Modern Asian Studies **33,** 4 (1999), pp. 951–988.
Printed in the United Kingdom

The Planning and Development of New Bombay

ANNAPURNA SHAW

Indian Institute of Management Calcutta

Abstract

Since independence (1947), foremost among the issues related to the growth of Bombay has been the decision to build New Bombay, a new city on the mainland across from Bombay island. In this paper, I examine first, the emergence of the idea of New Bombay and the interest groups who influenced the planning process. Secondly, I examine the actual achievements of the New Bombay project and the disjuncture between planning and reality. The New Bombay case shows clearly the way the political environment can influence the planning process. Confronted with the demands of different interest groups, the state in its urban planning opted for a solution which would accommodate all of them. In the process, many of the original objectives of building the new city have remained unfulfilled.

Introduction

Asian urban development policies have shown a marked shift in the last thirty years (Rondinelli, 1991). In the early 1960s, policies mainly centred on slowing down the rate of urbanization through controls on the growth of large metropolitan cities. By the 1980s policy makers had begun to accept the inevitability of the growth of the largest cities in the urban system. They then began to stress the need for a more diffused pattern of urban growth around the metropolitan area, stimulating the growth of secondary cities and smaller towns, and strengthening rural–urban economic ties (Rondinelli, 1983; Ginsburg *et al.*, 1991). In India, such a policy shift

The author is grateful to the Centre for Management Development Studies, Indian Institute of Management Calcutta for research support.

0026–749X/99/$7.50+$0.10

had occurred earlier, that is, by the mid-1970s, and in the case of Maharashtra by the late 1960s, when the idea of building New Bombay gained wide acceptability. Yet, in spite of its early start, India's policies of diffusing urbanization have not been very successful (Wishwakarma, 1986; Meshram, 1986). In this paper, I examine the case of New Bombay, to highlight some of the reasons for the shift of policy and the drawbacks in its implementation.

Since independence (1947), foremost among the issues related to the growth of Bombay has been the decision to build New Bombay, a new city on the mainland across from Bombay island. One of the reasons for the extension of urbanization to the mainland has been the urgent need to contain the congestion on the island and its suburbs. The geographical location of the old city has some in-built constraints which have exacerbated the problem of overcrowding. Being located on an island has meant that physical expansion of the built-up area cannot continue beyond the existing land surface available. Secondly, the central business district of the city is located in the southern tip of the island while the residential suburbs are located in the north, on Salsette island and beyond. This has resulted in the daily south–north commuting of a large portion of the city's labour force and has added to the traffic problems and congestion along the narrow island corridor. It was felt that a new city on the mainland, of equal size and importance to the old city, would absorb potential migrants into Bombay island and attract some of the city's residents, and thereby act as a counter-magnet. Actual work on the construction of New Bombay began in 1971 and is still in progress.

The problem of congestion on Bombay island had long been recognized in official reports and fact finding committees.[1] The early reports, dating back to the 1940s, had stressed the need for controlling the growth of the city by strict land-use controls and the banning of new industries on the island. Very few of these recommendations were put into practice. By the end of the 1960s we see a shift in policy. A more diffused growth pattern stressing metropolitan planning and mainland development through a satellite city gains ascendancy. In the first part of the paper, I examine some of the

[1] See, for instance, *Bombay City and Suburbs: Post-War Development Committee Preliminary Report for the Development of Suburbs and Town Planning, Housing and Traffic Panels*, Govt. of Bombay (no date given, probably publ. 1946). See also *Master Plan in Outline* by Modak and Mayer (no date given, probably publ. 1947) where they note that 'Bombay is desperately overcrowded, the overcrowding appears to be constantly worsening' (p. 3).

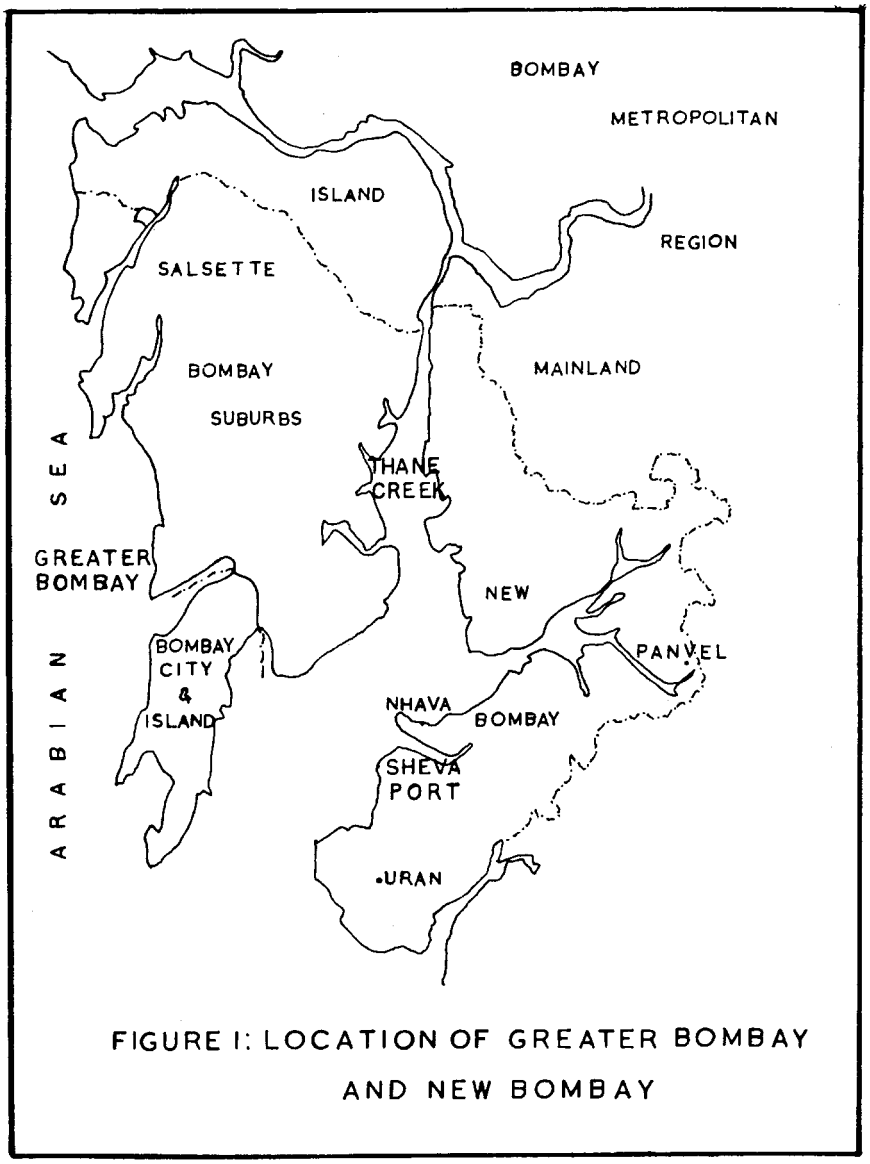

Fig. 1 Location of Greater Bombay and New Bombay.

reasons for the policy shift by first, considering national level policy changes and secondly, by focusing on local interest groups who influenced the planning process. The idea of New Bombay took a long time to be accepted and different interest groups played an import-

ant role in lobbying for its implementation. This section highlights the political nature of city planning in India and what this has meant in terms of the way urban growth is planned and managed. In the second part of the paper, I examine the actual achievements of the New Bombay project and the disjuncture between planning and reality.

The State and Urban Issues

Since the seventies it has been recognized and accepted that urban policy and planning are not neutral but are embedded in the political and economic compulsions facing the state (Lefebre, 1977; Castells, 1977). The nature of the state and its relative autonomy vis-à-vis these constraints directly impact upon the choices the state makes regarding issues such as supporting or not supporting low-income housing (Gilbert and Ward, 1982), fostering regional growth and decentralization as against centralization/concentration (Geiger and Davidovich, 1986), encouraging or discouraging the urban informal sector (Sarin, 1979), and permitting or controlling migration from rural areas. The marked shift in urban policy observed in the case of Asian countries can be best understood when placed in this context.

In the case of India, urban policy and planning are state subjects. The central government does not have the power to pass legislation on urbanization and urban planning.[2] At best, it can issue directives, provide advisory services and fund programmes which the states can follow at will. This has given the states autonomy but at the same time has resulted in a highly differentiated urban structure and levels of urbanization (Mohan and Pant, 1982). The level of urban amenities, for instance, varies considerably across the states and is directly related to the level of development of the state (Kundu, 1991).

Directives on urban planning and urbanization by the central government clearly indicate a policy shift in the sixties (Ramachandran, 1989, 330). In India's First (1951–56) and Second (1956–61) Plans 'urbanization by and large does not

[2] National Commission on Urbanisation, 1988, vol. 2, part 4, 391–2. However, with a constitutional amendment the centre can make mandatory on the states, changes in the structure of urban governance and resource mobilization. This is seen, for instance, in the recent passage of the Nagarpalika Bill following the ratification of the Constitution (Seventy-fourth Amendment) Act, 1992. The Nagarpalika Bill will give greater fiscal and administrative powers to urban local bodies.

appear as a problem worthy of attention' (Ramachandran, 1989, 329). In the Third Plan (1961–66), for the first time, issues of urban policy are indirectly addressed through the recognition of the need to spread industrialization away from big cities. Incentives would be provided, under the Plan, to industry locating in backward areas and the industrial licensing policy would give priority to these areas. From the mid-seventies onwards, urban decentralization was to become a major feature of national thinking. In 1974 it was explicitly stated in a document on national urbanization policy prepared by the Town and Country Planning Organization, Ministry of Works and Housing.[3] An important project, the IDSMT (Integrated Development of Small and Medium Towns) was launched by the central government in 1979 to regenerate smaller urban places and thereby diffuse urban growth.

Efforts to spread urbanization to less developed areas and generate economic growth in smaller towns must be viewed against the political and economic forces impinging upon the Indian state. After independence in 1947 and throughout the decade of the fifties and early sixties, the Indian state was relatively autonomous but subsequently became more constrained (Rudolph and Rudolph, 1987, 62). After the mid-sixties, rising levels of mobilization and the ascendancy of demand politics began to modify state autonomy.[4] The Indian state's investment in capital formation was cut back to provide subsidies to different interest groups (Bardhan, 1986). The regional development question and urban decentralization were very much a part of the demand politics that surfaced after the mid-sixties.

The state of Maharashtra reacted much sooner than other states in the country to regional development issues and the need to spread industrialization and urbanization. Maharashtra has been the first state to pass legislation on metropolitan planning. It has also been the first state to institute a state industrial development corporation

[3] Town and Country Planning Organization, 1974, *National Urbanisation Policy: An Approach*. Ministry of Works and Housing.

[4] The term 'demand politics' has been taken from Rudolph and Rudolph (1987) and refers to a type of interest group representation. However, 'unlike organized interests, the demand group relies on ad hoc rather than bureaucratic organization. It uses mass mobilization more than expert knowledge and technical bargaining but combines issues and movement politics with the politics of organized interests' (p. 247). The rapid increase in voter turnout, student indiscipline, riots, and workdays lost due to strikes and lockouts after the mid-sixties were indications of the ascendancy of demand politics.

for the purpose of creating industrial infra-structure in backward regions. Post-independence economic and political developments in Maharashtra left little option for the state government but to embark upon such a course.

Unlike many states, Maharashtra from the time of independence and till 1995 has had a Congress majority government in power, except for a brief period (1977–80) under the Progressive Democratic Front. The Maratha-dominated Congress party had, by the sixties, skilfully instituted many rural development programmes and won over middle and rich peasants who formed its support base.[5] Its professed socialistic leanings had thrown the left opposition into disarray and no opposition party was able to make inroads into the Congress stronghold until the general elections of 1977 (Pandit, 1979, 432).[6] The stability of the Congress government in Maharashtra, in the sixties, however, could not hide the tensions that existed between the two state wings of the then undivided Congress party, the BPCC (Bombay Pradesh Congress Committee) and the MPCC (Maharashtra Pradesh Congress Committee).[7] Each represented different lobbies (Joshi, 1968). The BPCC was more non-Maharashtrian, and had the support of the Gujarati and other non-Maharashtrian business interests in Bombay city. The MPCC was Maratha dominated, and represented the rest of Maharashtra. It often projected itself as the 'true' representative of Maharashtrian populist interests.[8] Talks of the merger of these two organizations had failed in the sixties and they operated like two separate kingdoms greatly complicating every issue at hand.

Maharashtrian politics in the sixties was dominated by the following issues: attempts at territorial expansion through the annexation

[5] Pandit (1979, p. 432) observed that 'The Congress, since Independence, has been essentially in Maharashtra, a party of Maratha peasants, united by strong caste bonds,' see also *Economic and Political Weekly* reports: 'Congress's Safest Haven,' vol. 2, no. 7, 18 Feb. 1967, pp. 390–1; 'Programme for Power Snatching,' vol. 6, no. 33, 14 Aug. 1971, pp. 1743–4.

[6] See also *Economic and Political Weekly* reports: 'Maharashtra: Caste and Communism,' vol. 2, no. 49, 14 Dec. 1967, pp. 2153–4; 'From Caste to Class in Maharashtra,' by G. P. Deshpande, vol. 4, no. 8, 20 Feb. 1971, pp. 485–6.

[7] In the Constitution of the Congress party it was written that each Indian state would be represented by one Pradesh Congress Committee. Maharashtra was the only exception to this rule. It was allowed to have two Pradesh Congress Committees in view of Bombay city's importance and the fact that up till 1930, it had been a separate regional unit from the rest of Maharashtra.

[8] See report in *Economic and Political Weekly*: 'Maharashtra: The Other Patil in Bombay,' vol. 2, no. 45, 18 Nov. 1967, pp. 2010–11.

of Goa (then a Union Territory) and the Belgaum district of the neighbouring state of Karnataka;[9] demands for regional development and the spread of economic activity to backward parts of the state;[10] rising militancy of white collar public sector workers (Punekar, 1966);[11] and the rise of Marathi sub-nationalism with the establishment of the Shiv Sena party in June 1966 (Morkhandikar, 1967). While attempts at territorial expansion failed, the government was compelled to address the issue of regional development, make peace with white collar workers and tolerate the Shiv Sena.

The regional development question had become particularly acute in Maharashtra which, in spite of being India's most economically advanced state, had a very unbalanced distribution of jobs and wealth. In the decade of 1960–70, 60% of all factory workers and 88% of all joint stock companies were located in Greater Bombay. In 1961, the per capita income of Greater Bombay was Rs 1025 and for the rest of Maharashtra was Rs 330 (Brahme, 1977). Demands for 'correcting regional imbalances' surfaced in the popular press and in the academic literature throughout the sixties.[12] The state's policies of industrial deconcentration and metropolitan planning must be seen against the backdrop of these demands.

In formulating and implementing its spatial policies, the state had to contend with entrenched and powerful lobbies, for instance, the industrial/business lobby (Verma, 1990) which had provided much of the support base for the BPCC. The BPCC leader S. K. Patil had openly sought the support of Bombay city's Gujarati industrialists and traders (Joshi, 1968, 205). Then there were the private real estate/builder interests which some scholars have seen as exerting a strong pull on government (Bapat, 1990; Sharma, 1991; Sebastian, 1991). In the mid-sixties, the state had also to deal with the aspira-

[9] See the following reports in *Economic and Political Weekly*: 'Maharashtra: Learning to Live Without Belgaum,' 28 Oct. 1967, pp. 1934–5; 'Maharashtra Letter: Goans Keep Goa,' vol. 2, Annual Number, Feb. 1967, pp. 129–33; 'The Mahajan Report,' vol. 2, no. 42, 21 Oct. 1967; 'Maharashtra: Not at Chavan's Expense,' vol. 2, no. 48, 9 Dec. 1967.

[10] See report in *Economic and Political Weekly*: 'Regional Imbalances in Maharashtra,' vol. 2, no. 30, 29 July 1967, pp. 1322–3. Also note Joshi's (1968) observation that within the Congress Party 'The rivalry generally runs along regional lines, with groups of Congressmen from each of the three regions of Vidarbha, Marathwada and Western Maharashtra bargaining hard for political gains (p. 194).

[11] See also *Economic and Political Weekly* report: 'Maharashtra Letter: The Revolt that Petered Out,' vol. 1, no. 3, 3 Sept. 1966.

[12] See *Economic and Political Weekly* reports: 'Correcting Regional Imbalances,' vol. 1, no. 11, 29 Oct. 1966; 'Water for Bombay,' vol. 1, 27 May 1967, pp. 947–8.

tions of a rising middle class as represented by the professions, middle and upper echelons of the bureaucracy and organized labour.[13] Moreover, because of its professed socialistic leanings, the state could not ignore the poor, at least in its planning rhetoric (Bapat, 1990). Rather than siding with any one of the above interests, my paper suggests that the state in its urban planning opted for a solution that would be least disruptive to the interests of business and industry while at the same time would appease the middle class and intelligentsia, and provide a modicum of benefits to the poor. But in the process of attempting to satisfy all major interest groups, the basic objectives of building the new city have remained unfulfilled.

New Bombay: Emergence of the Idea

The need for urban development on the mainland across from Bombay island was first officially recommended in the nineteen-forties. In 1945, a Post-War Development Committee recommended that areas be developed on the mainland on the opposite side of the harbour to contain the future growth of the city.[14] In 1947, N. V. Modak and Albert Mayer published their 'Master Plan in Outline'. Though the document had no official status, it left its mark on official planning for many of its suggestions were repeated in plan after plan. The Modak–Mayer document looked into issues such as the development of suburbs and housing, traffic and industrial dispersal. It strongly urged that heavy industries be exiled beyond Thane Creek and light industry dispersed on Salsette. It stressed the controlled development of the city, suburbs and satellite towns such as Thane, Bassein and Uran. It also recommended the establishment of a second shopping complex at Dadar and the building of an underground railway system. As the Modak–Mayer document lacked official status, no follow-up action was taken on the recommendations. Caught up in the many problems following independence and partition, the state government could not spare funds for city development work.

[13] In India, the intelligentsia or social elites are largely from the middle class. The power of social elites in influencing government policy is well discussed in D. L. Sheth's 'Movements, Intellectuals and the State: Social Policy in Nation Building,' *Economic and Political Weekly*, 22 Feb. 1992.

[14] *Bombay City and Suburbs: Post-War Development Committee* (see fn. 1).

However, some legislation controlling land use in the city was passed. In 1949, The Bombay Building Works Restrictions Act provided for restrictions on industrial location on the island and in 1951, an amendment of the Bombay Municipal Corporation Act, 1888, provided for zoning of land uses. New industrial plants would have to locate in specified areas in the northern and north eastern suburbs. In 1954, the Bombay Town Planning Act further strengthened zoning regulations. This Act also made it mandatory on the local authority (that is, the municipal corporation) to draw up a development plan for the city. But before this plan could be completed and submitted, the state government in March 1958 appointed a Study Group on Greater Bombay under the Chairmanship of S. G. Barve. The Barve Group's job was to re-examine the underground railway proposal given eleven years earlier by Mayer and Modak and to reconsider issues such as the development of suburbs, decentralization of industry and housing.

In its report published in 1961, the Barve Group recommended a ban on new industrial units on Bombay island with the exception of those units processing imported raw materials or exporting finished goods.[15] It repeated many of the suggestions made earlier by Modak and Mayer in calling for controlled industrial growth through the creation of industrial estates on the island and its suburbs. It also recommended the building of a new business complex at Bandra-Kurla, and a massive housing scheme with a target of 25,000 tenements per year, and endorsed the underground railway project. To absorb industry dispersed from the city, the Group recommended urban development on the mainland across the harbour and the building of a bridge across Thane Creek. The state government accepted some of the proposals, such as the building of the bridge (which was started in 1962), the industrial estates and the Bandra-Kurla complex.

In 1964, the Municipal Corporation of Greater Bombay (MCGB) submitted its Development Plan for Greater Bombay proposing a total investment of Rs 700 crores or Rs 70 billion (at 1964 prices) to be spent over the next 20 years.[16] The Plan would entail a restructuring of Greater Bombay on a large scale with the help of zoning, population dispersal to the suburbs, decentralization of industry and

[15] *Report of a Study Group on Greater Bombay*, Govt. of Maharashtra, 1961.

[16] *Report on the Development Plan for Greater Bombay*, Municipal Corporation of Greater Bombay, 1964. 1 crore = 10 million.

commerce through the building of six business districts and many industrial estates, a massive housing programme with sites for social services and public utilities, and reclamation of 27 Km of low-lying land. In addition there were specific proposals for improving water supply, power, sewage and drainage, education and medical services and traffic flow. This plan would be financed through loans, subsidies from the state and centre, and also through a development tax.

There were some obvious weaknesses in this Plan. As Harris (1978, 41) pointed out, 'Its strongest elements lay in the area of land use controls and zoning rather than development proper.' Secondly, it involved the municipality's purchase of land to reserve for public uses without having considered where the money was coming from. Moreover, as a planning document produced by the MCGB(Municipal Corporation of Greater Bombay), the possibility of eastward growth into the mainland was not considered as this area lay outside the jurisdiction of the MCGB. The Plan was also perceived as running against the interests of the business community (Verma, 1985, 34–6), both because of its proposal to lay upon them a development tax and also because the large-scale restructuring of the city and strict zoning of land uses would inflict heavy costs of relocation. Furthermore, Verma suggests that since the Plan, given its size, would involve all the scarce resources of the state in the next twenty years, it would leave nothing for the laying down of infrastructure in new areas. Thereby, it would act as a fetter upon the future investment opportunities of business and industrial houses.

According to Verma (1985), seeing these disadvantages in the 1964 Development Plan, the powerful business lobby in the city attempted firstly, to delay approval of the Plan by the state government and secondly, to present the government with an alternative plan. The process of approval was not completed until 1967 and by that time another plan had been developed with the help of prominent architects. In an article written by three of Bombay's leading architects, Charles Correa, Pravina Metha and Shirish Patel and published by MARG (Modern Architects Research Group), the need for a new city across the harbour was stressed (Correa *et al.*, 1965). A counter-magnet of equal size and prominence to Greater Bombay, that is, a 'twin city' would alone solve the present city's congestion problems. Piecemeal restructuring of the old city could only provide a stop-gap measure. Thus the New Bombay idea was thrust upon the public and state government by the city's business class.

This interpretation offered by Verma, of how the New Bombay idea evolved as a counter-plan instigated by the business lobby, is, however, not properly documented. We know that in 1965, shortly after the publication of the Development Plan, the government announced a restrictive policy of industrial location for the island and suburbs (Godbole, 1978, 91). This policy was the result of recommendations made in the Barve Group Report. The gist of the policy was that new industrial units and expansion of existing units on the island and suburbs would be strongly discouraged. It was hoped that backward regions of the state would receive some of the new industries and the state would give incentives for locating in less developed areas. Thus, by 1965, some curbs on industrial activities on the island were already in effect. The 1964 Development Plan could not make matters worse. It is also a little simplistic to assume that leading professional planners in Bombay were somehow persuaded into the idea of New Bombay by the business lobby. There is evidence that, in professional planning circles, the idea of mainland development had been advanced as far back as 1944–45.[17] Moreover, thinking in the professional planning community was subject to its own disciplinary dynamics and to influences emanating from both within the country and abroad.

Examining more closely the major influences on the intellectual development of city planning thought in India in the early post-independence period, we see clearly the stamp of British planning (Gandhi, 1973). In particular, the ideas of Ebenezer Howard (1946) and the enactment of new legislation on town and country planning in Britain had stirred the Indian professional town planning community.[18] Howard is best known for his concept of 'garden city', a self-contained new city to contain the overspill from an already congested metropolis. Howard, who was against the congestion of a big metropolitan city as well as the characterless existence of suburbia, stressed the need for a more organic kind of city. This city would be small in size and yet contain all the essential functions of an urban community and be surrounded by a permanent agricultural green belt. Hence the name 'garden-city'.

[17] See the 1944–45 Presidential Address given by the President of the Indian Institute of Architects, published in *The Journal of the Indian Institute of Architects*, July 1945, p. 2.

[18] Landmark legislation includes the Town and Country Planning Act 1947, the New Towns Act 1946, and the Town Development Act, 1952.

The name 'garden-city' was later replaced by the simpler and less confusing term 'new town' (Osborn and Whittick, 1969). To be self-contained, industry would be an integral part of the new town and workplaces within walking distance of residential areas. The town would contain about 32,000 people and have a fairly high population density of 70–100 persons per acre. To test the practicability of his ideas, Howard himself started an experimental new town, Letchworth, in 1904. Later, a new town, Welwyn, was started. Both were supported by private enterprise but their success impressed the government and Sir Anthony Montague Barlow's parliamentary committee, set up in 1937, recommended the creation of more new towns to handle the increasing congestion of London. Accordingly, the New Towns Act of 1946 was passed to enable the building of a ring of such towns around London and other parts of England. Today London is surrounded by a ring of eight smaller towns.[19]

Howard's vision went beyond the physical form of the new town to include suggestions for its administrative management and its integration into the urban system (Mumford, 1984). He recommended that the growth of the town be in the hands of some public authority which would have the power to acquire and develop the land, plan the town and provide all the necessary services. Also to free it from dependence on the large metropolis for higher order functions, he suggested that several new towns connected by rapid public transportation be politically federated and centrally associated. They would then be able to afford some of the specialized higher order services now only possible in the large city. Howard's utopian vision of building a new town on virgin land appealed to Indian architects particularly because many of them had become frustrated with the physical and political constraints that underlay any plan for the rejuvenation of an old city such as Bombay.[20]

The similarities between the 'twin city' as envisioned in the MARG (1965) issue on Bombay and Howard's new town are not difficult to

[19] These eight New Towns are Basildon, Bracknell, Crawley, Harlow, Hatfield, Hemel Hempstead, Stevenage and Welwyn Garden City. Except for the last one, all of them were built between 1946 and 1950 (Osborn and Whittick, 1969, p. 104).

[20] Harris (1978) noted: 'A prominent and active supporter of the second city project at one stage described how impossible it was to achieve significant improvements in Greater Bombay. The administrative and political obstacles to change were so great that there was no possibility of real achievement except by undertaking what seemed on the face of it an extravagant evasion of the problems' (p. 60). The extravagance alluded to here is the greater expenses incurred in building a new city.

see. The rationale for building the twin city is also similar. However, the absolute size of the twin city would be much larger for it would contain around twenty new towns. Each of these would be self-contained and yet interconnected to form a dispersed metropolitan matrix which in area and importance would equal old Bombay. Howard's ideas of the administrative management of such a system were also forwarded in the New Bombay case and ultimately adopted by the state government in 1970 when CIDCO (City and Industrial Development Corporation of Maharashtra), a state government enterprise, was created to plan and develop New Bombay.

It is, however, important to keep in mind the fact that external influences on town planning thought in India were greatly tempered by the local experiences of the Indian planners. In the mid-sixties, there was a general feeling in the planning community of the need to move away from the formalism and rigidity of Western planning and adapt planning to Indian realities. The need for more down-to-earth and functional cities reverberates in the papers of the participants of a national symposium held in 1966.[21] In the words of one participant:

> The town planning that we in Bombay are concerned with currently is not, repeat not, interested in ... 'bhawans, showpieces, expensive plate glass, steel concrete, aluminum, decorative louvres and frills, each of which might serve for a dozen low-cost houses, streets which are too wide for any earthly use, and parks which cannot be enjoyed, it being too dangerous to cross over to them.' It is concerned, and vitally, with such mundane things as houses in which people do not have to be huddled ten to a hundred sq. ft., sewers that flow and do not turn into cesspools, toilets that flush, water taps that yield water at least some hours of the day, and when they do, do not merely provide a media for carrying cholera, small pox and filaria germs to float in.[22]

This emphasis on a more basic and amenity-oriented type of town planning is carried over into the ultimate plan for the buildilng of the twin city. In the foreword of the Draft Development Plan for New Bombay, it is categorically stated that the new city is being built for the common man.[23] Hence monumental architecture will

[21] See *Seminar*, no. 79, March 1966, 'Our Cities: A Symposium on the Need for a Rational Urban Development.'

[22] *Ibid.*, see the paper by F. D. Anita entitled 'The Final Test,' p. 17.

[23] Foreword of the Draft Development Plan (1973): 'If there was a temptation to plan a city of architectural grandeur, our planners have steadfastly resisted it. The effort has been to avoid the spectacular, to provide minimally for the affluent few and to promote the convenience of the greatest number. New Bombay, then,

not be its hallmark, but rather a more populist type of architecture focusing on the needs of the majority for a better living environment. The MARG document also highlighted the physical and visual aspects of the new city. As an architect rather than an urban planner, Charles Correa, the leading member of the MARG team, had often stressed the need for using the physical elements of the city to give it character and vitality (Correa, 1966). Thus the emphasis on waterfront development and water as a means of transport between the old and the new city of Bombay.

Charles Correa's ideas were enthusiastically received by Bombay's architects and planners, many of whom supported the idea of the new city for practical reasons: because it held out the promise of jobs and the possibility of fulfilling professional ambitions. In the words of the authors of the city's draft Development Plan 'the scale of the city is beyond anything so far undertaken in this country. It may well turn out to be the largest planned city project so far undertaken anywhere' (CIDCO, 1973, 8–9). Designing and building an urban environment of such magnitude and virtually from scratch was a challenging task and architects and urban planners in Bombay considered it to be the opportunity of a lifetime. Thus Shirish Patel (1970, 1018), one of the authors of the 1965 MARG document observed that:

> The twin city work promises sufficient excitement to attract the best talent in India and perhaps some from the rest of the world. Since we start with a clean slate it promises the opportunity to try totally new urban systems, designed to meet the urban activities of the next century.

It was the activities of the Modern Architects Research Group (MARG) which were largely responsible for the state government's ultimate acceptance of the New Bombay idea. One of the strategies MARG effectively used was to popularize the idea and throw it open for debate by the media and the public. Following upon the publication of the MARG (1965) issue on Bombay, the idea of building a new city as opposed to patching up the old, received considerable media attention. The weaknesses and lack of vision of the Development Plan were much highlighted and a groundswell of middle class and intellectual support for the New Bombay idea was built.[24]

will not be another Grand City; it will be a city where the common man would like to live.'

[24] See, for instance, 'Succour for Bombay,' *Economic and Political Weekly*, vol. 5, no. 7, 14 Feb. 1970, p. 317. The New Bombay idea is regarded as 'a major breakthrough

Disciplinary dynamics and biases alone, however, cannot explain the overwhelming support for the New Bombay idea generated by the end of the sixties. Nor can they entirely explain the shape of the ultimate plan. For this one has to turn to the middle class and the role of the state government. Why did the middle class and intelligentsia support the idea of New Bombay? There was, by the late sixties, a feeling of hopelessness about developing Bombay island any further. In the popular press, Bombay was regarded as 'a decaying city' faced with imminent 'strangulation' unless growth could be directed elsewhere.[25] Academic investigations on Bombay's growth reinforced this feeling. For instance, Visaria's study (1969) had shown the rapid population growth in Greater Bombay during the decade 1951–61, particularly in the less populated eastern suburbs and wards in the city with space for vertical expansion. Its negative consequences were reflected in deteriorating living conditions (Lakdwala *et al*., 1963, 704–812). Lakdwala *et al.*'s survey of 13,369 families in Greater Bombay conducted during 1954 to 1956 revealed that 10,378 or 77.6% of them lived in single-room tenements (1963, 723). Moreover, 10,158 or 76% lived in tenements where floor space did not exceed 200 sq. ft. or 18.5 sq. metres (1963, 748). In addition to residential congestion, there was also a strong concentration of organized sector jobs in Greater Bombay with 18.5% of the sample total employed in offices in Ward A, that is, the southern end of Bombay island. Nine-tenths of those employed in the organized sector were working in the city proper with only 11% in the suburbs. Such a decided concentration already observable in the mid-fifties led the authors to ask 'whether it were not possible to develop an alternate site' (1963, 703). Thus we see that thoughts of directing development away from the city and into another site were already very much in the air. These only strengthened with the passage of another decade. By the end of the sixties, the building of New Bombay began to be perceived by Bombay's intelligentsia as the only way of saving the old city. It was 'the dream across the water' that had to be made a reality.[26]

in urban planning.' See also *Times of India*, Bombay, front-page article of 28 Jan. 1970, 'Counter-Magnet to Bombay: New Metro-Centre Urged.'.

[25] *Times of India*, Bombay, Editorial, 'Decaying City,' 21 April 1969, 6: 2; also, *Times of India*, Bombay, 'Saving Bombay City: Strangulation Threat,' 15 Oct. 1969, 6: 7–8.

[26] Dom Moraes, 'The Dream Across the Water.' *Illustrated Weekly of India*, vol. 91, no. 43, 25 Oct. 1970, pp. 34–7.

There were some practical considerations too. One of the major strengths of the New Bombay idea was the method of financing proposed. Unlike the Development Plan which had proposed to raise part of its money through taxation, the New Bombay project would be self-financed through the revolving fund technique. Land would be developed and sold to finance further land development (Rao, 1990). Between the years 1967 and 1970, support for this project was thus gradually strengthened.

In the meantime, given the unabated industrial concentration around Greater Bombay and Poona, the state government in 1965 appointed a committee under the chairmanship of the well-known economist Prof. D. R. Gadgil. Its objectives were to formulate the broad principles of regional planning for the Bombay and Poona regions with a view to dispersing industry and creating urban centres of suitable size. The Gadgil Committee submitted its report in 1966.[27] It strongly recommended the movement of heavy and light industry from old Bombay to the mainland. It also suggested that mainland development take a multi-nucleated form with many small settlements rather than one big city. The Gadgil Committee delineated a Greater Bombay Metropolitan Region and recommended the passing of a Regional Planning Act to enable the establishment of a metropolitan authority to prepare and execute plans relating to the metropolitan region. As the mainland lay beyond the municipal limits of Greater Bombay, its development could not be undertaken by the Municipal Corporation of Greater Bombay. Accordingly, the Maharashtra Regional and Town Planning Act was passed in 1966 and came into force in January 1967.

The Gadgil Committee's recommendations were landmark recommendations from the point of view of metropolitan planning in India. With the passing of the Maharashtra Regional and Town Planning Act, Maharashtra became the first Indian state to adopt a comprehensive metropolitan planning legislation. About the Gadgil Committee's other recommendations, especially that of industrial dispersal, it was noted by a contemporary administrator (Inamdar, 1978, 674) that:

> Excepting certain sections of industry, the public response to the proposals of the Gadgil Committee was in general appreciative. In Poona the reaction of industry was more critical than in Bombay . . . In Bombay also they did

[27] *Report of the Committee appointed for Regional Plans for Bombay–Panvel and Poona Regions*. 1966.

not agree with the Committee's proposal about the transfer of long-established industries like textiles as well as heavy and light industries from the island to the mainland, so also about the location of future industrial expansion in centres away from over-crowded areas like the Thana-Belapur complex. But in Bombay, people as well as government were unanimously in favour of placing severe restrictions on any activities that would lead to further congestion of Greater Bombay.

In actual practice, the government was unable to do this and its industrial location policy as announced in 1968 was quite liberal and did not reflect the main recommendations of the Barve Study Group or the Gadgil Committee (Godbole, 1978, 93). On the contrary, it allowed the expansion of existing industrial units, particularly textiles, on the island, and permitted small-scale units to come up freely. Thus many of the restrictions introduced in 1965 were once again reversed. It was only after 1974, with the establishment of metropolitan planning, that a full-fledged industrial location policy was announced by the state government.

The Maharashtra Regional and Town Planning Act, 1966 had enabled the notification of the Bombay Metropolitan Region in June 1967 and the formation of the Bombay Metropolitan Regional Planning Board (BMRPB). In January 1970, in its Draft Regional Plan presented to the Government of Maharashtra, the BMRPB evaluated the advantages and disadvantages of several alternate types of urban management systems for the metropolitan area. These were (1) internal restructuring, that is, upgrading the old city, (2) multi-town structure or the planned expansion of several existing towns around Bombay, (3) development of linear urban corridors along major transport routes into Bombay, and finally (4) the development of a twin metropolis on the mainland.[28] The last was proposed as the best option for the present.[29] The government accepted this proposal and

[28] Bombay Metropolitan Regional Planning Board, *Report on the Draft Regional Plan of Bombay Metropolitan Region 1970–1991*, 2 vols 1970.

[29] In the final version of the Plan, the first three were considered ineffective for arresting office growth in the southern end of Bombay island. The BMRPB felt that 'To be really successful in re-orienting growth of Bombay new development will have to be of such an order and of such character as will be able to induce the sophisticated tertiary sector to locate itself away from the congested southern tip.' (BMRPB, 1974, 104). Therefore, another city with a 'metropolitan fabric' rather than a few small towns was considered the best option. Though the BMRPB report stressed that the pattern for future urban development would have to be 'a combination of' all the four alternatives, in reality, it was the metro-centre idea which received the greatest attention at that time. In fact, the 1964 Development Plan for Greater Bombay remained, for the most part, a paper plan (Sastry, 1978).

very shortly, in March 1970, City and Industrial Development Corporation of Maharashtra (CIDCO) was formed.

As opposed to the inaction following the Modak–Mayer recommendations, the slow reaction to the Barve Group report and the 1964 Development Plan, the state government's positive and quick response to the BMRPB's Plan and the speedy formation of CIDCO, provide a sharp contrast.[30] It was as if the government had suddenly, in the late sixties, awakened to the urgent need for urban management. Pressure from the business class against relocation of existing units, active campaigning by professional architects through MARG and the backing of a middle class looking for a better living environment helped galvanize the government and direct it towards some concrete steps.

CIDCO was set up by the state government as a Public Limited Company under the Indian Companies Act and is a wholly-owned government company. In March 1971 it was designated the New Town Development Authority for New Bombay and in October 1971 it undertook to prepare a Development Plan. MARG's influence on CIDCO was very strong in the early years when Charles Correa, Pravina Mehta and Shirish Patel were given key decision-making positions. Their ideas shaped CIDCO's Draft Development Plan which appeared in October 1973. Final sanction was given to the Plan in August 1979 (CIDCO, 1989, 7).

The Development of New Bombay

The Draft Plan is a critical planning document for within it are the planning foundations of New Bombay. The Plan has been periodically reviewed and revised but its basic framework still holds. In the Draft Development Plan of 1973 we see that the foremost objective of the New Bombay project is that of 'reducing the growth rate of popula-

[30] S. M. Y. Sastry, former Deputy Municipal Commissioner of the Municipal Corporation of Greater Bombay noted a total lack of enthusiasm on the part of officials regarding the implementation of the 1964 Development Plan for Greater Bombay: 'Finances are the bug-bear and the attitude often appears to be "who can ever implement this fantastic plan?" The plan is by and large therefore ignored. An attitude of indifference if not apathy pervades. The controlling aspects, zoning, floor space index regulations, etc. are no doubt being enforced but the developmental aspects of the plan are not being touched upon at all.' According to him, the plan has 'by and large remained only a paper plan as far as the development aspect is concerned.' (1978, 99–100).

tion in Greater Bombay by creating an attractive urban area on the land across the Bombay harbour' (CIDCO, 1973, 10). Such an urban area should 'absorb immigrants who would otherwise come to Bombay as well as attract some of Bombay's present population' (CIDCO, 1973, 10). The Plan envisaged the development of New Bombay as a centre of tertiary employment, mainly white collar jobs, and not as an industrial area. Manufacturing jobs were estimated to reach 115,000 by the year 1991 while jobs in government and quasi-government bodies were estimated to reach 825,000 (CIDCO, 1973, 36). There was need to reduce the commuting of office-goers to south Bombay and this could be done by shifting office activities to the new location. Critical to the success of this operation was the tacit agreement on the part of the state government to shift the bulk of its offices from the central business district on the southern tip of Bombay island to New Bombay. Further decongestion on the island was anticipated to occur with the completion of the Nheva Sheva port on the mainland. The new port would handle many of the activities of the old port and thereby lead to a shifting of many port activities from Bombay port. In addition, twenty residential nodes or new towns would be created within the area of New Bombay. Each nodal settlement spread over 400 to 600 hectares of land would contain between 100,000 to 200,000 people. The nodes would be self-contained in terms of jobs, education and other services. On completion, New Bombay was expected to contain about two million people.

At first glance, the 116-page Draft Plan makes for impressive reading. But a closer examination reveals some major ambiguities about firstly, the economic base of the new city and secondly, its relationship to Bombay. If New Bombay's raison d'être was to be its ability to attract migrants who would otherwise go to Bombay, there would of necessity have to be similar types of jobs in New Bombay. Yet as a tertiary centre with a weak industrial base, how would these jobs be forthcoming? Also why was the city planned to have a service-dominated economic base? The 1965 MARG document kept stressing the need for 'a new capital' across the water. Would the shifting of government offices considerably reduce congestion in Greater Bombay, given that people came to the island for industrial jobs as well?[31] Shifting of government and quasi-government jobs to the

[31] Kosambi's detailed study of Bombay between 1880 and 1990 indicates that by 1961, the occupational distribution of the city population had a two-fold pattern: the northern half of the city and the northern part of the southern half were chiefly

mainland was anticipated to be easier than getting private industry to move. The development of New Bombay as envisaged in the Draft Plan would not necessitate the relocation of pre-existing industry and thereby would not adversely affect Bombay's big industries/business lobby.

Lack of direction and clarity regarding the economic base of the new city has led one critic to comment that:

> One is left with the impression that the central purpose [of building New Bombay] is solely to create an attractively built environment: that the plan is a programme for improved consumption, improved welfare for those fortunate enough to live in the second city, without clear assessment either of the opportunity costs involved or where the expenditure might minimize welfare. The danger is that scarce resources will be used to create a high income suburb, zoned physically to be a separate area of Bombay, an escape for higher income groups who wish to aspire to higher standards of public amenity (Harris, 1978, 57).

Two decades since the project was officially started, we can examine New Bombay's development and see whether the fears expressed above have materialized or not.

As of June 1991, CIDCO has developed seven of the twenty nodes. They are Vashi, Nerul, Belapur, New Panvel, Kalamboli, Airoli and Koparkhirane and are shown in Figure 2. By 1989, Vashi, the oldest node, had over 100,000 people and over 20,000 jobs. The other nodes are much smaller but are expected to grow rapidly as housing projects are completed and new jobs created. Ease of home ownership has become a major attraction for moving into this area from the congested island (CIDCO, 1984, 14). However, the nodes are not yet self-contained in terms of jobs and so commuting to the island city and its suburbs for work is still very much evident. In fact, in 1987–88, for the 17,283 households surveyed by CIDCO in Vashi node, 31% of the jobs were in Bombay island, 14% in the eastern suburbs of Greater Bombay and 4% in the western suburbs. Thus a total of 49% of the workforce was still dependent on the old city for jobs (CIDCO, 1988, 22). For interior nodes such as Kalamboli and New Panvel, dependence on Greater Bombay is weaker. In fact, in New Panvel, 49% of the jobs were within the node itself and other nodes of New Bombay.

Secondly, non-manufacturing jobs have not been growing at the rate expected by CIDCO in the Draft Plan of 1973. As of 1981, the

manufacturing and the rest of the southern half was non-manufacturing (1986, 139–40).

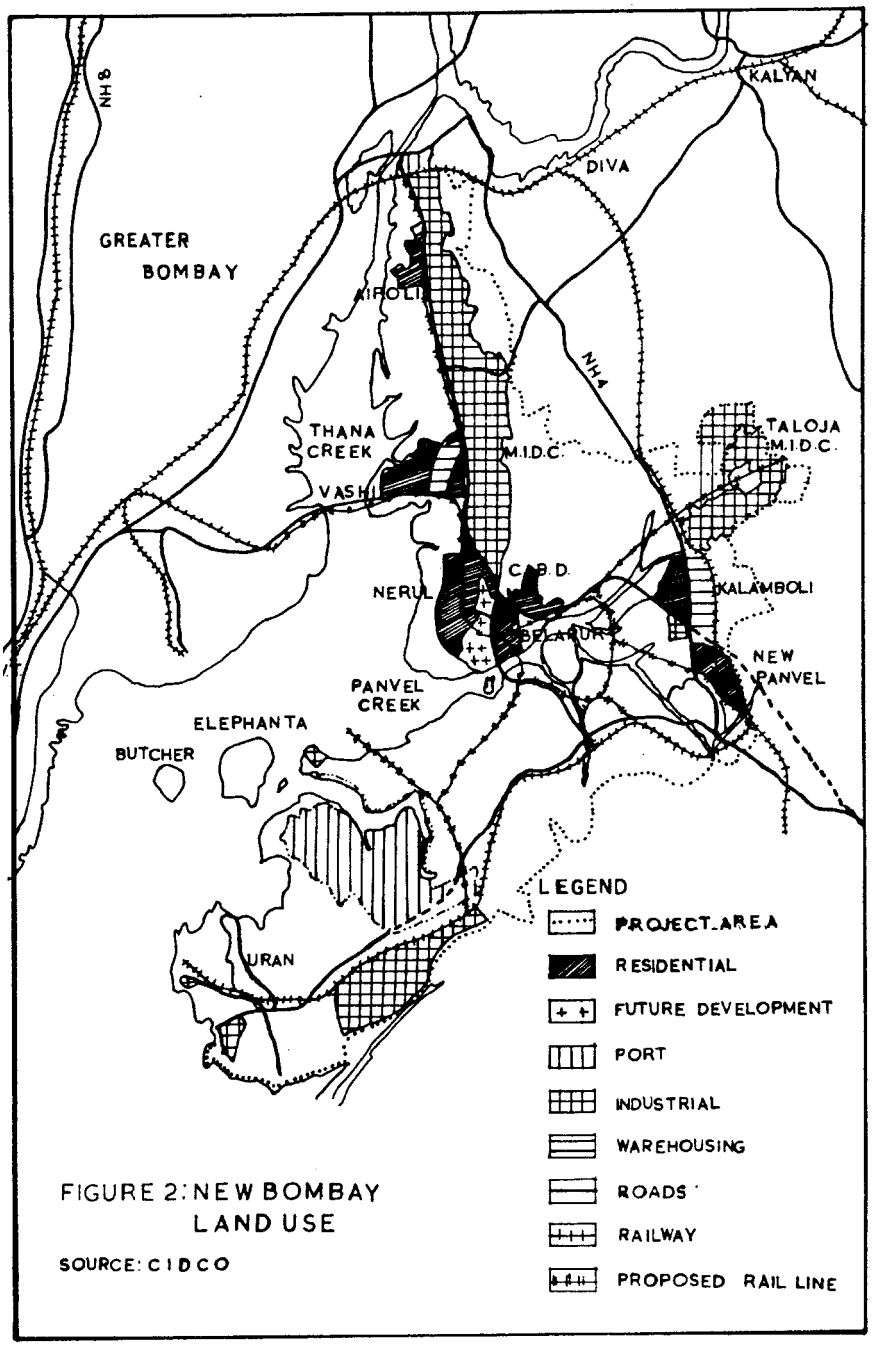

Fig. 2 New Bombay land use.
Source: CIDCO.

job mix of New Bombay was characterized by a heavy dependence on the manufacturing employment generated by the pre-existing MIDC (Maharashtra Industrial Development Corporation) industrial estates located in the Trans-Thane Creek area and Taljola. Non-manufacturing jobs were few, only 1,400 jobs in Konkan Bhavan at Belapur and 1,000 jobs in CIDCO's own offices at Vashi and Belapur (CIDCO, 1981). In the ten years since the above finding was made, the numbers of non-manufacturing jobs in New Bombay have greatly increased but not nearly enough. Only 1,200 of the 70,000 to 80,000 state government jobs have shifted to New Bombay (Engel, 1991, 102).

The state government's lack of commitment to shifting its offices from the island to the mainland has clearly been one of the major deterrents to the development of New Bombay as an autonomous entity. In fact, it has been observed by a leading architect involved in the planning of New Bombay that 'Government interest in New Bombay, after starting it off, has been minimal' (Patel, 1993). Lack of interest on the part of government in the new city project is reflected in its policy of allowing further land reclamation in the southern tip of Bombay island. Pressure from the powerful builder lobby which has close ties with politicians and the underworld has overridden the objections of environmentalists and other civic groups (Sivaramakrishnan and Green, 1986). With the vast Backbay reclamation project now complete, a highly profitable land and high-rise office and upper income residential complex involving some 250,000 jobs is underway. Moreover, when completed, the Bandra-Kurla office complex in Greater Bombay with 120,000 jobs is also likely to have an adverse impact on New Bombay's attractiveness as a growth centre for office sector jobs (Patel, 1993). Recently, the Bandra-Kurla area has also been chosen as the location of a new financial centre for Bombay. One hour away from the existing financial centre, it is hoped that the new one will relieve congestion in the southern part of the city. Experts strongly disagree (Patel, 1993).

Housing Pattern in New Bombay and its Implications

To understand New Bombay's development it is necessary to examine its achievements in augmenting housing supply. Details of land-use within the seven nodes are given in Table 1. They reveal some

important facts about the way the nodes are developing. We see that residential land-use per se is the single largest type of land-use, accounting for 46.64% of the total area of the nodes. What is interesting to note is the kind of residential land-use that is most available in the nodes. A distinction can be made between CIDCO-constructed tenements and non-tenements, or houses built by housing co-operative societies, bungalow/row houses (built by CIDCO), and housing available on bulk residential plots (built by private contractors). Following CIDCO's policy of cross-subsidization, it can be seen from Table 1 that tenements cost much less per sq. metre than non-tenement residential dwelling units. However, while tenements occupy 22% of the total urban area contained in the seven nodes, the better type of housing, that is, non-tenement housing, occupies 24.63% of the total area. These percentages indicate only a small difference in the area allocated to the two kinds of housing but in terms of the volume of residential housing stock built by CIDCO, housing for the lower-income group has been given priority.

As of 1989, a total of 65,068 residential units have been created by CIDCO (CIDCO, 1989, 9). Of these, nearly 53% cater to the lower-income group (income up to Rs 1,500 a month), 30% to the middle-income group (income between Rs 1,500 and Rs 2,500 a month) and 17% to the higher-income group. This distribution varies considerably from node to node. It can be seen from Table 2 that in Nerul, Belapur, Kalamboli and New Panvel, the percentage of CIDCO-built residential tenements available for the middle and upper-income group exceeds that for the lower-income group. On the other hand, in nodes such as Airoli, Koparkhairane and Vashi, the percentage of units built for the lower-income group exceeds that for other groups.

Going by the total numbers of dwelling units built for the lower-income group and CIDCO's policy of subsidizing these units, it would appear that CIDCO has succeeded in its objective of giving the highest priority to housing the common person. A closer examination of the quality of life offered in CIDCO's earlier low-cost housing schemes, however, indicates that its other objective of raising living standards and reducing disparities in amenities has not been realized. Most of its early low-cost housing units and sites and services settlements are now criticized as having been built without any consideration for privacy and space. The quality of life offered by these

TABLE 1
Details of Development of lands within Seven Nodes of New Bombay up to 31.3.88

Sl. No.	Land Use	Area leased Hectares	%	Amt. realized (Rs in lakhs)	Average rate per sq.m. in Rs
1.	CIDCO constr. tenements	164.52	22.01	2,130.71	129.51
2.	Co-op housing societies	56.88	7.87	2,119.13	359.51
3.	Bunglow/Row Houses	50.87	6.81	1,173.67	230.72
4.	Bulk residential plots	66.92	8.95	1,515.73	226.50
5.	GES Plots	18.67	2.50	46.14	24.71
6.	Primary schools	0.51	0.07	0.00	–
7.	Secondary schools colleges & higher education	10.77	1.44	21.63	20.00
8.	Social, cultural religious	53.90	7.21	231.56	42.96
9.	Public utilities	9.09	1.22	53.70	59.08
10.	Wholesale APM (agro. produce market)	42.36	5.67	1,671.43	394.58
11.	Health	7.82	1.05	51.92	66.39
12.	Wholesale steel	70.01	9.37	1,060.43	151.47
13.	Service Industries	11.40	1.50	234.62	205.91
14.	Warehousing & Cold Storage	101.88	13.63	1,235.69	121.29
15.	CIDCO Constr.	5.92	0.79	168.09	283.94
16.	Showroom plots	3.49	0.47	187.04	535.93
17.	Shopping-cum-residential	9.90	1.32	1,817.21	1,835.57
18.	Commercial	20.89	2.79	2,083.53	997.38
19.	Offices	26.16	3.36	1,563.35	621.36
	Total:	747.53	100	17,422.19	233.06

Sources: CIDCO, Planning Section. 1991.

structures is the lowest minimum possible, not much better than many of the 'chawls' of Greater Bombay.[32] It was observed by a resident sociologist in Vashi node that 'it is hard to believe that planning was needed to produce such poor quality housing.' A graphic description of the housing in the low-cost sites and services scheme is provided by a visiting architect who observed the following:

The sites and services settlements constructed in Airoli and Kopar Khairane resemble more a transit camp or an army barracks than they do

[32] 'Chawls' are a traditional form of working-class housing in Bombay. In spite of their dilapidated appearance and overcrowded nature, some architects point out that they have been able to provide semi-private space and a sense of social cohesion (Shah, 1991).

TABLE 2
Housing Built by CIDCO as of 31 March 1988

Node	Lower income group	Middle income group	Higher income group	Total
1. Airoli	6,163	804	1,920	8,887
	(69.35)	(9.04)	(21.60)	(100)
2. Koparkhairane	10,968	–	–	10,968
	(100)	–	–	(100)
3. Vashi	8.777	4,592	2,105	15,474
	(56.72)	(29.67)	(13.60)	(100)
4. Nerul	4,136	4,800	1,968	10,904
	(37.93)	(44.02)	(18.05)	(100)
5. Belapur	698	3,715	2,125	6,538
	(10.67)	(56.82)	(32.50)	(100)
6. Kalamboli	2,900	2,976	820	6,696
	(43.31)	(44.44)	(12.25)	(100)
7. New Panvel	995	2,740	1,846	5,581
	(17.83)	(49.09)	(33.08)	(100)
Total	34,637	19,627	10,784	65,048
	(53.25)	(30.17)	(16.58)	(100)

(Row-wise percentages are in parenthesis)

Source: New Bombay: An Outline of Progress. CIDCO, 1989.

a permanent habitat. They offer row after row of numbered plots almost unrelieved by open space with no allowance for the subtle sequences of public and private spaces that characterize Indian life. (Engel, 1991, 106)

CIDCO officials themselves admit that 'some kind of monotony due to repeition of designs and layouts already have crept in as a natural phenomena and also the quality of construction has not always been up to the mark for lack of sufficient technical staff, etc.' (Bhattacharya, 1992, 83).

One outcome of this has been the lack of attachment of the lower-income groups to the structures CIDCO has built for them. With rising prices many of the original owners have sold out to the middle class. This has meant more overcrowding, given the greater material possessions of the middle class. The class-bias in the architectural design of lower-income units is very apparent as the housing designed for the middle and upper classes has been sensitive to their needs for private and semi-private space. Unless more imagination is used for designing houses for the poor, CIDCO's mass housing programmes will not be successful.

So as not to repeat its earlier mistakes and to increase housing supply, CIDCO as of 1989–90 has begun actively to involve other

TABLE 3
Housing Being Built for CIDCO by Outside Builders/Agencies and in Progress from 1989–90

Tenement built-up area in sq. m.	Total number of housing units to be built	Type of tenement as a % of total units
18	8,534	34.00
24	3,270	13.06
34	4,526	18.08
40	2,146	8.57
50	2,492	9.95
70	2,505	10.00
85	746	2.98
100	817	3.26
Total:	25,036	100.00

Source: CIDCO, 1989.

agencies in building houses on a turn-key basis (CIDCO, 1989; Bhattacharya, 1991, 1992). A total of 25,046 units are being built by other agencies. A greater supply of housing will be possible with construction going on simultaneously by different agencies in different nodes. Already the impact of the new approach can be seen in the sharp increase in expenditure on housing in 1990–91 as compared to the previous year (Bhattacharya, 1992, 80). Originally, of the total number of units planned to be constructed, 34% were to have a built-up area of only 18 sq. m. and be priced at Rs 33,000. This is the smallest unit and is meant for the poor, but because it will not be a site and services type of unit but a 'pucca' unit, its affordability by the poor remains to be seen. Table 3 shows that of the new housing planned, only 16.24% will have a floor space greater than 50 sq. m. CIDCO's policy of providing small units to cut down on costs continues but how far, at current market prices, even these will be affordable by the groups for which they are constructed, is doubted.

In a recent article, Bhattacharya (1992, 80), a top-level economic planner in CIDCO, has pointed out that though CIDCO had indicated a cost limit of Rs 33,000 for LIG (lower-income group) housing, actual tenders received priced it at Rs 58,000. As a result, this house type now falls within the category of MIG (middle-income group) housing. The same problem is repeated in the next order of housing with a ripple effect. Bhattacharya attributes these escalated costs to a lack of awareness among practising architects, engineers, and developers on how to design houses with non-conventional and cost-reducing technologies. CIDCO's ability to provide housing for the urban poor has in these ways been constrained.

An interesting aspect of the development of New Bombay has been the kind of housing it has made available. Owner-occupied dwelling units are the most numerous. In fact in 1987–88, in six nodes surveyed by CIDCO, that is, Vashi, Nerul, Belapur, Kalamboli, New Panvel and Airoli, 33% of the residential dwelling units were owner-occupied houses bought through outright purchase. Another 28% were owner-occupied through hire purchase and about 39% were rental (CIDCO, 1988, 22).

The predominantly middle-class character of the nodes is reflected in the average household income of the nodes (CIDCO, 1987–88). CIDCO's socioeconomic survey (CIDCO, 1987–88) indicates that the average household income was Rs 2,112 a month for New Bombay as a whole. While Vashi and Belapur had figures higher than this, Airoli and Kalamboli showed Rs 1,076 and Rs 1,470 respectively. The occupational structure of the six nodes revealed a high proportion of top-level managerial, supervisory and professional people, as much as 35% of the total workforce. Skilled workers comprised about 20% of the workforce, unskilled workers only 11%, lower-level service sector jobs, for example, office assistants, typists, and clerks composed another 21%. Secondary workers as a whole made up 25% of the workforce, office workers about 44%, and trade about 8%.

From the data on housing tenure, monthly earnings and occupational structure of the population in the existing nodes, it is possible to suggest that the opening up of the mainland has clearly benefited the middle class. The housing opportunities that New Bombay has opened up have been a boon to middle-class professional and service sector workers as well as to blue collar workers in the organized sector of industry. In spite of CIDCO's attention to the housing needs of the 'economically weaker section', we find that the poor, mainly composed of those working outside the organized sector, have been excluded. Their housing needs are increasingly being met by the mushrooming of squatter settlements. CIDCO periodically supervises the demolition of these 'unauthorized structures,' but they keep on reappearing, much to the chagrin of the dwellers in the authorized buildings.[33]

[33] *The Twin City Times* (Publ. Vashi, New Bombay), 17–23 Dec. 1988, 'Unauthorized Construction Demolished at Kalamboli'; 11–17 March 1990, 'Unauthorized Huts Mushrooming'; 18–25 March 1990, 'Dharavi in New Bombay?'; 29 April–5 May 1990, 'CIDCO Swoops down on Unauthorized Construction'; 25 Nov.–1 Dec. 1990, 'CIDCO Sweeps down on Huts.'

New Bombay, in fact, is being peopled by two kinds of migration streams: one, an urban-to-urban stream which represents the inflow of middle-class people from Greater Bombay (CIDCO, 1978–88, 14) and, to a much lesser extent, from other nearby urban areas, and two, a rural-to-urban stream which represents an inflow of another class of people, the labouring poor, from surrounding rural regions to provide labour for domestic work in middle-class households and other services. Their access to New Bombay's housing and other facilities is very much circumscribed. Some, in the latter stream, are people from villages within the New Bombay area. However, by and large, people from local villages have come to the urban nodes for jobs alone, preferring to reside in their original villages (CIDCO, 1987–88). They are daily commuters to the urban nodes and not migrants.

Impact of New Bombay on Greater Bombay

Apart from new housing, the seven nodes have seen huge investments in social facilities such as schools and colleges, hospitals, community centres, shopping arcades, parks and public gardens (CIDCO, 1989, 38). To create jobs, there have been similar investments in the construction of an agricultural produce market at Vashi node and an iron and steel market at Kalamboli. The construction of a large office complex which will create 75,000 jobs is in progress in Belapur, the CBD of the new city.

To connect the nodes with each other and with places outside, CIDCO has had to make heavy investments in infrastructure development. It has entrusted the building of the infrastructure to different government departments/agencies (CIDCO, 1989). The laying of new infrastructure has been a costly affair involving earth work, levelling and drainage. Such physical tasks have, as of 31 March, 1988, cost CIDCO a total of Rs 99.03 crores or Rs 990 million. The railway projects alone have cost Rs 39.25 crores. These two types of expenditure have constituted 32.57% of CIDCO's total expenditure on the New Bombay project (CIDCO, 1989).

Total expenses on the New Bombay project as of 31 March 1988 were Rs 42,454.58 lakhs or Rs 42 billion. After showing losses for the first nine years, the project began showing profits after 1979–80. But do profits mean that the project has been successful in achieving its objectives? Has the growth rate of Greater Bombay been reduced by the presence of New Bombay? Official figures of

population growh during the decade 1961–71 and 1971–81 indicate that the growth rate of Greater Bombay has declined. From a decennial growth rate of 43.8% during 1961–71, figures for 1971–81 showed a slowing down at 37.8%.[34] The slowing down has continued in the decade 1981–91 when the growth rate fell to 20.4%. With a population of 9,925,891, Greater Bombay's decennial growth rate during 1981–91 has been on the low side.[35]

The slowing down of the growth rate of Greater Bombay, however, must be interpreted with caution. To what extent it has been the outcome of the growing presence of New Bombay is difficult to measure. Some of it has certainly resulted from the spillover of urbanization and industrialization from Greater Bombay onto adjoining talukas in the mainland and this would have occurred irrespective of New Bombay. According to the 1991 Census, neighbouring cities such as Thane City (803,389), Kalyan (1,014,557), Ulhasnagar (369,077) and Mira-Bhayander (175,605) have grown rapidly during the decade 1981–91. Their growth rate had been high in the seventies as well (Kosambi, 1986, 124). It is likely that these cities have absorbed most of the spillover and they all lie outside New Bombay.

Moreover, while the growth rate of Greater Bombay has slowed down, that of the entire Greater Bombay Urban Agglomeration has in fact accelerated during the last decade. The Census of 1991 has indicated that between 1981 and 1991 the growth rate of the urban agglomeration has been 52%. This is high compared to the growth rate of the nation's other large urban agglomerations. For instance, the decennial growth rates of the Calcutta, Delhi and Madras urban agglomerations have been 18%, 46.2% and 25% respectively.

The addition of new areas to the Greater Bombay urban agglomeration has been the main reason for the sharp increase in its population. Such an addition was inevitable. Spillover of urban development from Bombay island to the mainland and the increasing size of neighbouring cities in Thane district have been so marked that for the first time, in the 1991 Census, the urban continuum stretching from the tip of Bombay island into the eastern mainland has been officially recognized. The area covering the entire expanse of Greater Bombay and five first-class towns in Thane district now comprise the Greater Bombay Urban Agglomeration. A portion of New Bombay, located in

[34] Statistical Outline of India, 1986–87, p. 48.

[35] Table 3, pp. 85–9 of *Census of India*, 1991, Series-1, Paper 1 of 1992, vol. 11, *Final Population Totals*.

TABLE 4
Level of Urbanization in the Talukas of New Bombay

Spatial Unit	1951	1961	1971	1981
Thana taluka	N.A.	62.32	65.63	72.87
Thana district	29.51	30.21	36.23	44.34
Panvel taluka	16.06	N.A.	19.29	20.20
Uran taluka	18.33	N.A.	17.68	24.23
Raigarh district	10.56	10.07	12.08	14.12
State Average	28.75	28.22	31.17	35.03

Source: District Census Handbook 1951, 1961, 1971, 1981.
N.A. = Not available.

Thane district, has been included in the agglomeration. However, this portion accounts for only 2.44% of the population of the agglomeration and we can conclude, therefore, that its role in absorbing spillover population from Greater Bombay is still relatively minor.

However, New Bombay itself has registered a very rapid increase in population from 156,000 in 1971 to 250,000 in 1981 and then to 566,000 in 1991 (Bhattacharya, 1992). New Bombay's decennial growth rate during 1981–91 has thus been an astounding 126% which means an average annual growth rate of 12.6%. In the future, as the other residential nodes are completed, its role in absorbing population will become more important.

Table 4 shows us the levels of urbanization in talukas adjoining Greater Bombay and Table 5 the population density. Parts of these talukas also come within the territorial boundary of New Bombay. The level of urbanization and population density in these talukas has been rising as compared to the district in which they are located. This is clearly seen in the case of Thane taluka where 72.87% of the people were living in urban areas by 1981 and the population density had reached 1794 persons per sq. km. But to what extent has the rising urbanization in the region been the result of the development of New Bombay? To answer this, twenty villages located within the territorial boundaries of New Bombay were studied for changes in the proportion of non-agricultural activities in the last forty years. The location of these villages is given in Figure 3.

What the data on the employment structure of the villages, as given in Table 6, reveal is the following: first, villages located close to the coast, particularly in the case of Uran, began with a considerably higher level of urbanization in 1951 as compared to interior villages; second, interior villages remained predominantly agricul-

TABLE 5
Population Density in New Bombay Talukas and Greater Bombay 1961–1981

Spatial Unit	1961	1971	1981
	(Persons per square kilometre)		
Thana Taluka	N.A.	1,084	1,794
Thana district	N.A.	174	351
*Panvel taluka	N.A.	266	349
*Uran taluka	N.A.	366	483
Raigarh district	150	175	208
Greater Bombay (Bombay island and suburbs)	9,486	9,901	13,671
Maharashtra state	N.A.	N.A.	204

N.A. = Not available.
Source: Various District Census Handbooks
* Both talukas are in Raigarh district.

tural but those which were located on important crossroads or passes, for example, Kalundra, had high proportions of population in non-agricultural activities; third, in 1971, before the inception of the New Bombay project, there was already a high proportion of non-agricultural workers in many of these villages and fourth, between 1971 and 1981, many villages experienced a big increase in non-agricultural activities. This last point is also brought out in Phadnis's (1988) study of economic changes in three villages (Ju, Sanpada, and Vashi) located around Vashi node.

During the period under consideration, important changes in the pattern of migration in the region adjoining Greater Bombay had been occurring. It is possible to infer from existing data that out-migration from this region into Bombay and other urban areas has declined in the last thirty years. The evidence is indirect: sex ratios which indicate a higher proportion of males in talukas closest to Bombay. Data from Raigarh district best illustrate this hypothesis and are given in Table 7. What we see is a clear-cut difference between the sex ratios of talukas in southern Raigarh and northern Raigarh. The former region still experiences considerable male selective migration into Bombay and has a sex ratio which indicates a higher proportion of females in the population. Talukas in the latter region, including Uran and Panvel talukas, because of proximity to Bombay and rising levels of urbanization and industrialization, have less out-migration now and possibly have started to receive male in-migrants. Their sex ratios show a higher proportion of

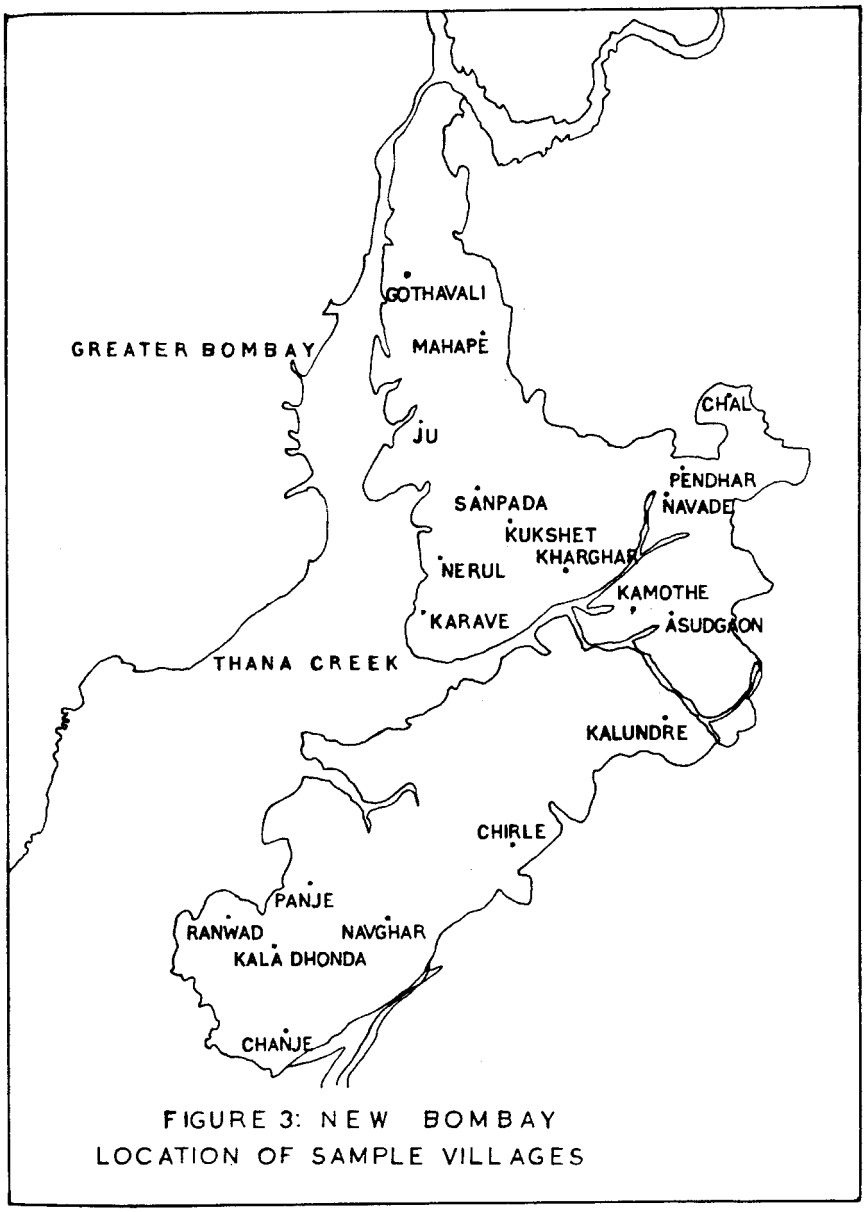

Fig. 3 New Bombay: location of sample villages.

TABLE 6
Changes in the Percentage of Non-Agricultural Workers in 20 Villages in New Bombay

Village	Taluka	% in Non-Agricultural Activities		
		1951	1971	1981
1. Sanpada	Thane	0.93	09.9	90.76
2. Ju	"	1.89	12.32	76.00
3. Gothavali	"	7.66	77.44	91.66
4. Nerul	"	2.66	21.04	61.79
5. Karave	"	6.17	42.81	58.04
6. Mahape	"	16.57	–	77.20
7. Kukshet	"	21.67	42.08	99.23
8. Kalundre	Panvel	41.54	42.67	57.17
9. Navade	"	3.91	22.89	81.63
10. Kharghar	"	0.69	22.93	26.56
11. Pendhar	"	14.17	–	76.32
12. Chal	"	0.00	0.0	14.03
13. Kamothe	"	4.94	15.08	63.65
14. Asudgaon	"	25.10	–	68.40
15. Kala Dhonda	Uran	29.71	75.24	76.52
16. Chirle	"	7.99	8.8	16.29
17. Navghar	"	34.64	49.42	51.11
18. Chanje	"	66.05	77.36	76.49
19. Panje	"	15.83	21.08	48.60
20. Ranwad	"	43.64	53.94	66.24

Source: Calculated from data contained in the District Census Handbook of Thane and Kolaba/Raigarh 1951, 1971, 1981.
Note: 1951 figures are based on total village population 1971 and 1981 figures are based on total main workers.

males. The growth of individual towns in the region also reflects this trend. Panvel town, for instance, continued to experience out-migration to Bombay, Pune and Thane up till the end of the sixties, after which rapid in-migration has been occurring (Town Survey Report: Panvel, 1989).

In summary, before the starting of the New Bombay project in 1971, the region had already been characterized by rising levels of urbanization, increase in non-agricultural activities and declining rates of out-migration. All these processes pointed to the gradual transformation of the countryside around Bombay city and its suburbs. Urbanization was gradually spreading from the island and suburbs to the mainland via the Thane–Kalyan and Thane–Pune corridors.

It was partly to check the haphazard spread of urbanization in the metropolitan region that the new city was planned. But the new city's impact has been quite small so far. Another major objective was that it would help decongest Bombay. In this regard, the successful shift

TABLE 7
Sex Ratio by Talukas in Kolaba/Raigarh District 1951–1981

District/Taluka	Females per 1000 males		
	1951	1971	1981
Kolaba/Raigarh district	1,040	1,056	1,046
Northern Talukas			
Panvel	947	946	928
Uran	918	960	923
Alibag	1,064	1,083	1,051
Karjat	921	930	938
Pen	988	1,015	1,017
Khalapur	935	924	914
Southern Talukas			
Roha	1,003	1,040	995
Sudhagad	978	1,019	1,042
Murud	1,109	1,093	1,130
Mangaon	1,109	1,132	1,173
Mahad	1,095	1,156	1,170
Poladpur	1,121	1,191	1,223
Mhasla	1,311	1,344	1,333
Shrivardhan	1,230	1,233	1,249

Sources: Calculated from data contained in the District Census Handbook Kolaba/Raigarh 1951, 1971, 1981.

of the onion, potato and iron and steel markets from their old sites in south Bombay to specified areas in New Bombay must be mentioned. But their impact has been limited to small areas of south Bombay. Of interest is the question whether New Bombay has made any impact on the quality of life in Greater Bombay by drawing off potential migrants. Between 1971 and 1981, migration accounted for about 50% of Greater Bombay's population growth and figures for 1984 indicate that 50% of the city's population of 8.2 million lived in slums (Rajan, 1990). Population density had continued to increase during the decade from 9,901 persons per sq. km in 1971 to 14,671 persons per sq. km in 1981.

Concluding Observations

What purpose, then, has New Bombay served? While it has made no difference in the percentage of Greater Bombay's population living in slums, it has helped meet the rapidly escalating demand for middle-

class housing at a location which with the completion of the railway links to the island in 1992, is within commutable distance of Bombay city. However, one of the original objectives of the city was to create a 'self-contained' counter-magnet to the old city. With strong commuting links to Bombay, that is unlikely even in the future.

The new eastwards railway link has increased the accessibility of the mainland region and New Bombay is expected to grow very rapidly (Patel, 1993). In 1993 housing construction by private developers in New Bombay has accelerated at such a rate that CIDCO's total housing stock now stands at 90,000.[36] Most of the new housing is for the middle and upper classes and the NRI (non-resident Indian). With a quickened rate of growth in the 1990s, the New Bombay project is losing sight of its initial objective of being the city of the common person (Venkatesh, 1993).[37] That CIDCO's populist objectives are being replaced by more consumerist and market-responsive ones is not surprising, given the changes taking place in the economy and polity of Indian society as a whole. It is happening in other urban development projects as well.[38]

As Third World countries attempt to steer away from the earlier policies of urban control to ones allowing for a more diffused pattern of urbanization, cases like New Bombay will be of great interest to urban planners. The New Bombay case shows clearly the limitations of urban control policies and the inevitability of the lateral spread of the large metropolitan city. It also highlights the way the political environment can influence the planning process. Confronted with the demands of different interest groups, the state in its urban planning opted for a solution which would accommodate all of them. But in the process, many of the original objectives of building the new city have got diluted. Lacking a dynamic economic base, the new city is still dependent on old Bombay for jobs and its housing is gearing more and more to middle and upper-class demands. Rather than emerging as Bombay's 'twin', it is today a series of disconnected high amenity enclaves, as yet without form, without identity.

[36] CIDCO advertisement, *India Today*, New Delhi, August 1993.

[37] Residential property rates per sq. ft. have risen rapidly in the more developed Vashi node of New Bombay and are now at par with several localities in Greater Bombay, for instance, Khar (East) and Andheri (East). Nerul and Panvel node of New Bombay are still affordable. See *The Economic Times*, Calcutta, 'Bombay Reaches for the Skies,' Sunday, 22 Aug. 1993.

[38] See *The Economic Times*, 1 March 1992 about the Delhi Development Authority, 'DDA Supplies Demands not Needs.'

Bibliography

Bapat, M. 1990. Allocation of Urban Space: Rhetoric and Reality. *Economic and Political Weekly* 25 (28), 1502–7.

Bardhan, P. 1984. *The Political Economy of Development in India*. Oxford, U.K.: Basil Blackwell.

Bhattacharya, A. 1991. New Approach to Construction Management—The CIDCO Experience. *Nagarlok* 23 (2), Apr.–June, 82–89.

——. 1992. Housing Urban Poor—New Bombay Experience. *Nagarlok* 24 (2), Apr.–June, 75–85.

Bombay Metropolitan Regional Planning Board. 1970. *Report on the Draft Regional Plan of Bombay Metropolitan Region 1970–1991*. 2 vols. Bombay.

Bombay Metropolitan Regional Planning Board. 1974. *Regional Plan for Bombay Metropolitan Region 1970–91*. Bombay.

Brahme, S. 1977. The Role of Bombay in the Economic Development of Maharashtra. In *Indian Urbanization and Planning: Vehicles of Modernization*. Ed. A. G. Noble and A. K. Dutt, 64–92. New Delhi: Tata McGraw Hill Publishing Co.

Castells, M. 1977. *The Urban Question*. London: Edward Arnold.

Census of India. 1961. *District Census Handbook: Thana*. Maharashtra Census Office, Bombay.

——. 1971. *District Census Handbook: Kolaba*. Part A and B. Maharashtra Census Office, Bombay.

——. 1971. *District Census Handbook: Thana*. Part A and B. Maharashtra Census Office, Bombay.

—. 1981. Series 12. Maharashtra. Part XIII A and B. *District Census Handbook: Raigarh District*. Directorate of Census Operations, Maharashtra.

——. 1981. Series 12. Maharashtra. Part XIII A and B. *District Census Handbook: Thane District*. Directorate of Census Operations, Maharashtra.

——. 1981. Part XB, Series 12. Maharashtra. *Town Survey Report: Panvel*. Directorate of Census Operations, Maharashtra.

——. 1991. Series 1. Paper 1 of 1992, vol. 11. *Final Population Totals*. New Delhi.

City and Industrial Development Corporation of Maharashtra. 1972. *Project Report: Early Development Area, Vashi, New Bombay*. Bombay.

——. 1973. *New Bombay: Draft Development Plan*. Bombay.

——. 1981. *Multi-Sector Urban Development Projects for New Bombay*. Bombay.

——. 1988. *Socio-Economic Survey of Households in Various Nodes in New Bombay (1987–1988)*. New Bombay: CIDCO Bhavan.

——. 1989. *New Bombay: An Outline of Progress*. Bombay.

——. 1991. *New Bombay: Development Plan as Modified up to March 1991*. New Bombay: CIDCO Bhavan.

Correa, C. 1966. Making a City Alive. *Seminar*, no. 79, 28–32.

Correa, C., P. Metha and S. B. Patel. 1965. Planning for Bombay. *MARG*, Vol. 18, No. 3, June, 30–56.

Deshpande, G. P. 1971. From Caste to Class in Maharashtra. *Economic and Political Weekly* 6 (8), 20 Feb., 485–6.

Engel, P. 1991. Building New Bombay: A Trick with Mirrors. *Architecture and Design* 8 (6), Nov.–Dec., 95–107.

Gandhi, N. K. 1973. *Study of Town and Country Planning in India*. Bombay: Indian Town and Country Planning Association.

Geiger, P. R. and F. R. Davidovich. 1986. The Spatial Strategies of the State in the Political Economic Development of Brazil. In *Production, Work, Territory: The Geographical Anatomy of Industrial Capitalism*. Ed. A. J. Scott and M. Storper. 281–98. Winchester, Mass.: Allen and Unwin.

Gilbert, A. and P. Ward. 1982. Low-income Housing and the State. In *Urbanization in Contemporary Latin America: Critical Approaches to the Analysis of Urban Issues*. Ed. A. Gilbert. 79–127. Chichester, England: John Wiley and Sons.

Ginsburg, N., B. Koppel and T. G. McGee. 1991. *The Extended Metropolis: Settlement Transition in Asia*. Honolulu, Hawaii: University of Hawaii Press.

Godbole, M. D. 1978. *Industrial Dispersal Policies*. Bombay: Himalaya Publishing House.

Gonsalves, C. 1981. *Bombay: A City Under Siege*. Bombay: Institute of Social Research and Education. 17pp.

Government of Bombay. (no date given, probably 1946). *Bombay City and Suburbs: Post-War Development Committee Preliminary Report for the Development of Suburbs and Town Planning, Housing and Traffic Panels*. Bombay.

——. 1951. *Kolaba District Census Handbook*. Bombay.

——. 1951. *Thana District Census Handbook*. Bombay.

Government of India. 1988. *Report of the National Commission on Urbanisation*. Vol. 2, Part 4. Ministry of Urban Development, New Delhi.

Government of Maharashtra. 1961. *Report of a Study Group on Greater Bombay*. Bombay.

——. 1966. *Report of the Committee appointed for Regional Plans for Bombay–Panvel and Poona Regions*. Bombay.

Harris, N. 1978. *Economic Development, Cities and Planning: The Case of Bombay*. Bombay: Oxford University Press.

Howard, E. 1946. *Garden Cities of Tomorrow*. London.

Inamdar, N. R. 1978. Metropolitan Planning in Maharashtra. *The Indian Journal of Public Administration* 14 (3), July–Sept., 670–81.

Joshi, R. 1968. Maharashtra. In *State Politics in India*. Ed. M. Weiner. 177–212. Princeton, N.J.: Princeton University Press.

Kosambi, M. 1986. *Bombay in Transition: The Growth and Social Ecology of a Colonial City, 1880–1980*. Stockholm: Almqvist and Wiksell International.

Kundu, A. 1991. Micro Environment in Urban Planning: Access of Poor to Water Supply and Sanitation. *Economic and Political Weekly* 26 (37), Sept. 14, 2167–71.

Lakdwala, D. T., J. C. Sandesara, V. N. Kothari and P. A. Nair. 1963. *Work, Wages and Well-Being in an Indian Metropolis: Economic Survey of Bombay City*. Bombay: University of Bombay.

Lefebvre, H. 1977. Reflections on the Politics of Space. In *Radical Geography: Alternative Viewpoints on Contemporary Social Issues*. Ed. R. Peet. 339–352. Chicago: Maaroufa Press, Inc.

MARG. 1965. Bombay: Planning and Dreaming. Vol. 18, No. 3, June, 56 pp.

Meshram, D.S. 1986. Integrated Development of Small and Medium Towns in Retrospect and Prospect. *Nagarlok* 18 (6), Oct.–Dec., 50–6.

Modak, N. V. and A. Mayer. (no date given, probably 1947). *Master Plan in Outline*. Bombay.

Mohan, R. and C. Pant. 1982. Morphology of Urbanization in India: Some Results from 1981 Census. *Economic and Political Weekly* 17, Sept. 25, 1579–88.

Morkhandikar, R. S. 1967. The Shiv Sena—An Eruption of Sub-Nationalism. *Economic and Political Weekly* 2 (42), Oct. 21, 1903–6.

Mumford, L. 1984. *The City in History*. Middlesex, England: Penguin Books, Ltd.

Municipal Corporation of Greater Bombay. 1964. *Report on the Development Plan for Greater Bombay*. Bombay.

Osborn, F. J. and A. Whittick. 1969. *The New Towns: The Answer to Megalopolis*. Cambridge, Mass.: M.I.T. Press.

Pandit, N. 1979. Caste and Class in Maharashtra. *Economic and Political Weekly*, Special Number, February 14 (7 and 8), 425–36.

Patel, S. B. 1970. Regional Planning for Bombay. *Economic and Political Weekly* 5 (26), 27 June, 1011–18.

——. 1993. A Second Financial Centre for Bombay: Where should it be? *Economic and Political Weekly*, 28 (32 and 33), 7–14 Aug., 1631–5.

Phadnis, S. 1988. *The Impact of Urbanization on Existing Villages: A Case Study of Vashi Node of New Bombay*. M.Phil. Thesis. Dept. of Economics. SNDT University, Bombay.

Punekar, S. D. 1966. White Collar Turns Blue. *Economic and Political Weekly* 1 (5), 17 Sept., 207–8.

Rajan, S. I. 1990. Is There any Hope for Bombay? *Nagarlok* 22 (2), April–June, 9–19.

Ramachandran, R. 1989. *Urbanization and Urban Systems in India*. New Delhi: Oxford University Press.

Rao, K. N. 1990. Urban Land Management in Bombay Metropolitan Region: An Innovative Approach. *Nagarlok* 22 (1), Jan.–Mar., 37–50.

Rondinelli, D. A. 1983. *Secondary Cities in Developing Countries: Policies for Diffusing Urbanization*. Beverly Hills, California: Sage Publications.

——. 1991. Asian Urban Development Policies in the 1990s: From Growth Control to Urban Diffusion. *World Development* 19 (7), 791–803.

Rudolph, L. I. and Rudolph, S. H. 1987. *In Pursuit of Lakshmi: The Political Economy of the Indian State*. Bombay: Orient Longman.

Sarin, M. 1979. Urban Planning, Petty Trading and Squatter Settlements in Chandigarh, India. In *Casual Work and Poverty in Third World Cities*. Ed. R. Bromley and C. Gerry, 133–60. Chichester, England: John Wiley and Sons.

Sastry, S. M. Y. 1978. Planning and Implementation—The Experience in Bombay. In *Urban Planning and Development Authorities*, 97–103.

Sebastian, P. A. 1991. Beautifying Bombay at Cost of Poor: *Economic and Political Weekly* 26 (31 and 32), 3–10 Aug., 1840–1.

Seminar, no. 79. March 1966. 'Our Cities: A Symposium on the Need for a Rational Urban Development.' New Delhi.

Shah, M. 1991. Chawls: Popular Dwellings of Bombay. *Architecture and Design* 7 (6), Nov.–Dec., 47–52.

Sharma, R. N. 1991. Land Grab Bombay Style: Urban Development in Vasai–Virar Hinterland of Bombay. *Economic and Political Weekly* 26 (8), 413–17.

Sheth, D. L. 1992. Movements, Intellectuals and the State: Social Policy in Nation Building. *Economic and Political Weekly*, 22 Feb.

Sivaramakrishnan, K. C. and L. Green. 1986. Bombay. In *Metropolitan Management: The Asian Experience*. By K. C. Sivaramakrishnan and L. Green. pp. 119–39. New York: Oxford University Press.

Tata Services Ltd. *Statistical Outline of India 1986–87*. Dept. of Economics and Statistics. Bombay House: Bombay.

Town and Country Planning Organization. 1974. *National Urbanisation Policy: An Approach*. Ministry of Works and Housing.

Venkatesh, L. 1993. No Fair Deal from CIDCO. *The Economic Times*, Calcutta. Sunday, 5 Sept., p. 10.

Verma, H. S. 1985. *Bombay, New Bombay and Metropolitan Region: Growth Processes and Planning Lessons*. Delhi: Concept Publishing House.

——. 1990. The Political Economy of Planning and Use of Land as a Resource in India. *Nagarlok* 22 (3), July–Sept., 1–22.

Visaria, P. 1969. Growth of Greater Bombay 1951–1961. *Economic and Political Weekly* 4 (28–30), July, 1185–90.

Wiswakarma, R. K. 1986. From IDSMT to UBS; Issues in Policy Formulation and Implementation. *Nagarlok*. 18(6), Oct.–Dec. 42–9.