

CALCUTTA'S BASIC DEVELOPMENT PLAN
A BACKGROUND PAPER

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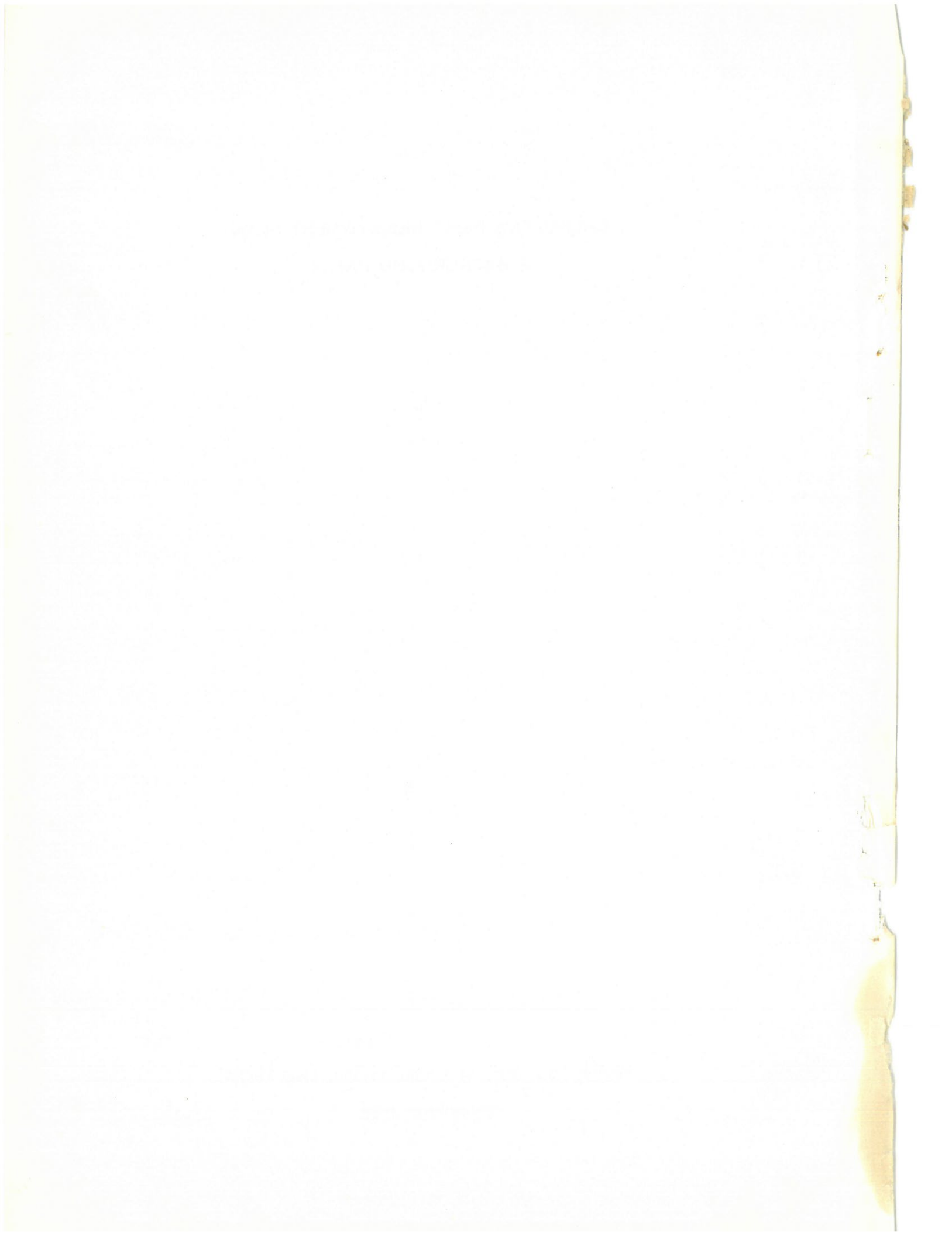
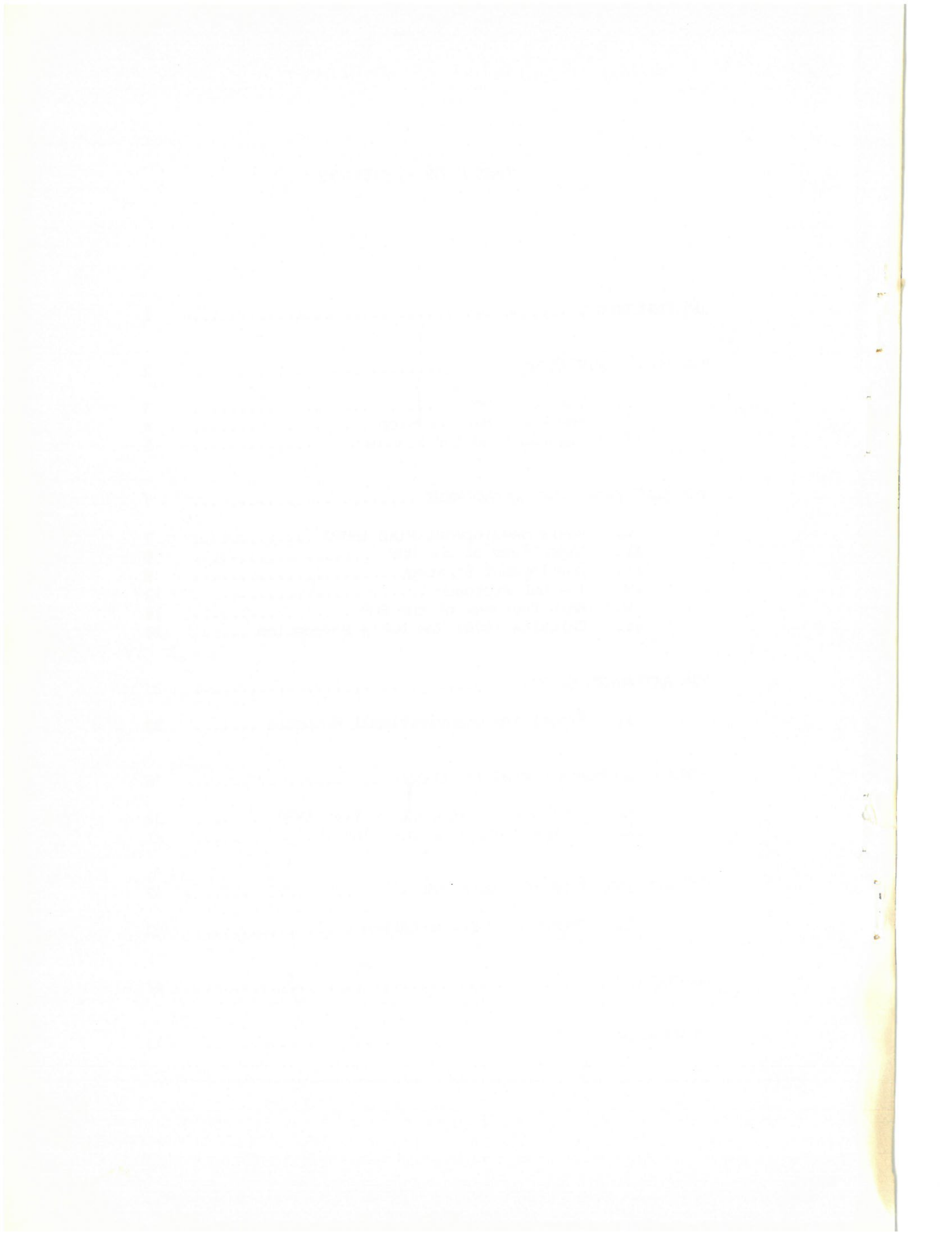


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I would sooner die in squalid Calcutta than live to be a hundred in an arcadian village. It is still possible for a Calcuttan to claim that he is a citizen of no mean city. How many cities can claim Calcutta's fierce affirmation of life and defiance of death?

- Ashok Mitra

Calcutta has been defying death with an indomitable zeal despite several strains and stresses brought about by a host of factors - political, economic, social and physical. In the beginning it had to give pride of place to Delhi consequent upon shifting of the capital of British India. The partition of the country and the Indo-Pak war in 1971 landed it in a traumatic situation wherein it had to accommodate the refugee population flocking in from East Bengal bringing in its wake utter congestion, dilapidation all around, and the straining of already meagre services and infrastructures as also social tensions culminating in a succession of communal riots. Its status as the prime commercial centre of India was relegated to second place after the emergence of Bombay as the economic capital of India. Its unique industrial base was eroded first by the decline of the jute industry and subsequently by the economic recession of the sixties resulting in unemployment and impoverishment of a large segment of its population.

Despite these social and economic upheavals, Calcutta is still pulsating with life and vigour. It would be worthwhile to examine the initiatives for planned public intervention for resurrecting Calcutta out of the abnormal stresses it has been through for, it would enable one to comprehend the inadequacy or gaps in the strategies for the all round improvement of Calcutta. This background paper therefore first analyses the forces and factors that led to the creation of the environment for plan preparation. Subsequently, it analyses various facets of the blueprint for development - the Basic Development Plan - and the strategies adopted to effectuate the plan objectives. Lastly, it analyses new developments in plan implementation and draws conclusions from the planning and development of the Calcutta Metropolitan District.

THE EARLY INITIATIVE

The genesis of planning efforts in Calcutta can be traced to the manifold increase in its population immediately after the partition of India which resulted in large scale migration of the refugee population from East Bengal. Due to its status as a primate city in eastern India, it also attracted substantial migrants from the adjoining eastern states. The city's service system, on the other hand, could not respond to this ever increasing population. The result was the proliferation of squalid bustees, physical deterioration, non-availability of even basic services and general insanitary conditions all round. It happens to be a rather curious coincidence that the two major planning exercises for urban

development in India arose out of such an insanitary condition. If it was the growing needs of India's capital city which resulted in the formulation of the Master Plan for Delhi (1961-81), it was the disastrous cholera epidemic of 1958 in Calcutta which led the policy makers to do something for redeeming the city from the situation it found itself in. Dr. B.C. Roy, the then Chief Minister of West Bengal and a great visionary, urged upon the World Health Organisation (WHO) to look into the insanitary conditions prevailing in this sprawling metropolis and suggest ways and means of finding a proper solution. This was pursued also by the Government of India and an Expert Team of the WHO finally landed in Calcutta to study its problems and devise a strategy.

THE WHO TEAM

The WHO team was overwhelmed by the appalling situation then obtaining in Calcutta and observed:

In India, the region of endemic Cholera falls within the state of West Bengal with its nucleus in Greater Calcutta and dominantly in the bustee population, ill provided with even elementary sanitary facilities.³

The team gave a number of suggestions for both interim and long term improvement in water supply, sewerage, drainage and garbage disposal. It made four important recommendations for formulating a

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- 1 K.C. Sivaramakrishnan, "Towards a Better Calcutta: Significance for Eastern Region's Economy", Supplement to CAPITAL, 26 July 1973.
 - 2 Authur T. Row, AN EVALUATION OF THE CALCUTTA PLANNING AND DEVELOPMENT PROJECT 1961-74, (Mimeo), Ford Foundation, New Delhi, October 1974, p.3.
 - 3 H.P. Cronier et al., Assignment Report on Water Supply and Sewage Disposal, Greater Calcutta, Project India 170, WHO, January 1960, p.67.

strategy to deal with the general insanitary environmental conditions. Firstly, it stressed the need for developing additional sources of filtered water supply on a twenty four - hour basis. Secondly, it suggested that the supply of unfiltered water to a substantial segment of Calcutta's population be stopped as early as possible. Thirdly, it proposed that the river Hooghly which serves as the source of water supply be safeguarded from pollution and the spread of salinity. Fourthly, it suggested the extension of the main sewage collection up to the points of ultimate treatment and disposal. In order to incorporate these suggestions the Team recommended the formulation of a Master Plan for water supply, sewerage and drainage on a priority basis.

Preparation of the Master Plan, however, required again a team of expert professionals as well as funds. The funds were provided by the then United Nations Special Fund and expert professionals were pooled together by the ⁴ WHO. With the technical assistance of the Calcutta Metropolitan Planning Organisation (discussed elsewhere in this paper), the team addressed itself to the task of preparation of the Master Plan.

THE WORLD BANK MISSION

Planning initiatives for the development of Calcutta were reinforced also by the visit of a World Bank mission to India in 1960 on India's Third Five Year Plan. Although the scope of this mission was to be confined to the various aspects of the Third Five Year Plan, the mission, recognising the economic role of Calcutta, noted the

4 Government of West Bengal (CMPO), Basic Development Plan, Calcutta Metropolitan District, 1966-86, Calcutta, p.96.

"impediments in the way of economic growth in India's rapidly expanding industrial region" created mainly by the physical and economic decline of Calcutta. To quote from the mission's observations:

There is hardly any aspect of community development that is keeping pace with the growth of Calcutta's population or with the requirements of its hinterland. Over-crowding, degradation of housing, health hazards, primitive water supplies, lack of space for new industries, traffic bottlenecks, power shortage and still unsolved refugee problem - are all increasing the cost of moving goods and of providing the many services that a growing industrial region demands of its metropolis. These conditions likewise nurture feelings of unrest and malaise in the population which are likely to boil over from time to time - in ways that are both destructive and inimical to orderly economic development.⁵

The urgency to do something for improving the situation in Calcutta probably was derived also from the observations of the mission especially its remark that the continued neglect of the problems of Calcutta "was one of the most dangerous weaknesses of the Third Plan".

The observations of these two international agencies led to the crystallisation of concrete thinking on the planning and development of Calcutta. The Ford Foundation was finally requested by the state of West Bengal to prepare a blueprint for Calcutta's development.

ORGANISATION FOR PLANNING

A Ford Foundation team had already been stationed in Delhi a few years earlier to formulate the Master Plan for Delhi. The Foundation

5 Report of the World Bank Mission to India on India's Third Five Year Plan, 10 August 1960, Ch.6, See also Arthur T. Row, op. cit., pp.3-4.

agreed to send a team of planners to participate in the second major planning exercise in India, this time in Calcutta. However, it insisted at the very outset on an organisation for metropolitan planning under the direct supervision and control of the Chief Minister. It also sent a draft resolution for setting up such an organisation. It was out of this draft that the Calcutta Metropolitan Planning Organisation (CMPO) came into being in 1961.⁶ Under the resolution, it was vested with three functions namely, (i) advance or long range planning,⁷ (ii) spatially integrated planning, and (iii) conceptual planning.⁷ In order to do this, it had first to delineate the metropolitan area. This was done during 1962-64 on the English concept of conurbation and interaction on a daily basis and by adopting a number of other criteria.⁸ The area thus finally carved out was known as Calcutta Metropolitan District (CMD). This was given official recognition initially through a resolution and later on in two legislative enactments namely, the Calcutta Metropolitan Area (Use and Development of Land) Act, 1965 and the Calcutta Metropolitan Water and Sanitation Authority Act,⁹ 1966.

The CMD had an area of 490 sq. miles and a population of more than 7.5 million in 1966.¹⁰ Its population increased to 8.33 million

6 Arthur T. Row, op. cit., p.10.

7 Kalyan Biswas, "Relating Metropolitan Planning to Development: The Case of CMPO & CMDA", *MANAGEMENT IN GOVERNMENT*, Vol.VI, No.3 (October-December), 1974, pp.284.

8 Abhijit Datta and Bappaditya Chakravarty, *ORGANISING METROPOLITAN DEVELOPMENT*, Centre for Urban Studies, IIPA, New Delhi, p.19.

9 Ibid. p.21.

10 Government of West Bengal (CMPO), *BASIC DEVELOPMENT PLAN: CALCUTTA METROPOLITAN DISTRICT 1966-1986*, Calcutta, 1966. p.1.

in 1971 and to about 10.2 million in 1981. Within its vast physical area the CMD today envelops three Municipal Corporations (Calcutta, Howrah and Chandannagar), thirty one municipalities and several notified area committees and panchayats.

In devising the strategy for planning the CMD, the CMPO thought that Calcutta being the primate city in the whole of eastern India, its problems could not be solved by confining planning efforts to the metropolitan area. Hence it also initiated a regional planning exercise for the Asansol-Durgapur region constituting the heavy industrial complex, Siliguri, the Sunderbans and Haldia port.

THE BLUE PRINT FOR DEVELOPMENT

BASIC DEVELOPMENT PLAN (BDP)

The blueprint for CMD's development was first conceived as a 21-point programme which was "the first comprehensive catalogue of Calcutta's problems". This programme later on led to the Basic Development Plan (BDP) in December 1966. Simultaneously, two comprehensive plans for water supply and urban transport were also prepared. The Master Plan for Water Supply, Sewerage, Drainage and Sanitation (1966-2001) was prepared on behalf of the WHO by consultants from the UN Special Fund and was published in August 1966. The Traffic and Transportation Plan for the CMD 1966-86 was prepared by the CMPO in collaboration with yet another consultant. These plans projected the needs for the anticipated population and formed important components of the BDP.

In essence the BDP contained and emphasised basic concepts and policies which could stimulate and guide the detailed planning and development of the implementation programme. The basic policies suggested by the plan constituted the rationale for systematic development action. It presented a perspective of CMD's development up to 1986 for imparting clarity in conceiving the short run action programme. The physical and economic environment of Calcutta had deteriorated so much that the plan addressed itself basically to three imperatives: (a) to arrest deterioration in urban services and facilities, (b) to determine the point of time when an action programme could yield quick and positive results for economic growth and social progress, and (c) to discover ways and means of accelerating the growth impulses so that they become self-sustaining.¹² It therefore quantified the chronic deficiencies in infrastructures, identified the priorities and gave an outline of the general concepts.

Thus the basic premise of the BDP was that the degrading deficiencies in services and infrastructures had led to the physical and economic decline of the CMD. Something had to be done immediately to prevent further decline. If it were not done, the plan observed it would result in further acceleration of the economic decline of the CMD with all its evil effects of loss of industrial production and mounting unemployment. The unique economic importance of Calcutta in the eastern region made it all the more important to take emergent action in saving Calcutta from economic decline and decay.

12 Government of West Bengal (CMPO), op.cit. pp.5-6.

OBJECTIVES OF THE BDP

To quote from the plan document, the objectives were:

- To promote a more dynamic growth of metropolitan economy with increased production and income opportunities, and with close integration with the economic development of the region for which Calcutta provides vital economic functions.
- To develop an urban environment which can be socially satisfactory and capable of sustaining with appropriate facilities and services a population of 12.3 million in the CMD by 1986.
- To create the machinery for sustained development planning and for effective coherent growth framework for the CMD and the state.
- To strengthen local self-government and citizen participation in the development of the Metropolitan District through a more effective mobilisation of local fiscal resources, civic leadership and voluntary citizen effort. 13

DEVELOPMENT STRATEGY

The BDP maintained in unequivocal terms that Calcutta being the primate city in eastern India, its problems could not be solved unless plans were prepared concurrently for the development of its vast hinterland also. It thus suggested a strategy of developing the wider region comprising West Bengal and the neighbouring states in general and a few economically conspicuous centres in particular in these states. They were Patna and Barauni in Bihar, Gauhati and Noonmati in Assam and the Cuttack-Bhubaneswar area in Orissa. In the state of West Bengal, the plan suggested the coordination of CMD's development with the that of Haldia, Asansol-Durgapur and Siliguri. While suggesting the plan for action, the BDP recommended "a focus on

13 Ibid, p.6.

three critical tasks; a focus on four centres for initial attention,¹⁴
and a focus on three kinds of government actions.

The Critical Tasks: The plan was to address itself to the three critical tasks of (a) arresting deterioration, (b) better use of existing capacity, and (c) providing for massive new growth. It intended to arrest the deterioration of the inner core of the CMD and the port of Calcutta for, the regeneration of the core was thought to be vital for the inhabitants of the metropolis, the region and the nation. With a view to give a boost to the economy of the CMD, it suggested fuller utilisation of the unused productive capacity especially in the manufacturing sector and in road and rail transport. In the CMD, it suggested that the low and medium density areas be redensified. The massive new growth was intended to eliminate urban unemployment, provide adequate shelter, essential utilities and community facilities.

The Four Centres : The plan suggested that the action plan should concentrate on four settlements namely, (a) the CMD, (b) the new port at Haldia, (c) Asansol-Durgapur, and (d) the marketing centre of Siliguri.

The Key Public Action : The BDP envisaged the initiation of key regional action. The kinds of key public action related to the establishment of appropriate machinery for planning and plan implementation, further development of public sector industries and the development of essential urban infrastructure.

14 Ibid, p.41.

At the regional level, the BDP stressed the need to address itself to the three critical tasks at the metropolitan district level also. But in order to do so with certainty, the plan projected a population for the CMD and suggested planning for a population of 12.3 million up to the year 1986. In order to properly accommodate this doubling of population in a span of twenty years, the plan envisaged the development of two nodes within the CMD. They were (a) the Metropolitan Centre comprising the then existing industrial, commercial and service core in Calcutta and Howrah and (b) the Kalyani- Bansberia area located at a distance of about twenty five miles in the north. The latter was selected especially because it was located at a distance which was far enough to discourage daily commuting but was close enough to enjoy some of the external economies available there. The BDP thus conceived of a two-centred plan for the CMD.

As regards the three critical tasks, the plan suggested that in order to arrest deterioration in the CMD, emergent action was required to provide adequate, safe and potable water, proper sewerage and drainage and proper refuse disposal. In order to provide shelter to the deprived and those sleeping on pavements and vacant lands, it proposed massive improvement in the shelter programme, housing and improvement of bustees. Likewise, it suggested a wide range of actions to be taken to arrest the deterioration in traffic and transportation and for the renewal of the central business areas of Calcutta and Howrah. Better use of existing capacity was suggested in

the manufacturing sector, the metropolitan street system and traffic, the suburban railway system, the water supply system and particularly in the developed areas. Massive new growth was suggested for accommodating the projected population in 1986. The new areas were proposed to be developed initially at the Metropolitan Centre and in the Kalyani-Bansberia area. In order to eliminate deficiencies as also to cater to the increasing population, the plan suggested a wide range of action programmes for industry and commerce, land forms and land use, public utilities, housing and bustee improvement, traffic and transportation, education, health, public administration and improving organisational and fiscal capabilities of local organisations and institutions. It provided a twenty-year (1966-86) perspective of planned public intervention in these spheres. It suggested different phases of the action plan. With a view to arrest deterioration, removal of deficiencies and better use of existing capacity it recommended an action programme to be implemented during the Fourth Five Year Plan (then to commence from 1966).

Plan Review : Planning is essentially a process and a continuous one.

But with a very long term perspective, the efficacy of the planning strategy may not be ensured especially owing to newly emerging situations. The plan recognised the limitation of visualising the future and therefore suggested a systematic review and revision of the plan at intervals of five years so that the development perspective could be kept up-to-date.

THE BDP APPROACH

Just a few years ago Delhi got the first comprehensive plan

document based on the Master Plan concept. The authors of the BDP, however, were not swayed by this approach because of the fact that the Master Plan was a long range and single shot exercise which tried to visualise the future of as complicated an entity as a city about twenty years later. It was likely to have pitfalls in visualising the future no matter how perfect the vision might be. To quote an expert planner:

The two underlying assumptions of the Master Plan concept are that: (a) all can be controlled to fit the pattern of the plan; (b) local public capital investment can be programmed in time and space to fit into the plan and advance its objectives. In the intricate and sometimes violent play of forces that constitute the dynamism of the contemporary city such simple assumptions do not stand up. 16

Secondly, a Master Plan happens to be preoccupied with land use and the city form. Its concern with strengthening the economic base of the city, income generation and employment happens to be minimal and at most indirect. It also has a negative disposition towards the growth of various elements of the city. Enforcement of negative stances of the Master Plan consumes substantial time and resources. Calcutta, on the other hand, "needed ... not a negative, restricted, regulative land use plan with the heavy commitment of scarce administrative resources that such a system of control requires, but rather a positive Development Plan in the full sense with the emphasis on development action directed at priorities of social and economic change, of selected capital investment in the physical infrastructure, in administrative and fiscal reorganisation, of coordinated executive

15 Gangadhar Jha, "Growing Under the Master Plan: A Study of Delhi", NAGARLOK, Vol.X, No.3 (July-September), 1973, pp.61-74.

16 Arthur T. Row, op.cit., p.37.

action by implementing agencies, and of the systematic generation and mobilisation of resources.....".¹⁷

The authors of the BDP were very conscious of these limitations of the Master Plan approach. To quote from the plan document again:

It is obviously difficult to predict with any degree of certainty the many changes, both in the physical environment and in social and economic behaviour and attitudes, which are likely to occur over this twenty year period. Consequently, the emphasis here is less on a hard and fast, once-and-for-all 'master plan' covering a series of governmental decisions for the next two decades, than on creating the developmental machinery and planning institutions whereby a full control, and positive encouragement, of the development process can be exercised. 18

Thus instead of adopting a rigid approach of the Master Plan the BDP, in spite of its long term perspective, is based on flexibility and adaptability. Secondly, the BDP is not at all a physical plan despite its obvious preoccupation with changing the physical environment. What it is concerned with is the formulation and implementation of the essential economic, social and administrative policies together with the development and reorganisation of the physical environment.

MAIN FEATURES OF THE BDP

The main features of the BDP in sectoral, spatial, institutional and fiscal terms are delineated below.

17 Colin Rosser, Quoted in Arthur T. Row, op.cit.,p.37.

18 Government of West Bengal (CMFO), op.cit.,p.5.

Sectoral Components : As mentioned earlier, the Basic Development Plan embodied 'basic policies' for properly guiding public action in the CMD. It did not prescribe programmes in concrete terms. It suggested specific studies subsequently for evolving the planning parameters for government action in various sectors. However, in order to stem the worsening situation in the CMD, it identified substantial programmes which were to be instituted at once. This immediate action programme, it was thought, would also help in promoting the growth of the CMD during the twenty-year life-span of the BDP. The six types of public action identified were:

- The institution of an appropriate economic growth policy,
- provision of a base for shelter,
- installation and operation of essential utilities such as power, water, drainage and sewerage,
- provision of essential community services and facilities,
- development of a modern transportation system, and
- provision of an appropriate governmental and administrative framework.

The 'immediate action programme' recommended by the BDP consisted of industrial and commercial development, shelter through bustee improvement and initiating experimental housing, water supply, drainage, sewerage, and refuse disposal, community services such as health, education and recreational facilities, and transport.

Spatial Dimension : As discussed earlier, the perspective as visualised by the BDP was to develop two main strategic centres namely, the Metropolitan Centre (consisting of the then industrial, commercial and service core in Calcutta and Howrah along with their

fringe areas, and a new centre comprising the Kalyani-Bansberia area. Besides, it identified seven areas in which new growth could be channelised. These were (1) the predominantly undeveloped parts of the Howrah Planning Area including Kona, (2) North Dumdum, (3) Salt Lake, (4) North and South Panchannagram, (5) Sonarpur, (6) the predominantly undeveloped parts of the south suburban area and (7) the Kalyani-Bansberia area. It also identified future land use and the physical form based on requirement of land for various uses such as residential, industrial, recreational and so forth.

The older parts of Calcutta and Howrah had become blighted due to the invasion of conflicting land uses and physical decay. The BDP therefore suggested that urban renewal schemes should be undertaken for re-establishing rational interrelationships between land uses. This was supposed to be done by shifting the incompatible land uses to new, better and more appropriate locations. The sites thus vacated were to be used more economically by acquiring the land. Since the priority of the BDP was to arrest further decline and promote economic development of the CMD, it suggested urban renewal as a measure to be taken later but up to 1986.

Institutional Dimension : Having elaborated the perspective of CMD's development during 1956-86, its sectoral components and spatial dimensions, the BDP suggested a proper organisation framework for smooth implementation of plan proposals. It suggested approaching the CMD for the purposes of (a) interpreting and implementing policies of state-wide importance such as urban land policies, (b) developing, coordinating and carrying out plans, policies and programmes of a primarily metropolitan nature and which were beyond the capacities of

local units, and (c) reviewing and coordinating plans and programmes proposed by local and functional authorities. With a view to facilitate planning and development of the CMD on a continuous basis, the BDP proposed the setting up of four Metropolitan Authorities namely, (1) the Metropolitan Planning Agency, (2) Metropolitan Traffic and Transportation Authority, (3) the Hooghly River Bridge Commissioners, and (4) a Metropolitan Parks and Recreation Authority. Another metropolitan authority for water, the Calcutta Metropolitan Water and Sanitation Authority had already been constituted in 1966 itself. The functions of the Metropolitan Planning Agency included (1) planning of the CMD as a continuous process, (2) preparation of a capital budget and its recommendation to the state Government, (3) review of projects formulated by various agencies to determine their conformity with the overall plan, (4) to communicate the plan to the people, to industry and to others so that they are fully informed about planning policies, and (5) to negotiate with the Government of India and its agencies for support to the specific projects conceived for the CMD. The BDP did not like the idea of entrusting this agency with implementation for it felt that it would dilute its primary function. Implementation of plans and programmes was proposed to be entrusted to new agencies created for this purpose. The action agencies proposed were (a) the East Bank Development Authority (to be constituted by expanding the Calcutta Improvement Trust), (b) the West Bank Development Authority (to be created by expanding the Howrah Improvement Trust), and (c) the Kalyani - Bansberia Development Authority.

It recognised the importance of local government institutions for

raising the quality of life. However, in view of the existence of a crowd of local bodies within the CMD, it suggested the substantial reduction in their numbers through annexation and consolidation.

Fiscal Framework : Implementation of the programmes conceived by the BDP obviously required huge capital investments and revenue expenditure to be incurred on operation and maintenance of the completed projects. The BDP's suggestion for a three-pronged strategy for this was to introduce the technique of a Revolving Fund for financing township development schemes. Public utilities were to be financed by raising loans. But in order to enable the repayment of loans it suggested that a pricing policy be adopted that would yield sufficient return on investment to make the projects a self-paying proposition. With a view to strengthen the local resource base for operation and maintenance of completed projects, the annexation and consolidation of myriad local bodies was expected to enhance their resource mobilisation capabilities.

CALCUTTA 1986: THE BDP'S PERCEPTION

The perspective for CMD's development as drawn by the BDP pertained to a span of twenty years, that is, 1966-86. As mentioned earlier, the BDP indicated the basic policy stance required to redeem Calcutta from physical and economic decline and chronic deficiency of services. It therefore suggested three critical tasks in this regard. In addition to suggesting the basic policies for an immediate action plan and guiding new massive growth, it also combined a few sectoral plans which had already been finalised by the CMPO during the early

sixties. Two such plans had been finalised for water supply, sewerage and drainage as well as for transportation. The BDP therefore indicated the shape of things in 1986 only so far as these two sectors were concerned. For other sectors and/or functional areas, it suggested the formulation of a detailed plan which could be implemented. In a few spheres such as employment, economic growth of the CMD, industrial land requirement, power, and so forth, it visualised the perspective only up to 1976. For the subsequent period it simply indicated the overall policies to be followed in devising the strategy.

The BDP intended to plan CMD for a population of 12.3 million by 1986 and its recommendation was to orient all the sectoral programmes for serving this population. It determined an employment target of 3.6 million by 1976. This would not result in full employment. Nevertheless it would present a marked improvement over 1961. In order to achieve this, it chalked out an industrial policy for CMD, giving its location, land requirements, investment required and so forth.

Housing and Shelter : In order to meet the requirements of housing and shelter as also to improve the appalling conditions in the bustees, it recommended the building of 1.3 million new housing units by 1986 and also a bustee improvement programme. The bulk of the housing needs was to be met by the private sector, but recognising the low income levels of population in CMD, it sought to improve the housing situation by enhancing personal incomes through economic development programmes. The bustee improvement programme was to cover the entire population of 9.12 lakh people then living in bustees. The

entire land under the bustees, about 2000 acres, was to be acquired over a period of five years for devising a land policy. As part of the bustee improvement programmes the suggestions included a water system through tube-wells, pump-houses, community water taps and baths on the basis of one water tap and two baths for every 100 persons, a sanitary sewer system, sanitary latrines at a standard of four for 100 people, storm drainage system, pavements, lighting and treatment of tanks.

Public Utilities : For the year 1976 it projected a power consumption of 6,894 million kw. while for water supply the BDP incorporated the already prepared Master Plan for water supply. This plan divided the CMD into five service districts, each to be provided with its own centralised system of collection, treatment and supply. It wanted to provide 20 gallons per capita daily (gpcd) by 1971 in all areas except Calcutta and Howrah where a higher standard was to apply. Between 1971 and 1981, 40 gpcd was to be supplied in all areas except Calcutta and Howrah where the norm suggested was 50 gpcd. Between 1981 and 2001 all the areas were to get a supply of 50 gpcd except Calcutta and Howrah where the supply was to increase to 60 gpcd. The anticipated total average daily requirement for water both for domestic and industrial purposes was 667 mgd in 1981 and 1226 mgd in the year 2001. The entire CMD area was to be provided with sewer facility. In the first phase, on-going projects were to be completed along with those which were needed most. Plans for storm water drains were likewise suggested in two phases. There was a master plan of major outlet works for 17 drainage basins which included comprehensive drainage works for the heavily urbanised CMD areas and in the first phase only

those projects were to be executed which could meet the most urgent needs of the CMD.

Transport : The BDP dealt with road transport, metropolitan mass transit by road and rail, the overall railway system, the post and air transport and so forth. It suggested a three-pronged action with (a) full utilisation of the existing transport system largely through improved traffic operations, (b) improvements in the existing physical facilities, and (c) development of new facilities. It recommended the following major steps for providing adequate transportation facilities in the CMD:

- Besides the then existing road bridge, one road and rail bridge and a second rail bridge, it recommended the construction of three more bridges - one at Princep Ghat, the second at Kalyani and the third to the north of the Howrah bridge.
- Another step was the creation of a modern road transport system by modernising traffic operations for fully utilising the present system, improving the existing highways, constructing new major highways and secondary roads and constructing truck terminals and automobile parking facilities.
- Major improvements in urban and suburban mass transit were to be effected through improvements and additions to existing systems and the creation of a new rapid mass transit system in the Metropolitan Centre.
- Improvement of the overall railway system was another suggestion.
- The modernisation of port facilities and operations in Calcutta was recommended.
- Finally, it proposed the improvement of facilities at Calcutta airport.

Community Facilities : The BDP envisaged the achievement of the basic goal as laid down in the constitutional directive of free universal compulsory education for the age-group 6-13. As regards secondary education, it recommended a 60 per cent enrolment by 1971, 75 per cent

by 1976, and 100 per cent by 1986. The target for higher secondary education was put at 40 per cent of the age-group by 1976 and 45 per cent by 1986. It emphasised over and over again the need to bring about qualitative change in education while ensuring a quantitative coverage.

Health services were to be tackled in three ways. Firstly potable water supply and provision of sanitation were expected to eliminate health hazards to a great extent. Secondly, the Urban Community Development (UCD) programme recommended by it was intended to bring greater public awareness for healthy living and the services available for it. Thirdly, clinics and additional beds in hospitals were recommended to be provided which would ensure adequate services. By 1986 it recommended the provision of 8000 additional hospital beds in the CMD. Twenty seven major new hospitals were to be provided though it was felt that even this would not cover the requirements.

Besides these the BDP gave valuable suggestions for providing recreational facilities and details of the UCD programme.

THE AFTERMATH OF BDP

FISCAL AND ORGANISATIONAL RESPONSE

The BDP, more than anything else, laid stress on launching an action programme during the Fourth Five Year Plan for providing minimum basic civic services and amenities. A year before the coming¹⁹ into being of the BDP the state government had presented a Memorandum to the Planning Commission containing a group of programmes costing about Rs.100 crores at 1965 prices. The Fourth Plan action plan of the BDP therefore came to be called the 'Rs.100 crore programme'. In order to finance the implementation of this programme, the state government allocated Rs.30 crores in the State Plan (1966-71) and requested the Planning Commission to provide the balance amount of²⁰ Rs. 70 crores.

However, the much needed 'Rs.100 crore programme' was not to get off the ground because of a few intervening factors. Firstly, in between the termination of the Third Plan (1966-67) and the beginning of the Fourth Plan (1969-70), there came a 'plan holiday' so that matters were decided outside the plan framework on the basis of annual plans. Secondly, the state was subjected to political instability as there were two spells of the United Front Government followed each time by two spells of President's Rule. In view of such a volatile political situation nothing could be done to effectuate the action

19 Government of West Bengal, Development and Planning (Town and Country Planning) Department, MEMORANDUM ON DEVELOPMENT PLAN, CALCUTTA METROPOLITAN DISTRICT, 1966-71, Calcutta, 15 Sept. 1965.

20 Government of West Bengal (CMPO), op.cit., p.142.

plan which was of the nature of a 'fire fighting' operation to be carried out as quickly as possible. It was therefore thought at one point of time to associate the private sector in financing the plan by creating an Urban Development Corporation with the financial participation of the business and industry community and the government.

Something had to be done to implement the plan. In 1969-70 when the Fourth Plan got off the ground, the state government could allocate only Rs.43 crores for the Fourth Plan. This was a drop in the ocean as the Rs. 100 crore programme of 1965 would cost much more at 1969-70 prices. This paltry sum could not have made any dent on the augmentation of services because prior to it the annual investment in Calcutta had been at the rate of Rs. 3 crores only.²¹ The new allocation meant an annual average investment of Rs. 8.6 crores. The central government also did not agree to have fiscal participation in Calcutta's development on this scale. Its stand was that funds had to be mobilised from within the state. However, this rigid stance gave way to receptivity in mid 1970. This change in attitude itself was due mainly to the emergence of a turbulent and violent political climate in Calcutta that manifested itself in the Naxalite movement. Something had to be done immediately to contain urban violence. The Prime Minister finally agreed to give direct central financial assistance for implementation of the programme. After a series of discussions among the representatives of the central government and the state government,²² it was finally decided that:

21 Kalyan Biswas, "Financing Urban Development in Calcutta: A Case of Centre-State Fiscal Relations", NAGARLOK, Vol.XIV, No.4 (October-December) 1982, pp. 85-97.

22 CMDA Papers.

- the development programme for the CMD should be of the order of at least Rs.140 to 150 crores;
- since there was not much scope for increasing the plan provision beyond Rs. 43 crores, the augmented outlay should come mainly from non-plan sources;
- apart from any international aid coming in for the Calcutta project, a substantial part of the non-plan resources would have to come from borrowings;
- in order to support the borrowings there should be some regular source of revenue; and
- a special high-powered agency should be constituted for ensuring the effective utilisation of funds raised for Calcutta's development.

In response to these decisions, the size of the development plan was kept at 150 crores though the CMPO had identified schemes costing about Rs. 234.24 crores (as against Rs.100 crores according to the 1965 Memorandum). This came to be known as the 'Accelerated Development Plan' (ADP) and also as the Rs. 150 crore plan. In addition, two major projects linked with the development of CMD were undertaken by the central government directly. These were (a) a second Hooghly Bridge and (b) the Metro Railway costing about Rs.24 crores and Rs.140 crores respectively.

The fiscal compulsion of mobilising Rs.150 crores led to the introduction of octroi in the CMD by enacting the Entry of Goods Tax (Calcutta Metropolitan Area) Act in 1970 promulgated by a Presidential Ordinance (there being President's Rule in the state at the time). Administered by the state government, half the proceeds from this tax were to be credited to the Calcutta Development Fund and the other half to be distributed to the Calcutta Corporation and other municipal bodies on the basis of population. Proceeds from octroi were

estimated to enable public borrowing to the extent of Rs. 45 crores during the Fourth Plan. A loan of Rs.45 crores was advanced by the central government. A grant of 10 crores was also given by it for bustee improvement. Rs. 45 crores had been allocated by the state government. Even though the total money mobilised came to about Rs. 118 crores only, the implementation processes were to proceed at once as one year had already been lost out of the Fourth Plan.

Subsequently, it was noted that in order to implement a programme of this nature especially in view of past performance, it would be necessary to take up schemes worth between Rs. 180 crores and Rs.200 crores so that an actual investment of Rs. 150 crores could be ensured. Therefore, flexibility was adopted in deciding the quantum of investment which was ultimately to depend on the availability of financial resources. In 1972, for example, the size of schemes was increased from Rs. 150 crores to Rs. 172.85 crores.

In order to mobilise resources for undertaking still larger schemes, the World Bank was approached in 1972 and finally the Bank's soft loan affiliate - the IDA - agreed to lend funds for what came to be known later on as the Calcutta Urban Development Programme (CUDP). It advanced about Rs. 25.70 crores for the CUDP-I during the period 1973/74 - 1974/75. Financial assistance for CUDP-II (1977/78 - 1981/82) and CUDP-III (1983-86) were to the extent of about Rs. 74.80 crores and Rs. 140 crores respectively.

Organisational Response : Having somehow resolved the mobilisation of

financial resources for administering the action plan, attention was then given to evolving a proper organisational framework as yet

another policy support for plan implementation. As mentioned earlier, the BDP had suggested the creation of four new metropolitan organisations in the CMD. One such organisation for water - the Calcutta Metropolitan Water & Sanitation Authority (CMWSA) had already appeared on the scene in 1966. However, it became defunct soon after its creation chiefly owing to stiff resistance on the part of the myriad local bodies who were not ready to shed their power and authority in this sphere. Responsibility for implementing the ADP had to be entrusted to some organisation. It could not be entrusted to the Calcutta Corporation (CC) or the other local bodies because it was felt that they did not possess the administrative capabilities to manage the administration of the plan on a scale required for the ADP. The state government would have been too remote a point to maintain the focus and the much needed identity with the metropolis.²³

Arising out of this organisational dilemma, it was finally decided to create altogether a new organisation - the Calcutta Metropolitan Development Authority (CMDA) - probably following a new organisational style for urban development launched earlier in Delhi, the Delhi Development Authority (DDA). The CMDA appeared on the CMD scene on 9 September 1970 after the enactment of the Calcutta Metropolitan Authority Act as a presidential ordinance.²⁴ The CMDA was given some of the functions which were to be assigned to the Planning Authority as proposed in the BDP. It was also entrusted with the task of operating the Calcutta Development Fund, the financing of investments and supervision and execution of projects. The Act provided for the Chief Minister to chair the CMDA and a Cabinet

23 K.C. Sivaramakrishnan, INDIAN URBAN SCENE, Indian Institute of Advanced Study, Simla, 1978, p.47.

24 The State was under President's Rule.

Minister to be its Vice-Chairman. The Development Planning Commissioner, the Commissioner, Town & Country Planning Organisation and the Financial Commissioner are the three ex-officio members. Besides, it has three non-official members - one from among the municipal councillors of the various municipalities on the east bank of the Hooghly, another from the western bank and the third from the Calcutta Corporation.

As mentioned earlier, the BDP strategy in its sectoral components consisted of promoting economic development initiative, urban utilities such as water supply, sewerage, drainage, electricity, transportation; community facilities such as education, health, recreation and area development, housing, shelter, and bustee improvement. Since 1969-70 when the implementation policy processes were initiated, there have been three successive CUDPs which were supposed to contain projects pertaining to the aforesaid sectoral components of the BDP proposals. It would therefore be worth one's while to see the nature and contents of the three CUDPs.

CUDP-I: CUDP-I was launched as the accelerated development programme in the Fourth Five Year Plan (1969/70 - 1973/74). Earlier some stray schemes were undertaken which did not have proper inter-sectoral relationships. The CUDP I was therefore conceived to rapidly increase coordination in urban development within the CMD so that it could address itself to serious deficiencies of almost all urban services. The programme contained projects in the fields of water supply, sewerage and drainage, garbage disposal, environmental hygiene, urban

transport, housing and area development, health, education and slum improvement. Constraints on the availability of financial resources compelled the CMDA to go in for a less ambitious water supply programme reducing the number of service districts from five to three lowering targets for per capita consumption and stressing the replacement of age-old pumps and pipelines. The CUDP I was to be implemented by the year 1973-74. About 80 per cent of the total investment proposed during the Fourth Plan was allocated to urban utilities and infrastructure (Table 1). But due to recasting of the size and content of the programme it was ultimately to terminate in the year 1976. However, the progress was slow due mainly to lack of experience in programme implementation on this scale, coordinating it with a host of action agencies, and delays in land acquisition. The CUDP was therefore redefined in 1976 and by 1979 only 90 per cent of the schemes could be completed.

Table 1

 CMDA Programme During the Fourth Plan (1969/70 - 1973-74)

Sectors	Allocation (Rs.in crores)
1. Water Supply	29.83
2. Sewerage and Drainage	40.78
3. Garbage Disposal and Environmental Hygiene	7.15
4. Urban Transport	
(a) Road and Bridges	35.05
(b) Buses and Trams	14.69
5. Housing and Area Development	17.58
6. Bustee Improvement	10.00
7. Others	11.72
Total CMDA Project	166.80
Princep Ghat Bridge *	10.00
Rapid Transit System *	20.00
Grand Total	196.80

* Government of India Project.

Against this allocation, actual investments were less in each year particularly in the initial years between 1971/72 - 1976/77 as is evident from the table given below.

Table 2

Allocated and Actual Investment in CMD

Investment	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Allocated	51.0	55.9	41.1	28.7	34.4	35.6
Actual	42.4	41.9	34.8	26.3	33.0	36.7

It was felt that improvement in programme implementation required strengthening of CMDA's management capabilities. To this end the state government introduced several management changes. The CMDA was given a Chief Executive Officer and a 'Management Team' comprising Directors of Planning Operations, Finance, and Administration. It was also given the green signal to work out a five year (1977-82) investment programme. These measures were supplemented by developing modern project appraisal, monitoring, long term budgeting and budget control techniques. The entire CUDP I period was devoted to taking emergent measures for consolidation of CMDA's authority and strengthening it to undertake the execution of large scale engineering projects.

CUDP II : CUDP II spanned the period from 1977-78 to 1981-82. It also consisted of several sectoral programmes as visualised in the BDP. By and large, it had projects and schemes relating to shelter, municipal

infrastructure improvement, solid waste management, improvement of school buildings, health care, credit to small business, traffic engineering and management, strategic land management and urban renewal projects. The project content thus reflected the priority given to neglected sectors and for providing immediate improvements in urban services. The project had also the component of new area development in accordance with the policy of spatial decentralisation. Urban utilities, sanitation and environmental hygiene together got more than 50 per cent of the financial allocation (Table 3). It may, however, be seen that the funds allocated to education and health were almost nominal. Fluctuation of total allocated investment each year is another feature of the CUDP II. This is mainly due to a stagnating resource position. This itself was because of reductions in the state plan funds allocated to the CMDA. Secondly, slow progress in the completion of projects led the central government to reduce the annual budgetary allocations.

In order to reduce the financial burden of the CMDA, the central government decided to 'roll over' the open market borrowings for 1975-1976 on maturity. This meant that the CMDA was not required to repay the principal through sinking fund contribution. All the loans up to 31 March 1976 (Rs. 61.6 crores) were thus converted into grants. From 1976 onwards, the central government's and state government's financial assistance was to be in the form of grants except for the revenue-earning schemes such as water supply and area development.

When the CUDP II was being executed, it came to light that the local resource base did not permit the local bodies to properly maintain the completed projects. In order to facilitate operation and

Table 3

Investment Allocated to Various Sectors CMD 1977/78 - 1981/82

(Rs. in crores)

Sector	1977-78	1978-79	1979-80	1980-81	1981-82	Grand Total
1. Area Development	2.48	5.75	7.94	7.31	4.10	27.58
2. Bustee Improvement	2.90	3.28	5.15	4.92	4.80	21.05
3. Schools	0.02	-	-	1.00	1.15	2.17
4. Health	-	-	-	0.10	0.10	0.20
5. Water Supply	8.26	8.57	6.89	7.11	7.09	37.92
6. Sewerage & Drainage	6.13	6.81	7.09	6.95	4.53	31.51
7. Solid Waste Management	1.30	1.75	2.04	2.03	2.02	9.14
8. Environmental Hygiene	0.32	0.50	0.50	0.52	0.30	2.14
9. Traffic & Transportation	11.17	11.22	9.35	10.18	8.47	50.39
10. Technical Assistance	1.15	1.08	0.50	0.75	0.56	4.04
11. Municipal & Anchal Development	1.00	1.10	1.20	1.30	1.40	6.00
12. Parks	0.23	0.10	0.10	0.10	0.10	0.63
13. Basic Map	0.20	0.25	0.35	0.35	0.35	1.50
14. CMDA Design & Supervision	3.02	3.19	3.36	3.56	3.73	16.86
15. Contin-gencies	3.13	6.64	9.32	9.91	8.22	37.22
Total	41.31	50.24	53.79	56.09	46.92	248.35

maintenance of the CMDA projects and also to sustain them the state government, as a short term measure, undertook to meet financial deficits of the local bodies and as a long term solution, it took some important decisions for toning up municipal finance. These included the creation of a Central Valuation Agency for improving valuation and assessment of Property Tax. This Agency was supposed to start its work by 1982. Secondly, it appointed a Municipal Finance Commission in December 1979, to look not only into municipal finances but also to examine the state finances for an optimum level of resource transfer to municipal bodies in order to make them viable in relation to their needs. Thirdly, in order to strengthen the executive system of the Calcutta Corporation and the Howrah Municipal Council as also its resource base, the state government, after a great deal of deliberation, enacted two pieces of legislation in 1980 for introducing the Mayor-in-council form of local government in both the local bodies. The Howrah Municipal Council was converted into the Municipal Corporation. Fourthly, a new pricing policy was devised for recouping huge investments made on water and sewerage systems. Fifthly, the Calcutta Theka Tenancy (Acquisition and Regulation) Act was enacted in 1981 providing for the acquisition of Bustee land in Calcutta and Howrah for planned development and distribution of land.

Thus, along with implementation of CUDP II, the state government took a package of vital policy decisions to give administrative and fiscal support to it for sustaining its continuance, financing and operation and maintenance. These went a long way in making effective the objectives of CUDP II. Implementation of various sectoral programmes made a great deal of progress and by 1982 when it was to

terminate, about ninety one per cent of the estimated investments had already been disbursed.

CUDP III: The third urban development programme for Calcutta relates to the period 1983 to 1988. In the course of implementation of the CUDP I and II it was realised that it brought in certain sectoral and spatial imbalances. Secondly, there was a better appreciation of the fact that concentrating on physical improvement alone would not suffice in improving the overall situation in the CMD. It had to be supplemented by institutional and financial reforms. The CUDP III therefore had the objective of consolidating the efforts taken in the past and improving urban management in the CMD through institutional and financial reforms. Besides, it intended to substantially increase the number of direct beneficiaries especially belonging to the economically weaker sections (EWS). Other objectives of the CUDP III were to correct the sectoral and spatial investment imbalances between the metro core and the rest of the CMD, to provide basic needs at affordable standards. It therefore conceived of four types of programmes with an investment programme of Rs.330 crores (Rs.288 crores as the programme cost and Rs. 42 crores as the spillover of the previous programme).

- Municipal Development Programme: This includes the provision of basic municipal services to the most deprived areas in each of the 31 municipal bodies and the corporations of Calcutta, Howrah and Chandannagar. It also calls for investment at the Ward level for providing water, drainage, management of solid waste, conversion of service privies, improvement of local roads, improvement and expansion of markets, upgradation of slum areas by providing basic utilities and services. This has been allocated Rs.94 crores.
- Trans Municipal Infrastructure Programme: These programmes are to be undertaken by the CMDA in critical areas such as water supply, drainage, sanitation, transportation which are to benefit

more than two municipalities. Rs.40.46 has been allocated to this sector.

- Calcutta-Howrah Investment Programme: In addition to the Municipal Development Programme being undertaken by the CC and the Howrah Corporation (HC), the CMDA is planning and executing a broader investment programme with a view to optimise the existing infrastructure and new investment finances during CUDP I & II. This in Calcutta includes improvement in the water supply system, sanitation and sewerage systems, traffic and transportation, and urban renewal in Calcutta and Howrah on the basis of a seed capital of Rs.6 crores. The allocation here is Rs.87.66 crores.
- CMDA - Wide Complementary Programme: This includes shelter and area development, small scale entrepreneur's programme, Panchayat development programme (water supply, all weather road access, sanitation) and training and technical assistance programme. This has an investment allocation of Rs.35.88 crores.

With a view to enhance the fiscal health of local bodies as also to rationalise the chaotic grant system prevailing in the state, the state government introduced a new grant system in 1983 by which the performance of the civic authorities in terms of tax effort triggers off the nature and amount of grant as well as a loan for capital investment in the next financial year.

The analysis of the three CUDPs that has been attempted in this paper indicates the features of projectising the BDP and other subsequent two blueprints, recommendations and proposals in sectoral terms, institutional and financial innovations for enhancing management capabilities for implementing the projects and the efforts to bring about development of the CMD in spatial terms. In sectoral terms the CUDPs, by and large, have been assorted projects comprising construction and engineering schemes. Urban renewal and area development could be taken up much later, towards the fag end of BDP's life-span (1961-86). However, a great deal of headway was made in

introducing institutional and fiscal reforms. These aspects of programme implementation are discussed later in this paper.

NEW DEVELOPMENTS DURING THE CUDPs

The BDP basically conceived for Calcutta an infrastructure development plan emphasising the need to arrest deterioration by providing a package of deficient infrastructures in the first instance. Towards the end of the Fourth Plan (1973-74) substantial investments had been made which caused a perceptible dent on the deteriorating infrastructure situation in Calcutta. At about the same time CMDA assumed planning functions for the CMD from the CMPO. Realisation then dawned upon the CMDA that the metropolitan structure visualised by the BDP in 1966 had become rather obsolete in view of a number of developments.²⁶ The master plans for water supply, sewerage and drainage and traffic and transportation also needed "revision to reflect the realities of the development during the last decade".²⁷ Moreover, it was also realised that the massive infrastructure development programme envisaged by the BDP could not be matched by programmes for providing basic settlement facilities, employment opportunities and community facilities for the deprived sections of the CMD as also for the prospective growth in its population. All these called for an altogether new perspective to CMD's development.

26 Asok Mukhopadhyay, MUNICIPAL GOVERNMENT AND URBAN DEVELOPMENT: A STUDY OF THE REFORMS IN WEST BENGAL, CUS, IIPA, 1984, p.35

27 CMDA (Directorate of Planning), CMD: DEVELOPMENT PERSPECTIVE AND INVESTMENT PLAN (Mimeo), June 1976, p.7.

Accordingly, a new development perspective and investment plan was formulated by the CMDA in 1976.

DEVELOPMENT PERSPECTIVE PLAN 1976

The Development Perspective Plan (DPP) tried to visualise the future city structure within the CMD and also provided augmentation of infrastructure for the existing as well as prospective growth in its population. Its avowed objectives were (a) to promote and stimulate economic development of the CMD, (b) to develop basic settlement and community facilities for the urban poor, (c) to enable articulation of the desired pattern of human settlement and employment space, (d) to develop an integrated, efficient and balanced transportation system, (e) to provide adequate infrastructure to support and sustain future development, (f) to improve the quality of metropolitan living by creating a desirable urban environment, and (g) to encourage improvement of metropolitan functions through a better organised institutional and financial framework.

The strategy of developing a bi-polar city of the BDP could not materialise and the growth occurred in a number of different areas. The DPP therefore considered the development of four alternative structures: (a) a strong centre around the existing Central Business District (CBD), (b) two centres as suggested in the BDP, (c) multi-centred distributing facilities and employment opportunities within the metropolis, and (d) an altogether new centre or urban corridor bypassing the existing urban concentration. After evaluating these alternatives, the DPP finally opted for a multi-centre development approach which was considered to be most appropriate in helping

optimise the growth potential of the metropolis. What was suggested was a number of community groupings around central areas linked appropriately by a strong transport corridor. Each community grouping was to have a population of about 3 to 5 lakhs located around the nodal centre. These were envisaged to be self-sufficient in matters of employment opportunities in the tertiary as well as secondary sectors. In addition to the CBD, the DPP visualised four "twin centre" business districts which would establish strong linkages between the two banks of the Hooghly. It also envisaged District Centres (DC) as centres of cultural, commercial, administrative, and major institutional activities each for a community of 3 lakhs to 5 lakhs people. It then suggested a hierarchy of business and community facility cores constituting the metropolitan structure.

Population Distribution : The DPP in its attempt to properly distribute the anticipated population in the metropolitan area of a projected population of 112 lakhs in 1986, suggested the distribution of the additional population of about 15 lakhs in the non-municipal urban and rural areas by 1986. It therefore proposed in detail the development of new areas, intensification of densities in the existing areas and a development policy in this regard.

Employment : It recommended the creation of about 13.30 lakh new jobs for the anticipated population by 1986. Recognising the limitations of CMDA in providing employment on this scale, the plan sought to create a physical environment which would attract prospective entrepreneurs. Physical and infrastructural movement was therefore envisaged along with the provision of industrial space in new areas.

Traffic and Transportation: In view of the multi-centre metropolitan structure and enhanced construction costs and constraints on resources, it stressed the need for change in the development policy for traffic and transportation. The existing programme was generally to continue along the same lines, but it sought to re-assign priorities on a rational basis and provide traffic and transportation in new areas.

Water Supply: The DPP felt that recommendations made by the Master Plan, though desirable, were too expensive a programme for financial constraints to permit execution. It therefore suggested that the programme be rationalised by (a) deferring such projects which are not likely to drastically alter the character of the CMDA's long term goals and (b) curtailing the scope and contents of the programme in order to keep it within the available financial resources.

Sewerage and Drainage: To the DPP, the Master Plan recommendations appeared difficult to achieve in view of the realities of the situation and the likely anticipated financial and physical situation. The long term programmes of the Master Plan therefore needed major revision. For most of the schemes, it planned the physical cut-off point according to the availability of resources. It stressed the need for revising the Master Plan and raised certain issues.

The DPP thus wished to have a new look on the entire gamut of planning policy and approaches for the development of the CMD. But soon after the appearance of the DPP, there emerged a new important development which completely overwhelmed its strategies.

Though the BDP had envisaged to enact new legislation for

comprehensive planning in the late sixties itself for constituting the proposed metropolitan-wide planning authority, this could be possible only in 1979 when the West Bengal Town and Country (Planning and Development) Act was passed by the state legislature. This Act provided for the constitution of Planning Areas by notifying such areas and designated CMDA as the Planning Authority with effect from 1982. The Act required the Planning Authority to prepare a Land Use Map and Land Register. It also required it to prepare an Outline Development Plan within two years and a Detailed Development Plan within three years to five years after declaration of the Planning Areas.

The second important development was the setting up of the West Bengal Urban Development Strategy Committee in 1980. Among other things the Committee was required to recommend criteria for allocating resources between different urban areas, including Calcutta, to devise ways and means of promoting a decentralised system for urban development in the state and to review the 1979 TCP Act if its provisions impinged on the problems of integrated urban development.

The Committee wanted to lighten the pressures on Calcutta by developing growth centres. Therefore it suggested slowing down, as far as possible, the rate of growth of expenditure in Calcutta and the stepping up of expenditure in other towns.

These two new developments necessitated a revision of the DPP and the entire perspective of Calcutta's development. The outcome of this

28 Government of West Bengal (Institute of Local Government and Urban Studies,) A HANDBOOK ON MUNICIPAL ADMINISTRATION, 1982, p.17

was a new Perspective Structure Plan in 1981.

PERSPECTIVE STRUCTURE PLAN 1981

The Perspective Structure Plan (PSP) intended to accomplish three planning tasks: (a) the formulation of a metropolitan perspective plan and structure plan, (b) preparation of a metropolitan development programme and action plan, and (c) preparation of project reports for implementation. It adopted the objectives of promoting the growth of industry, trade and commerce and expanding employment opportunities in the city as well as in its hinterland. It spelt out a spatial framework for physical, social and economic development, provision of infrastructures, location of nodal centres of various orders, distribution of industries and commercial undertakings in specific spatial units, population densities and transport linkages in the nodal centres and other places of the CMD. In conceiving the city structure, it had three alternatives and finally after evaluating those alternatives, it selected a structure consisting of a hierarchy of three centres with Calcutta Metro Centre as the first order centre and Howrah sub-centre as the second order centre. The third and fourth order centres were to have seven and ten constituent centres respectively. Besides this the PSP proposed land use for the year 2001, and strategies for urban utilities.

The proposals contained in the PSP were further evaluated on the basis of suggestions invited from experts in different fields. These were reviewed in the Revised and Reviewed Structure Plan, 1984. It still recommended the adoption of the structure plan as suggested in the PSP with marginal modifications. It also suggested certain

modifications in the proposed industrial location and major changes in the proposed land use for 2001.

Pending preparation of the Outline Development Plan at the local level, it suggested the acceptance of the Metropolitan Structure Plan and the revised land use for 2001 as an Outline Development Plan for the Metropolitan Planning Area.

· OVERALL IMPACT OF THE PROGRAMME

The paper has so far analysed the strategy for development of the CMD, its implementation and new developments during the implementation processes. It would be desirable now to look into the impact of implementation and then finally draw conclusions from planning and plan administration.

IMPACT OF IMPLEMENTATION

Utilities and Services: Implementation of the infrastructure programme has, by and large, led to much improvement in the status of the infrastructure obtaining in the sixties. Water supply, despite lowering of standards, has been augmented to about 300 mgd from a mere 84 mgd in 1964-65. Distribution has improved due to the construction of more than twenty thousand stand pipes in the bustees. Access to water in Calcutta is therefore better than in most large cities. The sewage system has improved after the construction of large new

29 United Nations, POPULATION GROWTH AND POLICIES IN MEGA-CITIES, CALCUTTA, U.N., New York, 1986, p.25.

sewerage treatment plants in Howrah and Serampore and implementation of about forty other sewerage projects. This has benefited about one half of the population as compared to one third in the sixties. Likewise the drainage system has improved much after the implementation of more than seventy drainage and outfall schemes. Environmental sanitation is much better due to augmentation of the collection and disposal of solid waste. On an average about twenty five thousand tons of solid waste are collected daily. More than fifty thousand privies have been converted into service latrines. As part of the new area development scheme, many of the city's two thousand two hundred cattle sheds have been relocated on fringe areas.

Public health measures, as part of CMDA's programme for environmental sanitation, have almost eliminated the incidence of cholera which used to be the specific feature of Calcutta. Implementation of health programmes has added to the number and new locations of health centres and dispensaries reducing thereby their concentration on the east bank and in middle income areas. In the sphere of yet another very important community facility - education - the number of educational centres has increased. The CMDA has constructed one hundred new primary schools besides renovating six hundred others.

Area Development and Housing: New areas have been taken up for development in Salt Lake, East Calcutta, West Howrah and Baishnavghata-Patuli. Housing stock has been augmented due to new area development as also because of construction of houses by public agencies. A housing scheme for the lower income group has been conceived with a sanitary core and encouragement to self-help housing

by extending suitable civic facilities. Out of about 2.6 million people residing in overcrowded settlements such as bustees, squatter settlements and refugee colonies, about 1.7 million persons have benefited from the bustee improvement programme which consists of paved internal roads, provision of electricity, internal roads, improvement of the supply of potable water (on the basis of one tap for hundred persons) and conversion of privies into sanitary latrines.

Institutional Improvement: Along with physical improvements, the concerted and integrated implementation efforts led to the emergence of new institutions, a new style and culture of project management and fiscal reforms which became instrumental in providing the much needed support to implementation and sustenance of physical improvement programmes. These have already been discussed earlier.

Despite these positive improvements, there are some sectors where progress has been slow and in others where the programme could not get off the ground. In the Traffic and Transportation sector, for example, although substantial new roads have been added to the total length of roads and traffic pattern and its management has improved, progress has been slow in improving urban transport despite special IDA financial assistance for this. It has not been able to cope with the volume of passenger demand (of about 6.8 million against the total capacity of public transport of about 2.8 million). Lack of an adequate number of river crossings and the problem of urban transport led to the programme of construction of the second Hooghly bridge, the Calcutta Metro Railway, and the circular railway. None of these

projects has so far been fully completed. Congestion on the Calcutta roads compels traffic to move at a snail's pace.

Progress likewise has been tardy in developing new areas and in the execution of urban renewal projects. Development of new areas could not be taken up on the scale envisaged by the plan. The basic reason for this was the problem encountered in land acquisition. The proposed acquisition of the entire land occupied by bustees for devising an effective urban land policy could be taken up only in 1981 by enacting the Calcutta Theka Tenancy Act. Salt Lake was supposed to be developed as a major government complex. However, only a few government offices have so far been relocated. The urban renewal programme could not be taken up on a scale which could have made a dent in rooting out inharmonious land use and decongesting the metro core.

The much talked of bi-polar growth strategy of the BDP could not be articulated despite new area development in Kalyani which was supposed to accommodate a population of 1.5 million. The 1981 Census reported a population of only thirty eight thousand for Kalyani and eighty nine thousand for Bansberia. The reasons for this were that neither the proposed bridge nor the connecting highway links were ever constructed. Moreover, the standards were too high to attract middle and low income group people. As the Kalyani - Bansberia Complex could not come up to the BDP expectations, there ensued a prolonged exercise on the structure plan and the emergence of new structure plans in quick succession between 1976 and 1984.

The most conspicuous failure has been in the economic development sphere of the CMD. This was the programme which was stressed time and

again by the BDP and also by the successive plan documents. In order to fulfil the objectives in this sector, a detailed study and a plan were supposed to be made. However, in all these years they went completely by default. The BDP had the strategic goal of stimulating private investment and economic activity for the economic and spatial development of the CMD.

Even the development of utilities has not been on the scale envisaged by the plan and in proper relation to the requirements of the population. Water supply, for example, was supposed to have been augmented to 667 mgd by 1981, the actual supply by 1981 was only about 300 mgd. Likewise despite drainage and sewerage works Calcutta still gets a lot of waterlogging on its roads and streets. The supply of electricity has not come anywhere near the requirement with the result that power breakdowns are frequent.

Institutional reforms for enhancing organisational and fiscal capabilities for plan implementation, however, have not yielded positive results especially in the realm of augmentation of local resource base. This has created two types of problems. Firstly, the local bodies are not in a position to repay loans to the CMDA and secondly, they do not have the requisite funds for the maintenance of the CMDA projects. The West Bengal Municipal Finance Commission (MFC) estimated a debt service liability of Rs.8.14 crores per annum for the local bodies arising out of CMDA's development assistance. To this has to be added an annual operation and maintenance (O & M) liability amounting to Rs.12.44 crores. The CMDA financial assistance of

30 Government of West Bengal, REPORT OF THE WEST BENGAL MUNICIPAL FINANCE COMMISSION, (Mimeo), March 1982, p.xll4.

Rs.11.91 crores has since been written off following the recommendation of the MFC. However, the operation and maintenance liability, according to a recent estimate, is expected to be Rs. 36.1³¹ crores for the CC and Rs. 18 crores for the other CMD local bodies. Revenues of the local bodies, on the other hand, have not shown any signs of remarkable recovery.

The analysis of plan implementation thus reveals that progress has not been in conformity with the targeted programme. It is worth recapitulating at this stage that the BDP programme consisted of providing immediate relief by removing deficiencies in infrastructures and promoting and guiding new growth. The analysis of the implementation indicates that the progress in achieving the first objective has been slow and inadequate; implementation of the second objective has almost gone by default.

CONCLUSION

1. Despite the fact that CMD has been an extensively studied planning area in terms of studies of its physical, institutional and fiscal dimensions and preparation of blueprints for planning there has still existed a planning gap. The BDP constituted basic policies for planning of the CMD; details of the development strategy were supposed to be worked out for important sectors such as economic development, bustee improvement, traffic and transportation, and so forth. Various sectoral studies though abundant, nevertheless, lack clarity in suggesting a

31 Abhijit Datta, "Financing of Municipal Asset Maintenance in West Bengal" (unpublished paper), 1986.

development policy. Whereas the BDP intended to improve physical environment by improving urban infrastructure, subsequent plans do not seem to be clear in their policy stance. There seems to be an ambiguity as these documents talk of economic development, infrastructures and city structure laying a great deal of emphasis on the latter.

2. The economic development of the CMD required it to devise a programme of action for the development of secondary and tertiary sectors well integrated into the state government's strategy for economic development. This itself called for a policy on location of industries, licencing procedures, augmentation of power generation and other incentives for attracting entrepreneurship or putting a ban on certain types of industries to be located within the CMD. Except for the promotion of small scale entrepreneurs as part of the bustee improvement programme, no such strategy was devised for opening up new economic opportunities on a substantial scale. The physical improvement programme has been pursued in complete isolation of the economic development programme. The former has not resulted in increasing incomes and purchasing power. To quote from a UN document, "Overall living standards in Calcutta have deteriorated relative to the rest of the country, and this deterioration is intimately tied to the stagnation of the metropolitan economy".³²
3. The BDP was not a rigid plan, its approach was biased in favour of promoting income, employment and economic growth. The approach adopted by the plan was not based on the rigid

32 United Nations, op.cit, p.36.

ideological disposition of the Master Plan approach but on flexibility. This flexible stance of the BDP seems to have been stretched too far. Over the years, the basic policies and programmes of the BDP could not be converted into projects. Components included in the various CUDPs were not rigorously related to the programme of action as visualised by the BDP with the result that the components were included in the projects without relevance to the envisaged programme. What was required was to enlist all programmes arising out of the BDP and other sectoral plans which were prepared subsequently and convert them into activities and projects by phasing them up to 1986. This could have enabled the nodal implementing agency to keep track of the total programmatic content with certainty and ensure implementation of "the plan". In its absence the programme schedule became amorphous. Even subsequent to the BDP when as many as three structure plans came into being in quick succession between 1976 and 1984, there was no evidence to suggest that the proposals contained in these were actually projectised for implementation; CMDA's programme of action, by and large, still contained a programme for infrastructure.

4. The development of new areas could not be programmed mainly because even though a particular area had a potential for growth it did not have access to services. In contrast to this, the infrastructure development programme continued without a bearing on spatial considerations. It could not be related to the circulation pattern and land use.
5. Investments, by and large, have been concentrated in the central

areas of Calcutta and Howrah. CUDP III tried to decentralise investments. However, actual investments in outlying areas and semi-urban tracts have at most been only sporadic.

6. Financial constraints have hampered implementation of plans and programmes from the very inception. Inadequate allocation to the CMDA for capital investments coupled with the fragile fiscal health of the CMD civic authorities has not permitted the programmes to be sustained on a scale required to solve Calcutta's problems. This also does not permit the myriad local authorities to maintain the CMDA projects after completion.

In order to overcome the problem of O & M expenditure, there has been a spate of reforms starting from creation of the Central Valuation Agency (CVA) and enactment of Calcutta and Howrah Municipal Corporation Acts, assigning of revenues from the Profession Tax, a new grant system, and so on. However, the impact of these reforms is not yet known. It could be said for certain that the creation of CVA has not yet done anything to improve the valuation and assessment for Property Taxes. CMWSA, though conceived as a nodal organisation at the metro level for augmenting the supply of water and sewerage system and maintaining it by recouping financial investments, became defunct soon after its creation. It has been reduced to the status of a contractor for CMDA thus bringing about distortions in its original mandate.

7. After the end of the Fourth Plan, all central assistance has been flowing not to the CMDA but to the state government as part of

the state plan decided by the Planning Commission on matching basis from year to year. This has created a situation which is as good as the one before the coming of the CMDA. To quote from the expert commentators on Calcutta's development:

In this situation, the sectoral distribution is decided by the state's Finance Department, where the CMDA is treated as an executing agency of the Public Works (MD) Department. CMDA's earlier role of coordinator is now transformed into a role of line functionary. At the metropolitan level, there is again an absence of institutional coordination - situation prevailing before the CMDA came into existence.³³

8. CMDA's capacity to raise funds through borrowing is constrained by the receipts from octroi. Since urban renewal schemes and the programme for development of new centres as part of the Structure Plan could not be implemented on a substantial scale, the CMDA could not mobilise resources from commercial development.
9. Financing of the CUDPs has been based on the concept of cost recovery for area development, urban utilities and over the bustee improvement programme. During the CUDP III, partial cost recovery has been applied even to health services. Barring its success in the development of new areas and urban renewal projects, it has been a problem in other projects including urban public utilities despite rationalisation of the tariff structure in this regard. Whereas the reason might be administrative in nature in the case of utilities, in bustee improvement, it might be due to a combination of poor paying capacity of the beneficiaries and gaps in projectisation.

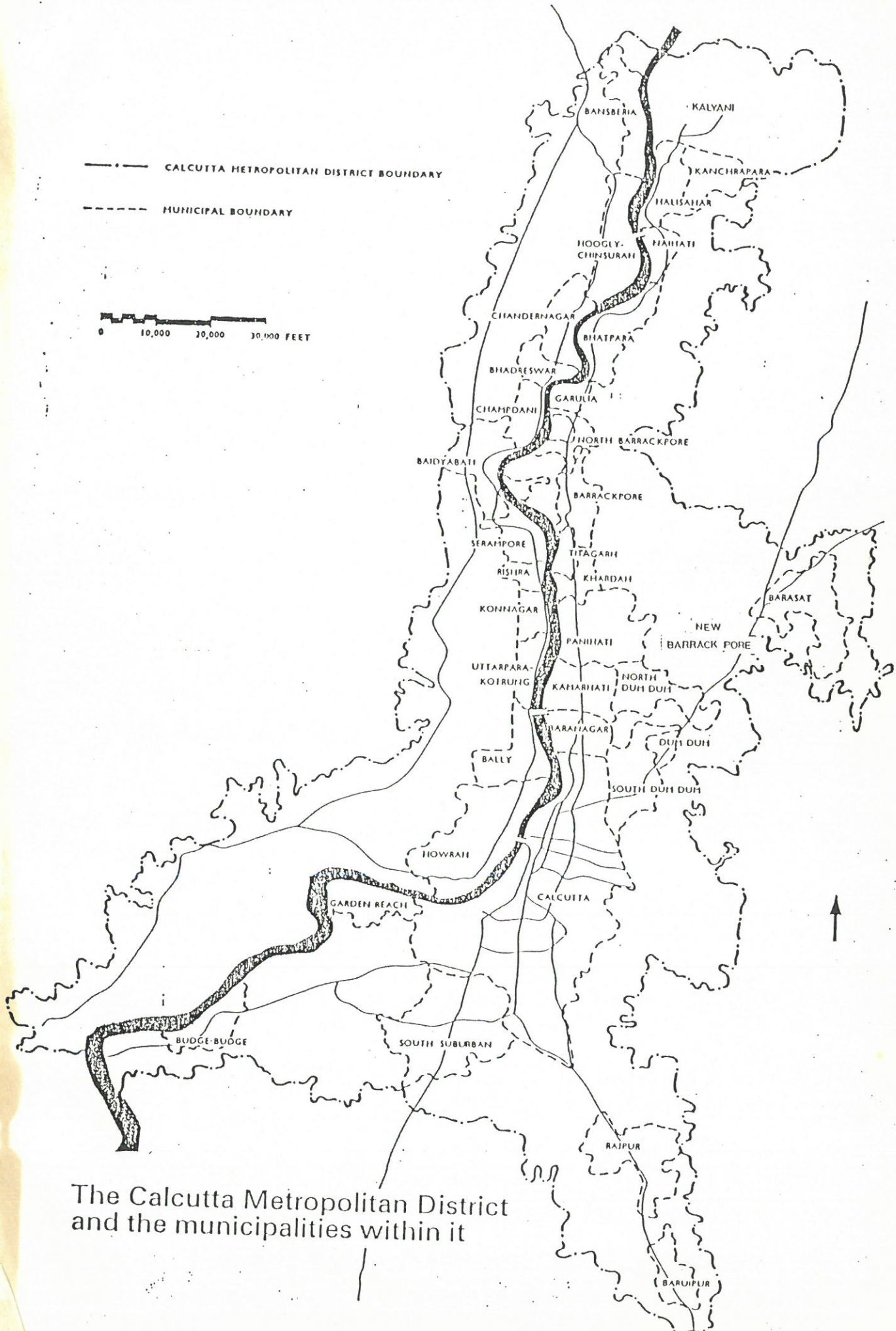
In sum, there have been gaps in planning, projectisation and mobilisation of financial resources for plan implementation. Effectiveness of any planning strategy would therefore depend very much on the extent to which ways and means are devised to bridge these gaps.

Annex 1

Population Projections, Calcutta Metropolitan District, 1966-86
(in millions)

Assumptions		Projection							
Mortality	Fertility	No.	1961	1966	1971	1976	1981	1986	
Declining	Constant	I A	6.721	7.690	8.823	10.143	11.664	13.408	
		B	7.626	8.672	9.907	11.338	12.992	Upper	
		C	7.547	8.529	9.693	11.029	15.594	Bound	
Declining	Slowly Declining	II A	6.721	7.690	8.762	9.960	11.274	12.704	Most
		B	7.626	8.627	9.738	10.965	12.301	Likely	
		C	7.547	8.478	9.510	10.653	11.89	Projection	
Declining	Rapidly Declining	III A	6.721	7.690	8.762	9.900	11.009	12.031	
		B	7.626	8.627	9.672	10.693	11.614	Lower	
		C	7.547	8.478	9.449	10.391	11.224	Bound	





The Calcutta Metropolitan District and the municipalities within it

