SUMMARY REGIONAL PLAN FOR POONA METROPOLITAN REGION 1970-1991

I. INTRODUCTION

Why Regional Planning?

Prior to independence the chief functions of the city of Pune were administrative, military, educational, and cultural. It was a city made great by political stalwarts, thinkers and dedicated workers like Gopal Krishna Gokhale, Lokmanya Tilak, Agarkar, Maharsi Karve and Mahatma Phule. It was a city which had acquired its name because of such educational and research institutions like the Deccan College, Ferguson College, S. P. College, the Pune Engineering College, Bhandarkar Oriental Research Institution and Bharat Itihas Sanshodhak Mandai. It was a lovable city up the ghats with a beautiful setting of hills and mountains surrounding it and with a salubrious climate all the year round. A seat of the Peshwas in the past it also became a favourite with the English who established military cantonments in its environs, who made it the summer capital for the Governor and also a second administrative capital of the State by the location of several departmental head offices in the city.

The post independence decades witnessed the commencement of a new industrial era in the development of Pune-Bombay was getting over concentrated and new industries were seeking out an alternative location for them. Pune was in many respects a natural alternative, being away and yet not too far away from the Capital; and being equipped with all the necessary infrastructure, development of industrial area in the eastern part, at Hadapsar as also the development of large industrial area by Maharashtra, Industrial Development Corporation in the Pimpri-Chinchwad complex on the Bombay-Pune Rail Road corridor at the very appropriate time attracted many industries to Pune since 1960 onwards. During the two decades after independence Pune emerged as the important industrial centre in Maharashtra manufacturing variety of industrial and consumer goods. Unprecedented floods due to breach of Panshet Dam in 1961 affected large number of families living on the river banks and new areas on the outskirts were opened for development to house the flood affected families and the boundaries of the Municipal Corporation were extended. The development of the city spread and sprawled into the neighbouring areas along the communication lines, thus gradually forming a conurbation. The character of development changed as also the core of development.

The process of rapid industrialisation and urbanisation brought in its wake problems not only of overcrowding of population and slums and scarcity of housing but also of bottlenecks in public utility services, traffic congestion and general environmental deterioration. The standard of civil services decayed considerably. These features were the usual ranges of overgrowth but were also an indication as well as the result of the city acquiring a new significance in the economic setting of the State.

This fast along with the inevitable overspill of activities beyond the erst-while city limits meant that the city and its immediate hinterland on the influence region had to be considered as a single entity for economic and physical planning.

The Committee appointed by the Government of Maharashtra in 1965 under the Chairmanship of late Dr. D. R. Gadgil (Gadgil Committee 1965) quite rightly emphasised the need for comprehensive regional planning of Bombay and Pune Metropolitan Regions with a view to tackle problems created by their rapid growth and its sprawl outside their boundaries. A statutory basis for regional planning was provided by the Maharashtra Regional and Town Planning Act, 1966. Under this Act, the Pune Metropolitan Region was established in July 1967 and a multi-disciplinary Regional Planning Board was constituted as a planning authority for the purpose of preparing the Regional Plan. The Region is a metropolitan and nodal region converging on the metropolis and derived its boundaries from the physical extent of metropolitan influence.

1. Planning progress

Various surveys, studies and investigations covering physical, social, economic and other aspects were undertaken for the area of the region. With the help of survey data the Study Groups appointed by the Board on the subjects of Demography, Land use, Industries, New Towns, Transport and Communications and Housing analysed the prospects and problems in the various sectors, made recommendations for removing bottlenecks and for organising, regulating or promoting growth and worked out future requirements of the various land users. These sectoral recommendations were then looked into by the multi-disciplinary Regional Planning Board for their inter-linkages and inter-sectoral impacts and synthesised to form a comprehensive plan for the future course of developments and improvements in the region. Regional growth centres in the region and their capacity to hold the future population growth was in this process considered and finalised by the Board, which facilitated designing of urban and rural structure. The draft Regional Plan was published by the Regional Planning Board on 9th March 1970 for inviting suggestions and objections from the public. It comprised the report of the various Study Groups, Part I dealing with the Report of the different surveys carried out by the Boards staff under the directions of the Board and Part II dealing with the proposals including relevant plans. The plan elaborates various essential activities, necessary for the transformation of the existing structure into the designed structure and suggests measures for augmenting facilities and amenities for the anticipated increase in population by 1991. Important findings of the surveys, salient features of existing problems and board proposals of the regional plan are summarised in the subsequent paragraphs.

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II. AREA AND BOUNDARIES

Boundaries of the region—

North.—Flows of rivers Indrayani and Bhima and northern limits of Alandi Taluka.

South.—Hill ranges.

West.—Partly by hills and partly by north-western limits of Talegaon-Dabhade Town.

East.—Administrative limits of Haveli Taluka.

Total area.—1605 square kilometres

Total population.—14,17,786.

Tahsils included in the region :

<table>
<thead>
<tr>
<th>Tahsil</th>
<th>Area in square kilometres included in Regional Plan</th>
<th>Population in 1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pune City</td>
<td>167</td>
<td>10,00,414</td>
</tr>
<tr>
<td>Haveli (Part)</td>
<td>1,196</td>
<td>3,65,182</td>
</tr>
<tr>
<td>Maval (Part)</td>
<td>49</td>
<td>20,626</td>
</tr>
<tr>
<td>Mulshi (Part)</td>
<td>179</td>
<td>26,181</td>
</tr>
<tr>
<td>Khed (Part)</td>
<td>14</td>
<td>5,383</td>
</tr>
</tbody>
</table>

(Area as per 1961 Census)

The region lies between 18°-20' and 18°-45' North latitude and 73°-39' and 74°-13' East Longitude.

III. THE REGION : SOME FACTS

The region includes Pune Municipal Corporation area covering 139 square kilometres, three Cantonment Boards of Pune, Kirkee and Dehu Road totally covering an area of 64 sq. km., three Municipal towns of Talegaon-Dabhade, Pimpri-Chinchwad and Alandi totally covering an area of 75 sq. km. and 127 villages covering the remaining area. The area within the jurisdiction of the above seven urban local bodies is 278 sq. km. representing 18.4 per cent of the area of the region, while the remaining 82 per cent of the areas of the region is rural.

Geographically, the region falls in the Western part of Deccan plateau and is situated on the Eastern side of Sahyadri Hill ranges, in the Western belt of Bhima basin Pune City, the nucleus of the region is situated on the confluence of Mula and Mutha rivers at a height of 549 metres (1800 feet) above Mean Sea Level and at a distance of 177 km. to the south-east of Bombay. It enjoys dry and salubrious healthy climate with a moderate rainfall of 714 mm. (28"). The city is surrounded by uplands and hills, the main hill ranges of Western Ghat being at 30 miles from it. The region includes portions of the basins of 5 rivers Mula, Mutha, Indrayani, Pawna and Bhima. The 3 small rivers Pawna, Mula and Mutha originate within a distance of 32 to 48 kms. (20 to 30 miles) from the boundaries of the region. The confluence of rivers Pawna-Mula, Mula-Mutha and Indrayani-Bhima takes place within the region. The south Western part of the region falls within the Mutha valley, containing famous water storage lake of Khadakwasla. The Hilly and undulating portion of the region in the south is over 610 m (2000') above Mean Sea Level. It starts right from the Southern limits of Pune city i.e. from low but sharp out hill known as Parvati hill upto Sinhadag hill ranges in the extreme south-west corners of the region having an altitude of 1317 m (4300') above Mean Sea level. Though the general elevation of Pune city is 549 m (1800') there are several residual flat topped hills with an elevations between 625 m and 671 m (2030' and 2200') above Mean Sea Level. The general slope of the land in the region is from west to east and from south-west to north-east as seen by the flow of rivers and streams. Geologically the area is a part of Deccan trap. The rocks from the region are used as building stones. The soil is brown copper coloured in the west and somewhat black in east. The soil at its best is very deep, along the river valleys. On higher ground of the intervening highlands, it becomes thinner and poorer. There are no mineral resources of economic importance in the region.

Due to its location in the Eastern slopes of the Ghat at a high altitude above sea-level and the prevalence of Western breeze, the Climate of the region is dry and breezy.
IV. LAND USE

The three principal land uses met are the non-agricultural and land uses in urban and rural settlements, agricultural and allied users including barren lands, hills and water bodies, and large areas under defence department occupation and cantonment, which is a special feature of the Pune Region.

Out of seven cantonments in the State, three viz. Pune, Kirkee and Dehu Road are in the Pune Metropolitan Region. The former two are to the east and north of the Pune city respectively and the third is at a distance of 20 kms. from Pune to its north west on Bombay-Pune Road. Besides these cantonments other defence establishments occupy 88 sq. kms. representing 6 per cent of the area of the region. These extensive Defence area constituting islands and rockets which cannot be touched even for integrated planning, have created some difficulties in co-ordinated planning.

An area of 927 sq. km. representing 61 per cent of the region is under agriculture or other user. The south-eastern part of the region on the river bank consists of good agricultural land. The irrigation projects already in hand when completed would afford irrigation facilities to an area of about 116 sq. kms. in the region representing 13 per cent of the total cultivable area of the region. The urban settlements including cantonments cover an area of 278 sq. km. as mentioned before.

V. POPULATION

The population of the Pune region according to 1961 census was 9.93 lacs of which about 81 per cent (about 8 lacs) was urban. The central core of the region consisting of Pune Municipal Corporation and Cantonments of Pune and Kirkee is thickly populated and accounted for 73 per cent of the total population of the region and 89.5 per cent of the total urban population of the region. The rural population of the region which was 1.87 lacs accounted for only 19 per cent of the total population of the region. Of the 2,127 villages in the region, 50 lacs had a population below 1000 each, while about 30 per cent had a population between 1000 to 2000 each. Only five villages had a population over 5000 each. In 1961 the town density of Pune city was 4,590 per sq. km. (11,880 persons per sq. mile) but the gross density in the thickly populated part of the city was as high as 1,23,553 persons per sq. km. (or 3,20,000 persons per sq. mile).

At its lowest it was 2,471 persons per sq. km. (6,400 persons per sq. mile) in the outlaying suburban area. The average growth rate in the region was 24.25 per cent during 1951-61. The maximum rate of increase recorded was 52 per cent in Bhosari-Pimpri-Chinchwad area and the minimum was for Dehu road area at 12 per cent. The average growth rate for the rural areas of the region was 11 per cent.

Occupation Structure.—In 1961 working population of the region was 33.60 per cent of the total population. The proportion of female workers to total workers was low viz. 21.13 per cent. Among the workers engaged in manufacturing and allied activities were 16.8 per cent. The corresponding percentage for urban area was 22.7 per cent while that in rural areas was only 7.6 per cent. Workers engaged in agricultural and allied activities comprised 27 per cent of the population, while 54 per cent were engaged in activities other than agricultural and manufacturing. The three Cantonment Boards of Pune, Kirkee and Dehu road are service towns. Pune has diverse functions, while Pimpri-Chinchwad is mainly industrial in character.

VI. NATURAL RESOURCES

Thirty per cent of the cultivable area in good agricultural land, 41 per cent is of medium quality and 29 per cent of marginal poor quality.

- Of the total-cultivable area, about 9 per cent i.e. about 7,840 hectares (19,370 acres) was under irrigation through canals and wells. An additional area of 1,000 sq. km. (38,61 sq. miles) is expected to be irrigated under the various major and minor irrigation schemes during the next three or four years.

- Of the total gross cropped area about 70 per cent area was under food crops and 30 per cent under non-food crops. The main food crops of the region are rubbi, jawar and bajra. The non-food crops are not significant in the agricultural economy of the region.

Fruits and vegetables accounted for nearly 4 per cent of the total cropped area in the region and more than 75 per cent of the area under this use was in the villages around Pune within a radius of about 8 km. (5 miles), having easy accessibility for marketing at Pune.

Out of the total cultivable area of 85,498 hectares (21,263) surveyed in the region for bunding and terracing programme, about 23 per cent in 19,351 hectares (47,770 acres) had been bunded and terraced.

The area under forests is only about 8 per cent of the total area of the region. The forests in the region are not of much economic importance but they have very good potential for maintenance of soils in productive fertility and conservation of water. Sinhagad Fort which is easily accessible from Pune City has a good potential for being developed as a Regional Forest Park for holiday relaxation and enjoyment.

Area under all water sheets accounts for nearly 2 per cent of the total area of the Region. The estimated number of workers depending on fishery for their livelihood in the region was only 0.16 per cent of the total workers.

The total livestock population of the region was 1.5 lacs, while the poultry was about 1.4 lacs as per 1966 livestock census. Important cattle breeds observed in the region are Gir, Khillar, Red Sindhi and Nimadi while important breeds in buffaloes are Surati and Murha.

Of the total milk production of about 49,000 litres per day, about 56 per cent was consumed locally while the rest was sold outside for which major markets were Pune City and Cantonments (18,400), Pimpri (1,150), Chinchwad (700) and Dehu road (500). Major demand of milk for Pune City and Cantonment is met with by the Government Milk Scheme. Except during summer season about 54,000 litres of milk is
collected by Milk Scheme out of which 30,000 litres is supplied to Pune City and Cantonments in addition to 18,400 litres supplied directly by private milk dealers in the region) and about 24,000 litres is sent to Bombay.

Out of the total production of eggs of about 2,050 dozens per day, 40 per cent was consumed locally in the villages themselves while the rest 60 per cent was sold outside for which major markets in the region are Pune City, Urulkanchan and Koregaon Bliima.

The region has one of the largest poultry farms in Asia at Varale known as Arbor acres. Major markets for the chickens reared in the region are Pune and Bombay. Government of Maharashstra has recently started a poultry dressing plant at Pune.

VII. INDUSTRIES

According to the survey carried out in 1966-67 there were nearly 700 registered factories in the region employing nearly 57,500 workers (excluding the defence factories employing nearly 22,000 workers). The total factory employment in the region was thus nearly 80,000 persons. Of the total industrial employment, nearly 43 per cent was in Pune Municipal Corporation limits about 41 per cent in Kirkee and Pimpri-Chinchwad belt along the Bombay-Pune National Highway; and about 7 per cent each on the Nagar Road belt and the Solapur Road belt. Nearly half the number of major industries were located in the Kirkee-Chinchwad belt along Bombay-Pune Highway. The total area under existing factories was nearly 2,750 acres (1,114 hectares), while an additional area of nearly 4,500 acres (1,821 hectares) was still available for industries in the area zoned. Thus the total industrial area in the region was nearly 7,250 acres (2,935 hectares).

In the absence of proper planning for the Pimpri-Chinchwad Industrial Area, haphazard development is taking place. Discharge of factory wastes in the adjoining nullas finds its way to the Pavana River. As a consequence, the environmental conditions in the area are deteriorating and river pollution has become a serious problem. The area is devoid of basic utility services and amenities as also community facilities much needed to a rapidly developing industrial area.

VIII. HOUSING

Housing Conditions.—The problem of housing in the region is of very complex magnitude as more than 2/3rd of the houses were observed to be of very poor quality also badly lacking in basic amenities like water tap, bath room and latrines. A large number of families have to share these facilities. The density of occupancy is very high, there being an average 3 persons per room. Nearly 60 per cent of the families lived in one room tenements, where the occupancy rate is 4-5 persons per room. According to slum survey in 1968 there was a slum population of 1,08,000 living in about 303 slums. As in 1967, about 29,000 tenements were estimated to be needed to remove overcrowding in the Pune Municipal Corporation area. The future housing demand in the region for the projected 1991 population is estimated to be about 3-74 lacs additional tenements. This would necessitate construction of 15,560 tenements per annum during the next 24 years (from 1967 to 1991). Of these about 9,500 tenements will have to be constructed per annum in Pune City and surrounding area. The prices of land within the Pune Municipal Corporation limits have shot up due to speculative activities in the private sector. There is an urgency of introducing remedial measures to curb speculation of land with a view to accelerating the private and public housing in the region. It is necessary to utilise undeveloped vacant land within the Municipal limits before permitting large scale growth and expansion of settlements outside the Pune Municipal Corporation limits. Adequate measures like bulk acquisition and development of land coupled with a programme of low cost massive temporary housing is required to be undertaken in the region.

IX. TRAFFIC AND TRANSPORTATION

The region is served by a fairly good network of roads and railways. There are about 282 Km. of good motorable roads in the region. At present heavy lorry traffic moves by day and night on the sections of National Highway (viz., Bombay-Pune-Bangalore and Bombay-Pune-Hyderabad) passing through Pune City. An origin and destination survey carried out for the purpose of estimating by-passable traffic revealed that 36 per cent of the incoming traffic was by-passable. Diversions of National Highways passing through the city from outside the Pune Municipal Corporation area and Pimpri-Chinchwad area are necessary both in the interest of quick movement of through traffic and increasing the safety of local movement.

Rapid development of factories in the Pimpri-Chinchwad area away from the residential areas of the main city and lack of good transportation system has aggravated the ill effects of ribbon-development and created serious traffic problems on the Pune-Bombay road and railway lines. A large volume of cyclists traffic (about 26,000) recorded in 16 hours on the Bombay-Pune road which is already overloaded beyond its capacity results not only in traffic jams and loss of time but also means danger to cyclists, pedestrians and other slow mowers.

Overbridges at Chinchwad and Hadapsar level crossings are necessary immediately. In the survey conducted it was observed that railway crossing at Chinchwad remained closed for 9 hours on the survey day causing thereby an interruption to nearly 2,000 vehicles. Water transport (ferry service) plays relatively an insignificant role in the region nor is there any possibility of any substantial development in water transport facilities.
X. PUBLIC UTILITY SERVICES

There are 12 urban areas in Pune Metropolitan Region, out of which two urban areas (Dapodi, Lonergaon) are now included in the Pune Municipal Corporation. Piped water supply is available in all the above urban areas having population of 8.06 lakhs i.e. 81 percent of the total population of the Region in 1961. The total daily water supply for population residing in Pune Municipal Corporation limits, Cantonment limits and the military area around was 147 million litres (32.03 ml. gals) per day. The present water supply of Talegaon—Dabhade is not sufficient for the growing population. One source of water supply of Maharashtra Industrial Development Corporation at Pimpri (through Pawana river) is polluted. The total 1991 water requirement of the major urban centres and urban areas of the Region would be 709 mld (156 mgl.).

As regards rural water supply the position is not satisfactory because facility of public wells is not available or is inadequate in case of 35 and 37 villages respectively. The population of these villages still depends upon the water in the nearby river as source of drinking water supply and experiences major difficulties during summer seasons.

The present drainage system of Pune Corporation area is not adequate. No underground drainage system is available in the other urban areas viz., Pimpri—Chinchwad Industrial area, Talegaon—Dabhade, Alandi etc.

The Region itself does not generate any electricity. Electric Supply is through the Maharashtra State Electricity Board. The region has therefore no special problems in this regard which are peculiar of the area but shares the problems with the rest of the State.

As per survey facility of primary education was available in 122 villages and 5 towns of the surveyed region. The facility of secondary education in the surveyed region was available in 16 villages and 5 towns. Higher education facility was available at one town (Talegaon Dabhade) only.

Facilities of hospitals, maternity homes and dispensaries were available to almost all the towns and to about 30 villages of the surveyed area of the region. Out of 95 villages, where either a facility of a hospital or a dispensary was not available, 11 villages were visited regularly by outside visiting doctors.

Communication facilities like Postal, Telegraph and Telephone services are a great help in the promotion of industry, trade and agriculture. Postal facility was available in all the 5 towns and 39 villages and telephone facility was available in 4 towns and 3 villages of the surveyed area of the region.

In the surveyed area of the region there were 15 commercial banks located in 4 towns and 2 villages which had also the facility of postal savings bank. Besides, the facility of only the postal savings banks were available in 1 town and 33 villages. Service co-operative societies providing short term finance to agriculturists for the purpose of agricultural operations, were available in 4 towns and 69 villages out of 5 towns and 124 villages covered under the survey.

In the surveyed area of the region the facility of veterinary dispensary/artificial insemination centre was available in 4 towns and 18 villages. Amongst all these dispensaries except the one in Bhosari were in the public sector.

Facilities of weekly markets, police station/outpost and community hall were available in 8 settlements, 12 settlements and 14 settlements of surveyed area of the region respectively.

XI. LOCAL BODIES IN THE REGION

108 village panchayats, 3 panchayat samities (some portion of each), zilla parishad (some portion), 3 municipal councils, 1 municipal corporation and 3 cantonment boards are functioning as local bodies in the region. Total income of all the local bodies in the region for 1967-68 was about Rs. 11,42 crores of which income of Pune Municipal Corporation alone was Rs. 10.55 crores.

Rough estimate of the region’s income for the year 1966-67 at current prices worked out to be Rs. 111 crores. Large scale manufacturing industries contributed nearly 38 percent of this region’s income. Therefore, it can be very well said that industries constitute the base of the regional economy.

XII. PLANNING PROBLEMS IN THE REGION

Problems noticed in most of the Metropolitar Regions experiencing rapid urban growth are obvious also in the Pune Metropolitan Region. These are a lop-sided industrial concentration, resulting from Industry’s natural bias for metropolitan location, acute housing shortage, growth of slums and their social evils, unauthorised ribbon development and continuous urban sprawl, inadequate public utility services and community facilities, bottlenecks in transportation facilities, in roads made by urban users on good agricultural land and last but not least rack renting and soaring land values.

XIII. OBJECTIVES

Most of the above hardships are the results of the total absence of or defective land policy. Corrective planning ought therefore mainly concern itself with prescribing a sound land use policy. From the analysis of the basic problems which rapid urbanisation and industrialisation have created, the following emerge as objectives to be aimed at during the next two decades. The two primary goals of the Regional Plan for the Pune Metropolitan Region would of course be, firstly, to regulate the growth of Greater Pune area and secondly to promote the expansion of other urban areas in the region. Objectives and strategies derived from these primary goals are:

(i) Further deterioration of the existing services and facilities in the urban areas should be arrested.

(ii) Urban development of a large magnitude should be anticipated and positively aided so that it proceeds in a guided manner and so as to strengthen the urban economy but without eroding its rural base in the region or the State.
(iii) This urban development should also take into account, the economic and social changes with it will bring about in the adjacent rural areas. There should be proper dispersal of industries and population with a view to balance the growth within the region.

(iv) Industrialisation being the chief factor influencing and aiding urbanisation should be given necessary regional basis and its location in any site or situation should take into account not only the needs of the locality but also the region.

(v) Development of individual areas should safeguard mutual bonds and interests of the entire region.

(vi) The plan should suggest measures for conservation of resources such as good productive land and forests. Development of potential tourist and recreation centres should receive due attention.

(vii) Sporadic and ribbon development along highways and railways should be avoided in order to economise the cost of providing services and conserving valuable potential urban land.

(viii) The original character of Pune city viz. educational cultural and administrative should be preserved.

XIV.—BRIEF DETAILS OF PLAN PROPOSALS AND RECOMMENDATIONS

The Board had appointed six study Groups on the subjects of Demography, Land use, Transport and Communications, New Towns, Industries and Housing. Various Government and Semi-Government Department and Local Authorities connected with the development of its region were also associated from the beginning with the deliberations of the Regional Planning Board.

The Regional Plan is based on the socio-economic and other surveys, and is a synthesis of the reports and recommendations of the various Study Groups, Committees and sub-groups appointed by the Board.

Population Projections

For estimating the future population of the region upto 1991, the method of extra population by means of geometric rate of increase was applied. The population projections worked out by applying decennial growth rate of area during 1951-61 were corrected and revised on the basis of employment prospects corresponding to the committed schemes of industrial development in the region. This method gave an estimate of population in the region at 13.11 lakhs in 1971, 17.96 lakhs in 1981 and 26.13 lakhs in 1991 as against the population of 9-93 lakhs in 1961. The population of the region would thus increase by about 2-6 times in the 30 years plan period. The break up of the estimated population in 1971 and 1991 for various areas in the region is presented in Table No. 1 at Annexure 1. Keeping in view the projected population, a planning strategy has been worked out to seek as far as possible rational distribution of the population and employment activities.

Estimated working Force

An estimate of the prospective working force of the region has been worked out by pooling the occupational groupwise figures of 1961 census for all the urban areas in the region (except Cantonments) and working out there from the future occupation groupwise population by 1971, 1981 and 1991 by applying the corresponding ratios as per the above pooled data to the respective projected populations. For rural areas it has been assumed that the occupational groupwise distribution will more or less remain unaltered upto 1991. The break up of the estimated working force in the urban and rural areas of the region is shown in Table No. 2 at Annexure 2. According to this projection working population of the region in 1991 works out to 8.38 lakhs or 32 percent of the total projected population. Of this 7.61 lakhs will be urban and 77,000 will be rural. Among these, those engaged in manufacturing activities would form 2-16 lakhs or 26 percent of the total workers in the region and 8-2 per cent of the total population in the region. The central core of the region comprising of Pune city group would have about 15 percent of the total working force engaged in industrial activities, because of its multi-functional character, while for Pimpri-Chinchwad group the same would be 40 per cent because of its purely industrial character. Other urban areas in the region would have Pune City pattern. The industrial employment in the region (including Defence Factories) is estimated to increase nearly to 2 lac workers by 1991 indicating a rise of nearly 2 1/2 times. Table No. 3 at annexure 3 shows the distribution of industrial areas, employment etc. in the region.

Development Structure Table No. 3 (Annexure 3)

The development structures and form of the region is almost predetermined due to its natural and physical character. The hills to the south and south-west limit development on that side. The fertile plains and irrigation facilities in the area between Mutha Canal and Mula-Mutha river in the south-east would require preservation of that area for agricultural development. Already committed industrial development to the north-west on the rail-road corridor outside the Pune City led to the proposal of development of a self-contained satellite township in the Pimpri-Chinchwad area to provide for the future urban expansion.

Pimpri-Chinchwad New Town

The establishment of Pimpri-Chinchwad new township is an important positive proposal of the Regional Plan. Without it, it would be impossible to achieve a balance between work-places and residences and avoid the perpetual problems of commutation of workers, loss of leisure and ever-taking of Pune's city infrastructure by the load of large future growth. It is estimated that the existing committed industrial
area of 1619 hectares (4000 acres) in the Pimpri-Chinchwad centre when fully developed would sustain a population of about 6 lacs. In the Regional Plan it is, therefore, proposed to develop a New City of about 5 lacs population in this area. A new Township Municipal Council for the area has already been established at the instance of the Regional Planning Board. Necessary land required for the development of township has also been notified under the Land Acquisition Act. The development of the township could be carried out in suitable phases. It is estimated that an advance of about Rs. 2·5 to 3 crores would be initially needed to constitute a Revolving Fund for the development of the proposed New Town.

In order to protect the natural beauty and existing character of Pune city viz. educational, cultural and administrative etc. it is proposed to regulate the population size of the parent city and its immediate surroundings by controlling the industrial activity to committed size only and diverting New industrial activity in other centres outside the city. In the Regional Plan, Pune city and its surrounding area is therefore treated as a single unit and it is expected that during the plan period the population of this area would grow to about 14.6 lacs from 6.46 in 1961. The plan suggests that there should be a stop line around the central urban core of Pune city and its surroundings which should represent a line of demarcation between town and country except towards Pimpri-Chinchwad side where continuous urban development has already occurred. The plan, further suggests a green shape around the urban conurbation of Greater Pune and Pimpri-Chinchwad area which would sustain forms of agriculture such as forests and market gardening and can also provide recreational facilities of many kinds including the Regional park in the Katraj-Sinhagad hills and Parvati Pachgaon-Kuran area. It also suggests the necessity of preserving the present religious and historical places and their development as Tourists' centres.

Considering the location of Talegaon, Dabhade, its dry climate, its present and possible infrastructural facilities, it is suggested that the town may be expanded to accommodate a population of about 50,000 by 1991 from about 12,000 in 1961. An area of 20 hectares (50 acres) should be provided for industrial use in its development plan. This industrial area should be allowed to be used for expansion of existing industries and service industries only. The Municipal Council should immediately undertake a scheme for augmenting water supply through the proposed storage at Fagene on the Pawna river. Religious character of Alandi-Dewachi is proposed to be preserved, by not permitting any industrial activity in the town.

The Regional Plan defines the best possible areas for channelising this future growth and seeks assiduously to preserve good agricultural and irrigable areas for agricultural uses alone and also to conserve forest. At present large areas in the Pune Metropolitan Region are held by defence services establishments and cantonments which accounts for about 10 per cent of the total area of the region. Further, these establishments area in scattered form almost on all sides of the Pune Municipal Corporation limits forming constraints on development of the metropolis. This has created some difficulties in co-ordinating the development in the region. The plan, therefore, recommends that no additional land for any new defence activity be acquired within the region.

The Regional Plan stresses the urgency of preserving extensive green stretches around the urban areas to delimit the urban growth and avoid continuous urban sprawl along communication lines. The plan also stresses that the natural hilly surroundings of Pune be preserved and dry hills may be taken up for afforestation and beautification. Scheme of channelising and cascading the Mutha river passing through the city has been recommended on priority.

Industrial Development

New areas of about 1086 hectares (2700 acres) are zoned for industries in the Regional Plan outside the Pune Municipal Corporation limits mainly in the eastern part of the region with a view to provide adequate employment opportunities in that area and are recommended to be developed through the Maharashtra Industrial Development Corporation.

In view of existing concentration of industries at Pimpri-Chinchwad complex in the north-western part it is recommended that further industrial growth be diverted to eastern and north-eastern part of region. No further addition to industrial area at Pimpri-Chinchwad be permitted.

Only industries which do not have large scale problems of dangerous effluents be allowed in the region. In allowing new industries due regard be had for industries which are ancillaries and feeders to the existing industries. It would be desirable to locate large, heavy and obnoxious industries within the Pune Corporation limits.

The industrial acreage at Wedgaonshari and Kharadi be limited to 360 hectares (900 acres). The area of 60 hectares (150 acres) zoned for industries at Hadapsar outside the Pune Municipal Corporation limits shall be zoned for general industrial purpose. The total industrial acreage at Wedgaonsheri, Kharadi and Hadapsar be 420 hectares. (1050 acres).

An area of 308 hectares (771 acres) shall be zoned for industries at Loni-Kand. Actual boundaries of the zone shall be delineated by the concerned agency at the time of actual implementation having regard to the fact that the area should not be too near Tulapur to preserve its historic character and should also ensure that it does not create any water pollution problems.

Hazardous industries shall be allowed to be located in the 'G' zone. The industrial area of about 60 hectares (150 acres) be earmarked for obnoxious industries at village Kondhvik BK on Kondhve-Saswad road and should also be allowed for hazardous industries.

TA 4936-3
The total industrial acreage to be developed in the Region should be as follows:

1. Wadgaonsheri and Kharadi..... 360 hectares (900 acres).
2. Hadapsar..... 60 hectares (150 acres).
3. Koregaon Mul..... 300 hectares (750 acres).
4. Lonikand..... 308 hectares (771 acres).
5. Kundhave Br...... 60 hectares (150 acres).

Total... 1088 hectares (2721 acres).

In addition, an industrial area of 60 hectares (150 acres) should be developed at Tathavade and Punavale villages in Mulshi taluka for the Hindustan Antibiotics.

No new large or medium scale industries should be permitted to come up in the Pune Municipal Corporation limits. The only exception could be in regard to small scale units and service industries which are essential for the day-to-day requirements of the residents of the area. Such units could be allowed only in a few functional estates set up by the Pune Municipal Corporation for the purpose.

A system of 'No Objection' certificate from the Industries Department should be introduced for the industrial units coming up in the Pune Metropolitan Region. Small scale industries and resources based, industries and processing plants employing local resources and giving employment to the local population in the rural areas having land requirements of not more than 2 hectares in each village may be freely allowed in villages located 8 kilometres beyond major industrial zones.

Housing.—Main recommendations regarding housing are as follows:

(i) The housing situation calls for a comprehensive housing policy, long term planning and programming for the region. A specialised housing agency is suggested to provide accommodation to low-income group families living in overcrowded conditions. The authority can build storeyed buildings and flats of variable sizes and standards suitable to various income groups.

(ii) If the housing agency finds it difficult to deal with the housing situation in the entire region due to financial limitations, it may concentrate its activity in the Pimpri-Chinchwad township on a priority basis. Emphasis should be given to the improvement in environmental conditions and provisions of temporary low cost housing and inducing self-help housing.

(iii) The present standards for the housing units laid down by the Government of India for different income groups need to be revised in order to bring them within the paying capacity of respective income groups.

(iv) In the case of slums, due to financial limitation emphasis should be given to the improvement of environmental hygiene and provision of facilities in the existing slums rather than complete clearance and redevelopment. Specific areas catering to 10 to 15 per cent of the projected population be earmarked by the Local Planning Authorities for organised Housing of hutment-dwellers to accommodate temporarily lowest income group immigrants.

(v) The State Government should enact a separate law on slum clearance independent of the existing Acts.

(vi) In order to encourage private housing, taxation policy and provisions of Rent Control Act need to be revised to exempt new residential construction for an initial period of about 5 years.

(vii) It is necessary to check speculative land prices in the urban areas.

Traffic and Transportation.—The plan suggests a westerly Express Highway diversion. The alignment of the westerly Highway diversion has been already finalised on site by the Public Works Department. The express way should receive a very high priority for execution. Besides, the plan also makes specific suggestion in regard to improvement of present railway transport facilities and bus transport facilities in the region. In view of the rapid industrial development on Bombay-Pune axis, the regional plan emphasises the necessity of quadrupling railway lines between Pune and Lonavala Railway section. It also suggests improvement in present facilities relating to goods traffic. On the basis of survey of road accessibility of villages in the region, proposals for improvement of existing village roads, widening of existing bridges, provision of new bridges, etc. are also made in the plan. The plan also proposes steps for supplementing the above broad proposals by short term Traffic Operation Plan and long term Comprehensive Traffic and Transportation Plan for the city and the region. The location of a new civil aerodrome within the Pune Metropolitan Region has been difficult in view of the existing Lohogaon Aerodrome. The Regional Plan recommends that certain additional facilities for the passengers and for servicing of aeroplanes may be provided at the existing aerodrome.

Public utility services.—The region had adequate unharnessed water potential. Schemes for augmenting the facilities of water supply wherever necessary have been there fore suggested. Measures for prevention of water pollution have also been suggested through the water pollution prevention board.

Municipal Bodies and Government Department in the region concerning water supply have prepared plans for augmenting the present facilities to meet the estimated future demand. The water supply potential in the region is sufficient to meet the total requirement of 1991 population and of the industrial development and agriculture. The Zilla Parishad, Pune has been also taking up piped water supply schemes for good number of villages in the region. The plan proposes that filtered water supply scheme undertaken by the Pune Municipal Corporation be completed early. Schemes for provision of piped water supply to the 12 emerging urban centres viz.—Purani, Lonkalbhor, Manjri Bk, Chakhir-Bk., Urali-Kaushan,
Dhayari, Naigan, Theur, Urli-Devachi, Wagholi, Chinhali and Moshi be undertaken. Underground drainage system in outlying developing areas of Pune City, Cantonment Boards, Pimpri-Chinchwad Complex and Talegaon-Dabhade is necessary. As regards water pollution it suggests that a sub-division of the Public Health (Engineering) Department be established in Pune in order to maintain a continuous watch over the various places of pollution and for evolving schemes to control the water pollution.

Rural Planning

The objective of Rural Development Policies is to increase rural productivity and income and also diversify rural economy so as to enhance the quality of life. For achieving this the plan proposes policies for increasing area under cultivation and production per hectare. The rural population in the region living in 127 villages be increased from 1.48 lakhs in 1961 to 1.66 lakhs in 1991 to live in 85 villages.

The entire rural area has been divided into 19 village clusters with a centrally placed village as a nucleus settlement to serve each cluster (micro region). After considering the amenities and facilities available in these 19 micro regions provision of community facilities like primary and secondary schools, primary health units, veterinary dispensary, post-office, police station post etc. are proposed at the selected centrally placed village for the cluster it serves.

The Regional Plan lays emphasis on the necessity of preserving good agricultural land irrigated land for agricultural use. The proposed urban users are not expected to reduce the land available for the cultivation. An area of about 17,800 hectares i.e. 19% of the total cropped area in the region will be brought under the irrigation by different irrigation schemes, giving thereby a very good scope for agricultural development by way of intensive cultivation of food crops, horticultural development etc.

Development of Tourism.—The Regional Plan makes recommendations regarding development of certain places of tourist interests, preservation of areas of religious and historical importance and places of scenic beauty.

(i) Sinhagad
(ii) Khadakwasala Lake
(iii) Katraj Lake
(iv) Theur, Dehu, Dudulgaon, Alandi and Chinchwad being religious places

Sinhagad Fort and extensive uplands round about it upto Panchgaon-Parvati Kuran penetrating into the City area are well suited for park, out-door recreation and enjoyment by urban population. The areas round about Khadakwasala lake and Katraj lake also have good potential for development as picnic spots, Dehu, Dudulgaon, Alandi located on the bank of Indrayani. Theur on the Mula-Mutha and Chinchwad on the Pawna are the sacred places of religious importance. Similarly Tulapur, Phulgaon, Wadhu Khurd, Wagholi etc. are also having historical monuments. Besides, proposal of provisions of promenades along the banks of river would offer a good recreational facility to the densely populated areas in the city.

Guided urban development and development control

The plan has recognised three principal lands use categories—(i) the Urbanisable areas, (ii) Major Industrial zones and (iii) The non-urbanisable areas which include good agricultural and forest lands which ought to be preserved as such and other areas not suitable or ripe for non-agricultural urban uses. The delineation of the urbanisable and non-urbanisable areas is also among other things based on the need to ensure as far as possible a compact from for urban development which is space conserving and economical for the provision and maintenance of social and physical infrastructure for the future urban population. To ensure this, the plan recommends that the development should as far as possible be permitted in and around the existing development, leaving other areas for agricultural use. The Regional Plan also recommends preparation of fringe area development plan for the areas surrounding Pune Municipal Corporation with a view to absorb the urban pressure. In dealing with the development permission in the fringe areas of Pune Municipal Corporation as well as in the agricultural areas outside the limits of the various urban bodies a procedure and policy has been therefore suggested.

Implementation and Finance

The Statement at Annexure 4 indicates the financial outlay (1969 estimates) for some of the key projects recommended in the Regional Plan. The cost involved in implementing the important proposals of the Regional Plan would be in the neighbourhood of Rs. 200 crores according to 1969 estimates. It is necessary to consider the proposals in the Regional Plan as a whole and implement such proposals by a phased programme.

A phased programme for execution of important projects such as construction of diversion of Highways e.g. Pune-Bangalore Highway, provision of additional capacity or constructing new railway lines, augmentation of water supply etc. would have to be drawn up spread over the next 15 to 20 years by the concerned agencies by including necessary budget for such works in their perspective plans and 5 year plans.
ANNEXURE 1

Table No. 1

Areawise projected population of the Pune Metropolitan Region (1971, 1981 and 1991)
(Figures in lacs)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pune City and surrounding areas</td>
<td>6.46</td>
<td>8.48</td>
<td>11.14</td>
<td>14.62</td>
</tr>
<tr>
<td>2</td>
<td>Pune Cantonment and Kirkee Cantonment</td>
<td>1.24</td>
<td>1.44</td>
<td>1.66</td>
<td>1.92</td>
</tr>
<tr>
<td>3</td>
<td>Bhosari-Pimpri-Chinchwad and surrounding areas</td>
<td>0.32</td>
<td>0.54</td>
<td>0.74</td>
<td>0.92</td>
</tr>
<tr>
<td>4</td>
<td>Dehu Road Cantonment</td>
<td>0.19</td>
<td>0.21</td>
<td>0.24</td>
<td>0.27</td>
</tr>
<tr>
<td>5</td>
<td>Talegaon-Dabhade and surrounding areas</td>
<td>0.13</td>
<td>0.16</td>
<td>0.19</td>
<td>0.23</td>
</tr>
<tr>
<td>6</td>
<td>Alandi Town Group</td>
<td>0.04</td>
<td>0.05</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>7</td>
<td>Other urban areas</td>
<td>0.07</td>
<td>0.08</td>
<td>0.09</td>
<td>0.11</td>
</tr>
<tr>
<td>8</td>
<td>Total urban areas</td>
<td>8.45</td>
<td>11.36</td>
<td>16.19</td>
<td>24.47</td>
</tr>
<tr>
<td>9</td>
<td>Rural areas</td>
<td>1.48</td>
<td>1.55</td>
<td>1.77</td>
<td>1.66</td>
</tr>
<tr>
<td></td>
<td>Total for the Region</td>
<td>9.93</td>
<td>13.11</td>
<td>17.96</td>
<td>26.13</td>
</tr>
</tbody>
</table>

ANNEXURE 2

Table No. 2

Estimated working force in the Pune Metropolitan Region (1991)
(Figures in lacs)

<table>
<thead>
<tr>
<th></th>
<th>Estimated population</th>
<th>Per cent of working force to total population</th>
<th>Estimated working force.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pune Metropolitan Region. Total</td>
<td>26.13</td>
<td>32</td>
<td>8.38</td>
</tr>
<tr>
<td>Pune City group</td>
<td>14.62</td>
<td>30</td>
<td>4.40</td>
</tr>
<tr>
<td>Pimpri-Chinchwad area</td>
<td>5.89</td>
<td>33</td>
<td>1.96</td>
</tr>
<tr>
<td>Three Cantonment together</td>
<td>2.19</td>
<td>33</td>
<td>0.72</td>
</tr>
<tr>
<td>Other urban</td>
<td>1.77</td>
<td>30</td>
<td>0.53</td>
</tr>
<tr>
<td>Total Rural</td>
<td>1.66</td>
<td>46</td>
<td>0.77</td>
</tr>
</tbody>
</table>

ANNEXURE 3

Table No. 3

Distribution of Industries and employment in the Pune Metropolitan Region

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Name of the Area</th>
<th>Area under existing working factories (Hectares)</th>
<th>Area in the Zone where industrial use is not started (Hectares)</th>
<th>Total area (Hectares)</th>
<th>Existing employment in the industries</th>
<th>Estimated employment after all the industrial area is fully utilised i.e. in 1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pune Municipal Corporation (as per sanction Development Plan.)</td>
<td>486 (1,200)</td>
<td>242 (1,800)</td>
<td>728 (1,800)</td>
<td>38,000</td>
<td>90,000</td>
</tr>
<tr>
<td>2</td>
<td>Area outside P.M.C. just on its peripheries from villages Vadgaon Sheri, Kharudi, Hadapsar and Konhavre.</td>
<td>41 (100)</td>
<td>445 (1,100)</td>
<td>486 (1,200)</td>
<td>1,093</td>
<td>1,093</td>
</tr>
<tr>
<td>3</td>
<td>Bhosari, Pimpri-Chinchwad factories outside the M.I.D.C. area.</td>
<td>526 (1,300)</td>
<td>526 (1,300)</td>
<td>(1,300)</td>
<td>1,093</td>
<td>1,093</td>
</tr>
<tr>
<td>4</td>
<td>M.I.D.C. Industrial area from Bhosari, Pimpri, Chinchwad, Akurdi, Negadi villages.</td>
<td>(1,300)</td>
<td>(1,300)</td>
<td></td>
<td>(1,300)</td>
<td>(1,300)</td>
</tr>
<tr>
<td>5</td>
<td>Talegaon-Dabhade</td>
<td>20 (50)</td>
<td>20 (50)</td>
<td>1,400</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Loni-Kalbhor, Theur and Phursungi</td>
<td>41 (100)</td>
<td>41 (100)</td>
<td>82 (200)</td>
<td>1,400</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,114 (2,750)</td>
<td>1,821 (4,500)</td>
<td>2,935 (7,250)</td>
<td>57,500</td>
<td>1,75,000</td>
</tr>
</tbody>
</table>

Note.—(i) The estimates of the future industrial employment are worked out by adopting a labour density of 74 workers per hectare (30 workers per acre) for the industrial area in the Pune Municipal Corporation and its peripheries and 49 workers per hectare (20 workers per acre) for industrial areas outside the Pune Municipal Corporation.

(ii) The factories in the M.I.D.C. industrial area at Pimpri, Chinchwad have started functioning recently. They have secured land on the basis of their future expansion programme and have presently utilised only a very small proportion of the potential plot capacity. The area in their possession have not been therefore separately shown in the above table but only their approximate present employment is stated.

(iii) Factory workers mentioned under columns 6 and 7 do not include 22,000 workers in defence factories.

(iv) 200 factory workers are employed in factories located in areas other than those mentioned in the table.
## ANNEXURE 4

**Financial Outlay for Major Schemes in the Pune Regional Plan**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Serial No.</th>
<th>Project Description</th>
<th>Probable Cost Rs. in crores</th>
<th>Suggested Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Authority</td>
<td>1</td>
<td>Pimpri-Chinchwad New Town</td>
<td>3.85</td>
<td>First Five Yearly Stage.</td>
</tr>
<tr>
<td>Housing Agency</td>
<td>2</td>
<td>Construction of 2.23 lacs tenements</td>
<td>159.22</td>
<td>All phases.</td>
</tr>
<tr>
<td>B. and C. Deptt., Railway</td>
<td>3</td>
<td>Contract of over-bridge at Chinchwad Railway crossing.</td>
<td>0.12</td>
<td>Execution already started.</td>
</tr>
<tr>
<td>Railway and P. M. C.</td>
<td>4</td>
<td>Construction of over-bridge at Hadapsar Railway crossing.</td>
<td>0.18</td>
<td>First Five Yearly stage.</td>
</tr>
<tr>
<td>Railway</td>
<td>5</td>
<td>Railway siding from Chinchwad to Lohagiri</td>
<td>0.96</td>
<td>All phases.</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Introduction of electric multiple Luni stock</td>
<td>4.10</td>
<td>First Five Yearly stage.</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Automatic signalling between Pune-Lonavala</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Quadrupling of Railway Lines between Pune-Lonavala</td>
<td>10.24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Doubling of Railway lines between Pune-Dhons.</td>
<td>3.80</td>
<td></td>
</tr>
<tr>
<td>B. and C. Deptt.</td>
<td>10</td>
<td>Western Express Highway of Pune City</td>
<td>4.12</td>
<td>First Five Yearly stage.</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Parallel service roads to Pune City Sr. No. 10 above.</td>
<td>0.28</td>
<td>Do.</td>
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<tr>
<td></td>
<td>12</td>
<td>New Road bridges</td>
<td>0.73</td>
<td>All phases.</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Improvement of existing bridges</td>
<td>0.50</td>
<td>Do.</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Upgrading of roads:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(i) Village roads to O. D. R.</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ii) Other District Roads to Major District Roads</td>
<td>0.62</td>
<td>25 per cent works to be completed in first five yearly stage.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(iii) Blacktopping of major District Roads</td>
<td>0.47</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(iv) C. D. Works</td>
<td>0.42</td>
<td></td>
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<tr>
<td>Pune Mpl. Corpn.</td>
<td>15</td>
<td>Major Road Construction in Pune Municipal Corporation limits.</td>
<td>1.69</td>
<td>First Five Yearly stage.</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Augmentation of water supply in Pune Municipal Corporation areas.</td>
<td>3.37</td>
<td>Do.</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Drainage system for Pune Municipal Corporation.</td>
<td>7.34</td>
<td>Do.</td>
</tr>
<tr>
<td>M. I. D. C.</td>
<td>18</td>
<td>Augmentation of water supply in M. I. D. C. area.</td>
<td>0.70</td>
<td>Do.</td>
</tr>
<tr>
<td>Pimpri-Chinchwad</td>
<td>19</td>
<td>Augmentation of water supply in Pimpri-Chinchwad area.</td>
<td></td>
<td>First and Second Five Yearly stage.</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Drainage system for Pimpri-Chinchwad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talegaon-Dabhade Municipal Council</td>
<td>21</td>
<td>Augmentation of water supply in Talegaon area.</td>
<td>0.36</td>
<td>First Five Yearly stage.</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Drainage system for Talegaon</td>
<td>0.50</td>
<td>Estimates etc., in first five yearly stage.</td>
</tr>
<tr>
<td>Cantonment Boards</td>
<td>23</td>
<td>Augmentation of water supply in Cantonment area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Drainage system for Cantonment areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zilla Parishad</td>
<td>25</td>
<td>Water supply for emerging urban centres</td>
<td>0.70</td>
<td>First Five Yearly stage.</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Village Water Supply through wells to 72 villages.</td>
<td>0.10</td>
<td>Do.</td>
</tr>
<tr>
<td>Town Planning Department</td>
<td>27</td>
<td>Traffic Surveys</td>
<td>0.02</td>
<td>Do.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>208.23</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX I

Development Control Regulations for various zones

The urban Civic Authorities in the region such as the Poona Municipal Corporation, the Cantonment Boards, Talegaon and Alandi Municipal Councils and the New Township Municipal Council set up for the Pimpri-Chinchwad should work out detailed Development Plans for the entire areas in their jurisdiction so as to bring them in conformity with the proposals regarding size of population; network of communications etc., indicated in the Regional Plan. Once such Development Plans are prepared, development works could be passed by respective civic authorities so as to be in conformity with such Plans and the development control rules and bye-laws framed by them.

The Development Plan for 1961 limits of the Poona Municipal Corporation has been already sanctioned by the Government in 1966. As previously indicated, a plan for the entire present limits of the Corporation is necessary.

In the Pimpri-Chinchwad Municipal area, the development permissions may be scrutinised so as to be in general conformity with the board zoning pattern and network of roads indicated in the tentative zoning and circulation plan prepared by the Town Planning and Valuation Department for the area. In the area to the South of Pavana river from villages Thergaon, Wakad and Rahatani etc., such a zoning plan has not been yet prepared. Policy for development permissions in the rural areas discussed below may be followed in scrutinising the development permissions in this area. However, good agricultural land along the river banks should be excluded from granting development permissions.

In the rest of the rural area of the region, development permissions may be granted in Survey Nos. adjoining the Gaot hans and Wadis to serve as an extension of Gaot hans and Wadis. As far as practicable, care should be taken to see, while granting development permissions that such survey numbers are not beyond one furlong limit of the existing development within the Gaot han/Wadi or any other adjacent development.

The above provision, however, would not serve the needs of the Gaot hans or Wadis existing in the fringe areas of the Poona Municipal Corporation limits. In the fringe areas there is likely to be considerable pressure of population because of nearness to large urban centre of Poona, as also of comparative lower land values as against land values prevailing in Poona. May be in time to come, the Corporation limits would have to be extended to include such areas. It is suggested that development permissions in the fringe area may be scrutinised in the light of the policy discussed in paragraph 12.13.11 of the Regional Plan report.

Residential development in the fringe area may be permitted to organised co-operative housing societies as far as possible. But non-agricultural permission for individual houses in a plot may be given in the rural areas or in the fringe areas, irrespective of whether the land is in the proximity of a gaot han or otherwise, provided the conditions laid down in clauses 13.6 and 13.7 below are fulfilled.

In granting development permissions for the above areas in the region, irrigated land, rich agricultural land, hill tops, hill slopes e.g. Parvati, Chaturshrungi, Pachgaon Kuran etc., should invariably be excluded.

In particular villages or towns where the population is likely to exceed the limit of 10,000, the Collector should move the Town Planning Authorities to prepare proper Development Plans/Schemes with a view to control the development.

The Collector while granting the development permissions should impose a condition that the developers should before starting non-agricultural use, construct roads and drains in layout plans to the satisfaction of the Collector or any other authority he may specify. The developer should also make satisfactory arrangements for the provision of water supply and sanitation.

Except the small scale industry permissible in Gaot hans and nearby villages of rural areas in the region, no industrial use may be permitted outside the industrial zone.

In addition to permissions for extensions of Gaot hans and villages and their hamlets and non-agricultural permissions for individual houses as permissible above, certain other expected categories of users as listed below would be permissible in the areas of the Region shown in Green colour in the Regional Plan:

(i) Petrol pumps, servicing shops, transfer godowns for goods and parking sheds for Road Transport operations and other reasonable roadside amenities including way-side shops and restaurants, in conformity with the current regulations in these respects.

(ii) Any use or development of land connected with carrying out of agricultural and allied operations including poultry keeping, dairy farms, cattle raising, piggeries, etc., and quarrying with due permission from the appropriate authorities subject to provisions in paragraph 12-15 (i) of the Regional Plan Report.

(iii) Construction of buildings for public utility concerns, such as sub-stations and receiving stations of the Electricity Board, chilling plants for Dairy Development, any works required for water works and sewerage works etc.

(iv) Construction of any new communications routes or facilities such as roads, railways, airports, etc.

(v) Hazardous industries requiring very large areas for safety margins as compared to the operational area itself, provided such industries would not cause nuisance to adjoining users and the site is approved by the Exports Committee of the Industries Department.

(vi) Individual houses by persons or societies who have brought lands with due sale or Non-Agricultural permission from the Revenue Department for residential purposes.

(vii) Existing authorised industries and industrial estates. These may be allowed to continue as if they are in an industrial zone, and only reasonable expansions not involving purchase of additional land be permitted in their ' Case '.
Recommendations to the State Government regarding directions to be issued for the Local Authorities in the Region and the different Departments of the State Government, in respect of enforcement and implementation of the proposals contained in the Regional Plan.

A. State Government in Urban Development and Public Health Department

The Government in Urban Development and Public Health Department have already established Pimpri-Chinchwad New Town Development Authority for implementing the proposals of establishment of new town around the existing industrial complex as suggested in the Regional Plan, and the work of the project is in progress. Provision of adequate seed capital required for the initial work and building of the project is necessary. The Housing and Area Development Board, Pune should take up the provision of adequate housing to meet the housing requirement as recommended in the Regional Plan.

As a matter of general housing policy, Government may move the Income Tax authority to consider the flexibility of granting concessions in income tax in respect of income realised from new residential constructions in order to encourage the housing activities.

The suggestion in the Regional Plan to amend the rent act to exempt the new residential construction be considered by Government.

Recommendations to check speculation in land prices in urban area has already been met with by new legislation viz. Urban Land Ceiling and Regulation Act, 1976 enacted by the Government of India.

DEVELOPMENT OF INDUSTRIAL AREA

The Maharashtra Industrial Development Corporation may be requested to take up action for development of new industrial area earmarked for industrial development in the region. The Pune Municipal Corporation may be requested to take action for development of functional industrial development for small scale industry in the industrial zone within the Corporation limit.

TRANSPORT AND COMMUNICATIONS

(a) Railways.—The Railway authorities be requested to take up proposals for quadrupling of railway lines between Pune and Lonawala, provision of additional goods facility at Chinchwad.

(b) Roads.—Public Works and Housing Department.

The Public Works and Housing Department be requested to take up early action for provision of express highways to divert traffic of Bombay-Bangalore Road passing through Pune City.

The Public Works and Housing Department may be pursued to take action regarding provisions of new bridges or widening of existing bridges or roads as suggested in the Regional Plan vide paragraphs 12, 17, 23 to 12, 17, 28, 12, 17, 29 as also upgrading of roads.

Revenue and Forests Department.—The Regional Plan has suggested that no additional land be acquired (in the region) for Defence Department.

Agriculture Department.—Recommendations made in paragraphs 12, 17, 30 of the Regional Plan Report regarding agricultural development be pursued with that Department.

Forest Department.—Recommendations in respect of development of forests made in paragraphs 12, 17, 15 and 12, 14, 16 viz. development of regional forest park at Parvati, Pachgaon, Kuran and Katraj and Singhad area be pursued with the Forest Department. That Department has already taken up aforesaid programme in these areas.

Director of Tourism.—The Regional Plan recommendations regarding development of towns of tourist interest viz., Sinhagad Khadakwasla, Katraj, Theur, Alandi, Dehu etc. may be brought to the notice of Director of Tourism for expeditious action.

Collector of Pune.—The recommendations regarding permissions of fringe area development and overall development control in the region as contained in Appendix-I may be brought to the notice of the Collector of Pune. Recommendations regarding controlling quarrying operations in the region contained in paragraphs 12, 15, 1, 12, 15, 2 may also be noted by the Collector.

PUBLIC UTILITY SERVICES

Pimpri-Chinchwad Municipal Council.—Pimpri-Chinchwad Municipal Council should take up expeditious action to implement the proposals of Regional Plan regarding augmentation of water supply, provision of underground drainage, opening of new bus-routes, provision of housing etc. and slum improvement within its limit.

ZILLA PARISHAD, PUNE

1. The Zilla Parishad may undertake the work of preparation of Development Plans for the following villages, Fursungi, Mangari BK, Wagholi, Uralikanchan, Theur, Naigaon and Koregaon Mul as these are expected to become urban settlements by 1991. The Zilla Parishad, while providing the facilities in the various villages, may consider the recommendations in paragraphs 12, 14, 11.

2. Necessary action on the recommendations in paragraphs 12, 18, 3 to 12, 18, 6 and 12, 18, 10 may also be taken.
Poona metropolitan region and its environs

References

- Boundary of Poona metropolitan region
- Main urban centres
- National highways
- Broad gauge railways
- District boundary
- State boundary

Scale: 20 40 60 80 Miles

Poona metropolitan regional planning board
generalised existing land use (1966-67)

references

- non agricultural
  - predominantly residential
  - commercial
  - industrial
  - public and semi public
  - crop land irrigated
  - crop land non irrigated
  - grazing land (pastures)
  - forest
  - defence and cantonments
  - undeveloped (urban)
  - roads, railways
  - railway stations and bus stations
  - water sheets
  - municipal boundaries
  - region boundary

scale: one inch to two miles

1: 126720

references
- areas covered by present urban local bodies
- corporation and municipal councils
- cantonments
- 5000 p.m. c. fringe area
- existing defence areas
- major existing & proposed industrial areas
- existing
- proposed
- proposed new town
- existing & proposed principal roads
- existing national highways
- existing state highways
- proposed by pass roads to national highways
- railways
- railway line to be quadrupled
- railway line to be doubled
- proposed railway line
- agriculture
- irrigable agricultural land
- non irrigated & pastures
- forest & catchment areas
- existing forest
- catchment areas of lakes to be preserved for afforestation
- soil conservation
- other proposals
- urbanized areas
- proposed picnic spots
- religious & historical places to be preserved
- proposed parks
- major recreation areas
- national parks
- proposed nature reserve
- towns & cities (1991 population)
  - below 25,000
  - between 25,000 to 50,000
  - between 50,000 to 100,000
  - between 100,000 to 500,000
  - 500,000 and above

The boundaries are only suggestive and the actual extent may be decided by the concerned authorities after a detailed survey.

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S/L KMS

map no. 45/143