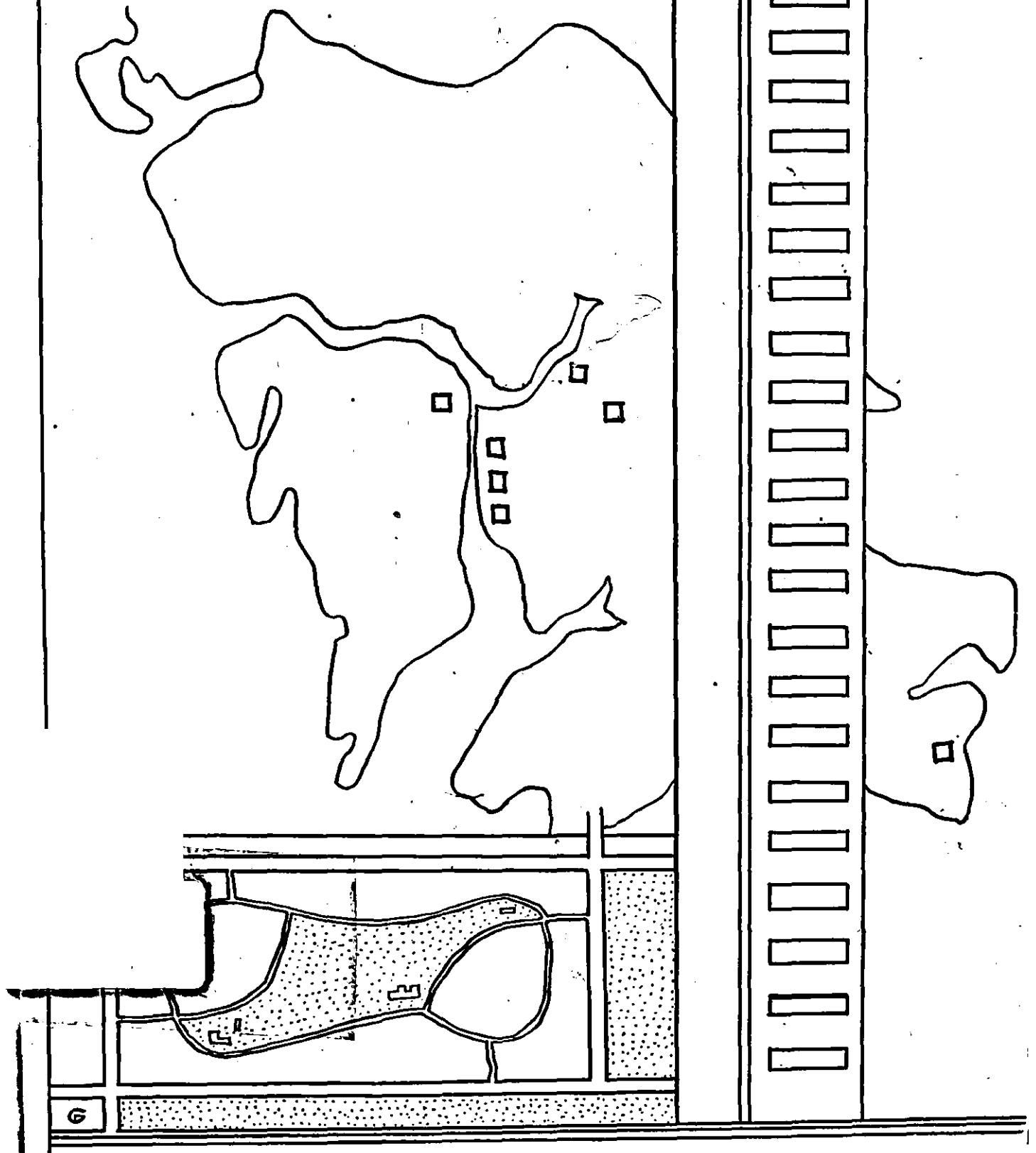


PRELIMINARY REPORT
OF THE STUDY-GROUP
ON NEW TOWNS



PRELIMINARY REPORT OF THE STUDY GROUP

1. Introduction:- The Study Group on New Towns was constituted on the 22nd of November 1967 and was asked to make the required studies and make recommendations to the Board on the locations, sizes and compositions of New Towns required in the region and limits for the expansion of existing towns."

The Group consisted of the following persons:-

- 1) Shri S.V.Desai, Chairman,
- 2) Dr. Shanti Patel, Corporator, Bombay Municipal Corporation.
- 3) Shri R.P.E.Vazifdar, Chief Engineer, Bombay Port Trust.
- 4) Shri K.K. Nambiar, Chief Engineer, Concrete Association of India, Ltd.,
- 5) Shri S.H. Godbole, Civil Engineer and Town Planner,
- 6) Shri Shirish Patel, Civil Engineer,
- 7) The Chief Executive Officer, M.I.D.C., Bombay,
- 8) Shri J.G. Keskar, Member-Secretary,

Later, need to have an urban economist on the group was felt and Shri Krishna Raj, joint Editor of the Economic and Political weekly was co-opted with the concurrence of the Chairman.

Shri Guruswami, Town Planner of the Maharashtra Industrial Development Corporation and Shri V.P. Phadke, Senior Executive Engineer of the Bombay Port Trust were also present for all the meetings of the group as special invitees and gave us the benefit of their views on the subject.

The Group was expected to submit a preliminary report within two months and a final report within six months from the date of constitution of the group. The terms of reference were :-

- a) to recommend desirable locations for the New Towns in the Bombay Metropolitan Region and limits for the expansion of existing towns.
- b) to indicate desirable occupational pattern for the New Towns to secure balanced economic and social development.
- c) to recommend broad features of planning for

each of the New Towns including sizes of towns.

- d) to study the economics of New Town-Development and to recommend the machinery for setting up New Towns.
- e) to study and make recommendations on any other relevant aspects.

The first meeting of the Study Group was held on 6th December 1967 and thereafter the group met on 18th December 1967, 26th December 67, 3rd January 68, 9th January 68, 18th January 68 and 23rd January 1968. One of these meetings viz. the one on 18th January was held in the Trans Thana area when members of the Study Group heard the views of the villagers and the industrialists in this area.

PURPOSE OF PRELIMINARY REPORT:- The terms of reference for the group are very comprehensive and it will take some more time for the group to finalise their recommendations on all the terms. The purpose of this preliminary report is therefore to acquaint the Board with the line of thinking of the Study Group rather than to make any definite recommendations and to focus the attention of the Board on some areas where immediate action is necessary.

2. APPROACH TO THE PROBLEM:- There were two different views about what should be the starting point for determining the sizes, locations and characters of New Towns that may be required in the Bombay Metropolitan Region. One point of view was that we should start with some tentative demographic projections, and having thus known the number of people to be provided with houses and work places and other amenities, we can start thinking about the best manner in which these people and their activities can be distributed at various places on the regional canvas. The other point of view was that Regional Planning would mainly have to concern itself with maximising returns from available resources, and therefore a perspective picture of the likely economic development of the Region must first emerge, before we can start discussing desirable distribution of population and

possible locations for the settlement of people by way of New Towns. It was argued that population of any area was itself a function of the level of economic activity in that area and that planning strategy itself could and should be used to regulate the size of population of the Region. This was also largely the point of view of the Gadgil Committee. The adherents of this point of view in the study group therefore urged that the group must have a better idea of what the future industrial development pattern and policy for the region would be. It was argued that the problems of population, location and characters of New Towns would materially differ depending upon whether--

- 1) the 'No New Industries Policy' is extended to the whole Region.
- 2) a policy of allowing only chemical industries in the metropolitan region is decided upon,
- 3) some other policy is adopted,
- 4) whether large scale shifting of industries from Greater Bombay is found to be feasible and,
- 5) whether there is any scope for intensified development in the primary sector viz. Agriculture, forestry, fishing, mining, & quarrying and salt making.

It was therefore, argued that locations and sizes of New Towns should be considered only against the background of the picture of economic development.

After discussing both these points of views the group felt that though the latter was undoubtedly a rational and valid approach, a beginning could be made by making some tentative projections of population and attempting to distribute it between different urban and rural centres old and new. This would indicate the extent of the problem that would have to be faced if planning strategy is not used to control population sizes.

3. POPULATION PROJECTIONS:- Projections of population by very elaborate methods would require a long time. And however sophisticated the method, population projections have to depend upon certain assumptions which can be completely invalidated by changing circumstances. To guard against

population projections thus going wrong and upsetting the planning, it would be necessary to have several high, low and medium estimates with alternative assumptions. It would also be necessary to introduce an element of flexibility into the plans so that they could be easily adopted to meet the deviations from the projected figures of population.

Some tentative projections of population for the region were made at the time of the Gadgil Committee's report. These were made with the ratio method, using the State's projected population and assuming that the ratio of the Region's to the State's population will be the same in 1981 as it was in 1961. The 1986 and 1991 population was estimated by fitting a parabolic curve of the second order beyond 1981. The estimates for the Region's population at 5 year intervals upto 1991, according to the above method are shown in table 'A' attached. The rural-Urban Break up of the region's estimated population as shown in this table has been worked out on the following assumptions:-

- 1) The urban population of the region would continue to be about 87% of the total population of the region.
- 2) The population of Greater Bombay would continue to be about 89.5% of the region's population.

The assumption that the ratio of the Region's population to the State's population will remain static between 1961 and 1981 is not based on any scientific analysis; nor is the projection beyond 81 very refined.

A second projection:- A second projection of the Region's population also made by the Ratio method but by using the District-wise projections worked out by the Demographic Training Research Centre for the Superintendent of Census Operations, Maharashtra State is shown in table 'B'. The assumption made in the second projection is that the Region's population will grow at the same rate as the population of the whole of the District. This also may not be correct. The group will therefore require high and low estimates of population on alternative assumptions by more refined methods from the Demographic

Study Group as early as possible. However, since projections by using refined methods will require some more time, and since we cannot work in a vacuum, but will have to have some figures to work upon, it was decided that the average of the projections above referred to may be used for the present.

The average of the two estimates of population referred to above, gives a figure of 116 lacs for the Region's population in 1991, of this about 102 lacs would be urban and 14 lacs would be rural. The urban sector in the Region will thus increase from 46.43 lacs in 1961 to 102 lacs in 1991. This gives some idea of the enormity of the problem that would have to be faced and underlines the necessity of evolving measures quickly to reduce rates of population increases and indeed to induce reverse migration from the metropolis to the other areas of the State. If all the threatened increase in the urban population is to be absorbed in the existing urban centres in this Region, it will mean that each of the existing urban centres will have to plan for about 100% increase in its population during the next 25 years. Duplicating Bombay on its own soil is unimaginable. It would also be most unimaginative. Some part of the increase in the urban population may have to be diverted to other areas of the State if possible and some settled in New Towns around the new work centres that would be developed in the Region or that are already in the process of development.

This brings us to the question of how much of the population should be settled in existing towns and how much in New Towns, what would be the ceiling for Bombay's population, and how to regulate the natural trends in respect of growth of Bombay's Population. An answer to the question about optimum population of Greater Bombay will require a deep analysis and we will leave this question unanswered for the time being. We did have some discussions however about some of the factors which contribute to the growth of the Metropolitan cities and measures that will be necessary to effectively control Metropolitan population.

4. OFFICE EMPLOYMENT:- We felt that the very rapid growth of the office employment in metropolitan cities is as

much responsible for the growth of the population as the growth of factories and industries. Most of the problems of the central business Districts are due to an acute concentration of business activities and office jobs in these areas. The table below shows the rapid growth in office jobs in some of the Government organisation in Greater Bombay between 1961 and 1966.

TABLE

Name of Organisation.	1951	1961	1966	Percentage increase from 1951 to 1966.
Union Government.	55,164	1,58,358	1,84,340	234.2
State Government.	27,929	41,258	56,776	103.3
Municipal Corporation	37,786	66,913	88,727	134.8
B.E.S.T.Undertaking.	13,848	21,519	23,764	71.6
Port Trust	18,353	24,577 (approx.)	28,085	53.0
Reserve & State Banks	3,168	6,852 (approx.)	9,914	212.9
Total	1,56,246	3,19,477	3,91,606	150.6

(Source:- M.I.D.C's Report on development of mainland across the harbour).

The population of Greater Bombay during the period has increased from nearly 30 lacs to about 48 lacs i.e. by 60%. The total factory employment between 1961 and 1966 increased from 4,97,000 to 5,46,000 i. e. by 34.2%. It will thus be seen that while the population increased by about 60%, the factory jobs have increased by about 34% whereas the employment in Government organisation has increased by as much as 150%. The employment in private offices must also have similarly increased at a much more rapid rate than the factory employment.

We feel therefore that as much attention should be paid to the siting of offices outside Bombay as to the siting of large industries outside Bombay Area. We are

very much of the opinion that if the growth of office jobs in Bombay as a whole and to C.B.D. in particular is not restricted, advantages gained by the relocation of industries would be nullified by the increased employment in the office in these areas. One immediate step necessary for tackling this problem would for the Govt. to put a stop to their plans for creating more office space in the new Backbay reclamation blocks. Not only should new office growth not be allowed in south Bombay, but attempts should be made to shift existing offices (along with industries) to new areas away from the metropolitan core and if possible, some of them even outside the Bombay Metropolitan Region. We are aware that we are not the first to make this recommendations. A similar recommendation was made by the Barve Committee, the Gadgil Committee, and also recently by the Metropolitan Transportation Study Team.

5. GEOGRAPHY AND LAND USE IN THE REGION :- We have already stated that New Towns in the Metropolitan Region will be inevitable if conditions in Greater Bombay are not to be allowed to be aggravated. We will now come to our observations as to what these locations could be. Before however starting discussion on the probable locations of New Towns, we examined the existing land utilisation pattern in the region and it would not be out of place to deal here briefly with the salient aspects of the existing land use pattern in the Region.

Geographical features:- The metropolitan region consists of an area of nearly 1500 sq.miles included between the rivers Tansa and Patalganga. On the eastern side it reaches upto the foothills of the Sahayadri in Karjat Taluka, but to the north of this, the boundary is decided, not by any natural features, but by the administrative limits of Bhivandi and Kalyan Talukas. Geographically, the region forms part of the north Konkan region that lies to the west of the Sahyadris and consists of the mainland of North Konkan and the two large insular masses of Salsette-Trombay and Bombay that are separated from each other by shallow creeks. The region on the whole is lowland but not plains. The average elevation of the area above MSL is 100 m. but significant local variations are brought out by a series of north-south hill ridges. On the eastern side of the region there are two main systems of

CCP Data/H. 1110(0)/500-3.501

hill ranges, which are the Matheran-Haji Malang hill range in Panvel and Kalyan Talukas and the Bhatsai hill range in Thana Taluka and the Bhivandi Gotara range in Bhivandi taluka. Along the coasts are the Trombay Hills, the Salsette hills and the Uttan hills in salsette and Tungar Hills in Bassein Taluka. In between these hill ranges the lands are plain, and are mostly devoted to paddy cultivation. Along the coasts, there are large tracts of marshy areas and salt pans. The main salt pan areas are round about Ju-chandra in Bassein taluka; near Bhayandar, Mirs and Vadala in Salsette near about the village, Sarsole Shahabaj in the Trans-Thana area, and near about Uran and Sheva in Uran Taluka. There are large forest areas in Bassein, Bhivandi and Panvel Talukas.

Rivers:- The Ulhas & its tributaries,, Bhatsai and Kalu are the main rivers draining the region. Patalganga in the south and Tanas in the north form the limits of the region. According to the Master Plan of Ulhas and Patalganga valleys, prepared by the Irrigation and Power Department these two valleys, can be planned in an integrated way so far as water resources are concerned as it is possible to treat the two valleys as one single unit and it is possible to divert the water of one valley to another without entailing any appreciable cost. This report shows that if fully harnessed the water from these two valleys would fully meet the requirements of agriculture, industry and townships in the region. Recent studies conducted by Dr. Bharadwaj of the Department of Economics, University of Bombay in respect of future demand of water in the metropolitan region also indicate that the Bhatsai project with a capacity of supplying 250 million gallons per day coupled with the upper Vaitarna Project would adequate to meet the water demand of the region at least upto 1981.

Surface Utilisation in the Region :- The tables C & D in the appendix show the surface utilisation pattern in the Region and the areas under different crops.

One of the predominant land use features of the Metropolitan region is the almost continuous belt of natural

forests all round it. It would be seen from the tables that excluding Greater Bombay, almost 30% of the area in the region is covered by forests. The net area sown in the region (excluding Greater Bombay) is nearly 40% of the geographical area while the gross cropped area is about 48%.

The main crop grown is paddy and the areas under crops such as Ragi, Oilseeds, pulses, vegetables and fruits are comparatively very small. The per capita land availability of cultivable land for the rural population is about 0.89 acres.

Geologically,, the entire region falls in the Deccan lava country and is covered by Deccan Traps and laterites. The Deccan traps are not associated with minerals of economic importance. These rocks are however an excellent source for excavating building stones, road metals and concrete aggregates. Traces of bauxite occur in Tungar hills, east of Bassein in Bassein taluka, while Ilmenite is reported from the shore sands of Arnala island which is to the north west of Bassein. These occurrences are however of little economic value.

Salt Pans :- The table 'E' attached in appendix shows the amount of salt produced in the region between 1965-66-67. The salt is used in fish curing, curing of hides and skins and in several industries such as manufacture of caustic soda, soda ash, soap industries, Ayurvedic pharmaceutical etc. Salt may thus prove to be an important resource in the region. Salt pans are however likely to disappear in the process of urbanisation of the coastal areas and proper thought would therefore be necessary in the planning of coastal areas and in selecting sites for new urban centres.

Fishing :- Fishing is carried on in a number of centres along the sea coast. Of these fishing villages 15 are in Greater Bombay and 11 are to the north of Greater Bombay, 17 are to the south of Greater Bombay. The more important fishing centres are Versova, Karanja, Danda, Arnala, Bassein, Uttan, Varangal, Madh and Urva. The total fish catch in 1964 from all the fishing centres in the region was 77240 tons.

Existing Industrial Centres in the Region:- Areas of the industrial zones outside Bombay are understood to be as under:-

Thana Municipal limits	....	....	....	1715 acres
Kolshet Balkum etc.	....	....	....	1840 "
Kavesar	....	....	....	245 "
Kalwa	....	....	....	1300 "
Trans Thana	....	....	....	374 "
Mira Bhayandar ..	....	....	....	525 "
Dombivali	....	....	....	850 "
Kalyan	....	....	....	110 "
Bhivandi	....	....	....	350 "
Ulhasnagar	....	....	....	300 "
Atale	....	....	....	600 "
Ambernath	....	....	....	340 "
HOC	....	....	....	1050 "
Khopoli	....	....	....	900 "
Panvel	....	....	....	400 "
Badlapur	....	....	....	150 "
Vangani	....	....	....	N.A.

Total:- 14,360 acres

These then, are the main features of the existing land use pattern.

6. SELECTING LOCATIONS FOR THE NEW TOWNS:- We will now come to our observations about the locations for the new towns in the region.

It seems clear to us that many of the New Towns in the region will have to be built around a nucleus of industries. Some of the industrial centres which have been stated above have already started emerging in the region..

The industrial developments at all these centres should really have taken place as part of the total township development, and steps to provide positive facilities for growth of all sectors of activities including the residential, commercial, educational etc. should have been taken from the very beginning of development at these places. This has somehow not happened so far, partly because there was no development agency which could undertake these developments, but perhaps more because

the attention of Government was not sufficiently focussed on this necessity. The result is, that at most of the new centres of development, industries have developed in an isolated manner, and workers' residences, schools, hospitals and such other facilities have still not come, as no agency was at any time conceived to take care of these aspects. The mere setting apart of land for these purposes as has been done in certain cases is not sufficient in our opinion. But at some of the centres of growth even sufficient land is not available for these users. After the land is set apart, some authority must now be set up to make investment in new infrastructures for township facilities at a number of these industrial locations.

The total area of the industrial zones in the region (excluding Greater Bombay and the area of the defence factories at Ambernath) is nearly 14½ thousand acres as stated before. By the end of 1964 about 2400 acres out of these were actually utilised by industries and the total industrial employment in these areas was 62,000 (in registered factories excluding the defence factories). The largest single industrial zone outside Greater Bombay in the region was in the Trans-Thana sector. We understand that the number of employees in the factories in the M.I.D.C. sector of the Trans-Thana non MIDC sector viz. Mukund Iron, National Machinery, Indian Aluminium and other industries at Kalwa was also nearly 4500 by the end of 1964. In view of this large industrial nucleus which has already developed in this area, we feel that positive action to set in motion full fledged town development programme in this area is immediately taken. We noticed that even elementary facilities such as police outposts and Post-Offices are still lacking in this area, not to speak of other amenities. The total employment potential of the organised industrial sector in the Trans-Thana area is estimated to be about 60,000 eventually. We feel that in planning this township we would also have to take into consideration the possibility of establishing a large commercial complex in this area. An agreement on the population size for this township will involve an agreement about the relative sizes of the various town elements, which aspect is still to be examined. We would

GCP.Rota/H-1449(C)(500-3-69)

however recommend that steps should be immediately taken to provide facilities for atleast 2 lacs of population in the first stage. An aspect which would need consideration in the planning of this area is the needs of the local population in this area which is about 20,000 at present. Adequate care would be necessary to ensure that the local population is not uprooted.

Other such areas where action for New Town Development must be started immediately would be (1)Khopoli - where also a sizeable industrial development has already taken place and (2) the northern suburbs of Thana viz. Kolshet, Balkum, Chitalsar, Manpada etc. In the latter location, perhaps the question may have to be examined from the point of view of necessity of reorganisation of the jurisdiction and activities of the Thana Municipality rather than the setting of a new development Authority. As at present a considerable development has taken place in the villages referred to, and in matters such as shopping, educational facilities, transport, hospitals etc. Thana has to share a major load.

A similar question will have to be faced in the Kalyan-Dombivali-Ambernath-Ulhasnagar-Shahad complex. A somewhat tentacular development is taking place in this complex and the full significance of this has to be grasped immediately. It appears that a new conurbation has already started emerging in the Kalyan-Ambernath area and this area as well as the Thana area needs to be planned immediately.

In addition to these, there would be some other locations in the region where New Town development would be necessary either in view of the necessity of a geographically balanced distribution of urban development in the region or on account of the potentialities of such places as natural growth points, or on account of projected developments, the shape whereof is not yet quite clear.

7. PHASING OF THE REGIONAL PLAN:- We feel that the Regional Plan including plans for new town development should be split up into (1) a perspective plan and (2) an operational plan. The operational part of the plan
GCP.Rota/H-1449(C)(500-3-69)

which would form part of the perspective plan of the plan will have to be spelt out and worked out meticulously and in all details. This should be the part for which definite commitments are contemplated. The perspective plan should however be left sufficiently elastic to enable it being modified to suit the changing circumstances or experience gained in the implementation of the operational plan.

Limiting the size of the operational plan could be so decided as to suit available resources with a view to concentrate them only on the area of the operational plan.

8. STRATEGY FOR IMPLEMENTATION OF THE NEW TOWNS :-

Acquisition and continued public ownership of all lands required for the New Town would be ideally desirable. However for lack of funds it may not be possible to do this in respect of all New Towns. The next alternative would be to acquire and retain public ownership of land in atleast the key areas of the town e.g. the commercial and industrial complexes. It also appears necessary to have some control on the land required for the low income housing. This control could be acquired by (1) purchasing land necessary for this purpose and leasing it out to the low income group individuals after preparing a layout, leaving it to the people to construct tenements by self-help or (2) failing (1) by sub-zoning suitable and sufficient lands in the residential zone for low income group housing and insuring by means of regulations that tenements only for low income group people are allowed to be constructed in such sub-zones, the success of the second measure will however largely depend upon the practicability and capacity to enforce such regulations. Acquisition of the lands will therefore certainly be a preferable course if funds for this purpose are available.

Another possibility which needs to be examined in this respect is regarding compulsory pooling of lands and allotment of shares to the individual landholders, equivalent to the value of their respective lands, so that the land so pooled is available for the kind of development
GCP.Rota/H-1449(C)(500-3-69)

desired by the New Town-Authority.

If for some reasons the development agency cannot acquire all the lands required for the New Town development at one stage then some measures will have to be taken to ensure that land values do not increase in these areas purely as a result of speculation. Freezing of land values may not be constitutionally possible, but speculation and spiralling of land values as a result thereof could be considerably arrested if steps are taken to ensure that supplies of developed land generally match the demand therefor at all stages and if true demand is regulated and supplies are not allowed to be artificially restricted or hoarded.

POPULATION ESTIMATES OF BOMBAY METROPOLITAN REGION FOR THE PERIOD 1961-91

APPENDIX 'A'

(Figures in thousands)

Year on 1st March.	Rural			Greater Bombay			Rest of Urban			Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
1961	328	311	639	2496	1656	4152	269	222	491	3098	2188	5281
1966	410	389	799	2850	1919	4769	327	237	564	3587	2545	6132
1971	462	440	903	3203	2191	5394	385	244	629	4041	2885	6926
1976	524	496	1020	3622	2464	6086	432	287	790	4578	3247	7825
1981	591	561	1152	4081	2700	6871	495	310	811	5167	3667	8834
1986	560	638	1298	4580	3168	7748	576	331	907	5816	4137	9953
1991	748	710	1458	5119	3599	8718	674	333	1007	6541	4642	11183

- Note:- (1) Estimates are provisional and are subject to revision.
 (2) Estimates total and sex-wise upto 1981 are obtained by Ratio Method using the State's population projections (by component Method) by R.E.Shodhari, Tata Demographic Research Centre, Chembur.
 (3) Estimates total for 1986, 1991 are obtained by fitting a parabolic curve of second order.
 (4) Sex ratio in 1981 is repeated for 1986 and 1991.

IIInd Projection worked out on the basis of district-wise projections by
Demographic Training Research Centre.

APPENDIX 'B'

Year	Ratio	THANA			Ratio	KOLABA			GREATER BOMBAY			TOTAL POPULATION	
		Rural (48.72%)	Urban (51.22%)	Total		Rural (83.51%)	Urban (16.49%)	Total	Rural	Urban	Total	Urban	Total
1961	-	426341	448720	875061	--	212376	41948	254324	4152056	638717	4642724		5281441
1966*	1.1657	496972	523086	1020058	*1.1161	237044	46808	283851	4993000	734016	5562893		6296909
1971	1.1463	569879	599613	1169292	1.1108	263309	51993	315302	5850000	832988	6501606		7334594
1976	1.1398	649320	683499	1332759	1.1196	294800	58212	353012	6753000	944120	7494651		8438771
1981	1.1350	736978	775703	1512681	1.1293	332918	65738	398656	7694000	1069896	8535441		9605837
**1991		919590	967310	1887500		414627	81873	496500	9042700	1334217	10692483		12026700

* Source:- Projection made by Demographic Training Research Centre
for the Census Department.

** 1991 estimates are worked out by fitting a quadratic curve $y = ax - bx^2$

Land utilisation in Bombay Metropolitan Region (Acres)

APPENDIX 'C'

Item.	Thana	Kalyan	Bassein	Bhivandi	*Karjat	*Panvel	Uran	*Khalapur	Total for Region Exclu- ding Gr.B'bay	Percent to Geo- graphi- cal area.
1. Total Geographical area.	84711	160680	133284	169735	160906	143232	48066	100349	998966	100.00
2. Forest	11776	38999	56089	61147	43478	44160	6689	35488	297826	29.81
3. Barron or Uncultivated land.	9810	11139	7208	5213	15415	19495	10328	14956	93764	9.39
4. Area put to Non-Agricultural use.	1667	310	2585	409	1056	235	230	162	6654	0.67
5. Cultivable Waste	1183	9417	1749	269	78	641	3725	2757	19819	1.98
6. Permanent pastures and grazing land.	2532	9844	4701	13519	16853	2753	....	....	50202	5.03
7. Land under miscellaneous trees Groves.	19776	....	....	4068	32077	....	773	....	56688	5.68
8. Current fallows	613	....	8613	265	21	1669	327	61	11569	1.18
9. Other fallows.	7388	114	11951	21731	2672	21332	2321	309	68814	6.89
10. Net area sown.	29972	90857	40398	63108	48259	52747	21673	46616	393630	39.40
11. Gross Cropped.	30466	90024	43684	63942	53389	56284	22084	47801	407638	48.05

Source- District Inspector of Land Record, Thana, Kolaba Districts

* Full talukas are considered.

Area under important crops in Bombay Metropolitan Region (Acres)APPENDIX 'D'

Crop.	Thana	Kalyan	Bassein	Bhivandi	*Karjat	*Panvel	Uran	*Khalapur	Total Exclu- ding Greater Bombay	Greater Bombay.	Grand Total
1. Rice	19836	31727	31622	44649	31624	33719	18398	18880	235515	6105	241620
2. Ragi	...	1143	633	...	2224	592	76	211	5379	...	5379
3. Total cereals	19969	33313	32460	46818	34751	39615	18515	19075	244416	6105	250521
4. Total pulses.	144	1153	1664	1603	1571	1571	157	668	8531	...	8531
5. Total Oil Seeds	78	301	244	438	88	2	6	49	1206	608	1814
6. Fruits & Vegetables.	614	565	3763	714	90	1624	249	108	7727	3353	11080
7. Fodder Crops.	9576	56164	4701	13579	16859	12887	3140	26898	143798	10551	154349

* Whole talukas are covered.

Sources : Season and crop report of Thana, Kolaba & Greater Bombay District.

APPENDIX 'E'ABSTRACT FROM SALT COMMISSIONER'S OFFICE

Annual Salt Production
(figures are in tons.)

		1965	1966	1967
Bombay	....	9,043	11,231	14,454
Bhandup	....	48,632	47,431	50,454
Trombay	....	21,350	20,270	19,629
Belapur	....	40,033	38,526	21,536
Sheva	....	67,940	69,231	N.A.
Uran	....	43,187	42,408	39,021
Karanja	....	22,883	27,345	N.A.
Bassein	....	69,078	83,187	N.A.
Total:-E		3,22,146	3,39,629	1,45,094
=====				