

DEMOGRAPHIC CHARACTERISTICS

2.1 POPULATION OF SMKMC

As per Census of India estimates, population of area under Sangli Miraj Kupwad Municipal Corporation increased from 351917 persons in the year 1991 to 431014 persons in the year 2001. Increase in population in the last decade was 79097 and the percentage variation in the population is 22.4%. There is a constant decline in percentage variation of population in each decade from 1961 to 2001 and there is less variation in increase in population. This shows that growth of city has almost stabilized.

Table 2.1 Population of SMKMC

| YEAR | POPULATION | DECADAL VARIATION | PERCENTAGE VARIATION |
|------|------------|-------------------|----------------------|
| 1961 | 134458 | - | - |
| 1971 | 202461 | 68003 | 50.6 |
| 1981 | 271096 | 68635 | 33.9 |
| 1991 | 351917 | 80821 | 29.8 |
| 2001 | 431014 | 79097 | 22.4 |

Source: Census of India, Maharashtra tables

2.2 TOTAL NUMBER OF HOUSEHOLDS & HOUSEHOLD SIZE

In 1991, total number of households in Sangli Miraj and Kupwad Municipal Corporation area was 69971 households and the household size was 5.03. Household size has decreased from 5.42 in 1971 to 5.03 in 1991.

The Sample Household surveys conducted as part of the Plan Preparation studies in September 2001 reflect the average households size of the respondent households in the municipal corporation area to be 4.8, which is less than the Maharashtra state average. The household size in Miraj proper, and Sangalwadi exhibit relatively higher household size in the range of 5.

Table 2.2 Total Number of Households and Household size

| Year | Population | Number of Household | Household size |
|------|------------|---------------------|----------------|
| 1971 | 202461 | 37379 | 5.42 |
| 1981 | 27199 | 50885 | 5.33 |
| 1991 | 351917 | 69911 | 5.03 |

Source: Census of India, Maharashtra tables

2.3 AGE SEX STRUCTURE

The data on age distribution compiled from sample household survey exhibits normal trends. Minor children constitute only 6% of the sample households, which includes 3.4% who are below 3 years of age, followed by 15% juveniles (up to 14 years of age). The main concentration of age group in the respondent population is between 21-40 years, which constitutes 38% of the sample population. Less than one third (28%) of the respondent population are in the age group of over 40 years.

Table 2.3 Age Sex Structure

| Age group | Total | Male | Female |
|-----------|-------|------|--------|
| < 4 | 14403 | 7575 | 6828 |
| 4-5 | 12305 | 6579 | 5726 |

| Age group | Total | Male | Female |
|------------------|--------------|-------------|---------------|
| 6-14 | 62518 | 33500 | 29019 |
| 15-18 | 36665 | 19417 | 17248 |
| 19-20 | 21195 | 10349 | 10846 |
| 21-30 | 89119 | 44417 | 44702 |
| 31-45 | 99894 | 60811 | 39083 |
| 46-60 | 58251 | 26103 | 32148 |
| >60 | 36665 | 20946 | 15718 |

Source: Sample Household Surveys

The main concentration of age group in the respondent population is between 21-40 years, which constitutes 38% of the sample population. Less than one third (28%) of the respondent population are in the age group of over 40 years and even in this, persons above 60years constitute only 9%.

2.4 SEX RATIO

In Sangli Miraj Kupwad Municipal Corporation, the number of females per thousand males is 931. This is lower than that of the district average sex ratio of 958 and slightly lower than the state average sex ratio of 934.

Table 2.4 Sex ratio

| YEAR | MALE | FEMALE | TOTAL | NO. OF FEMALES PER 1000 MALES |
|-------------|-------------|---------------|--------------|--------------------------------------|
| 1971 | 107132 | 95299 | 202461 | 889 |
| 1981 | 141835 | 129264 | 271099 | 911 |
| 1991 | 182238 | 169679 | 351917 | 931 |

Source: Census of India, Maharashtra tables

2.5 LITERACY

As per Census records of 1991, about 64 % of the total population is literate. The percentage has increased by 10% from 1971 to 1981. The literacy rate for district is slightly below the average rate of the state. I.e., 64.87% and slightly higher than the district average of 62.61%

Table 2.5 Literacy

| YEAR | 1971 | 1981 | 1991 |
|-------------|-------------|-------------|-------------|
| TOTAL | 109356 | 165894 | 222524 |
| PERCENTAGE | 54.01 | 61.19 | 63.23 |

Source: Census of India, Maharashtra tables

The sample household surveys reflect a large proportion of the sample population (55%) to be moderately educated, i.e. up to primary or high school levels. 33% are relatively better educated (higher secondary or above)

2.6 RELIGION

On the basis of sample household surveys, it can be inferred that similar to the state profile a large majority (81%) of households in corporation area are the Hindus followed by the Muslims. Miraj reflects a relatively high population of Muslim households.

About 80% of the respondent households belong to general category, 11.1% belongs to OBC, and 9% to schedule castes and schedule tribes. S.T population is relatively low in SMKMC area

2.7 OCCUPATION

The sample household surveys depict the Workforce participation rate amongst males in the study area to be 51.1 while that of females to be 8.66. Overall, the occupational structure is more oriented to business, self-employment and white-collar workers, except the slums where causal work or low earning self employed workers prevail and Sangaliwadi where agriculture sector does have significance. The working population (about 34%) is also moderate among the sample households.

2.8 INCOME & HOUSEHOLD ASSETS

Almost half of the respondent households (46%) show their income up to Rs 2000 or below per month in the sample household surveys. One third of the respondent households reported a monthly income of Rs 2000 -5000. Households from Sangli Township, as expected, show better monthly earnings than Miraj Township.

Overall, the data on household assets depict a better economic status than that was reflected from the monthly income of the sample households. Township/settlement wise variations are also visible with the sample residents of Sangli and Kupwad being better placed in terms of ownership.

About two third of the households have a bank account. This information is significant because having a bank account distinctly keeps such households away from the poor families. Though the income data showed that about a half of the families earn Rs. 5000 or less a month, the very fact that 66% families have bank account, presents some evidence that the interviewees under state the monthly income.

Equally significant is the fact that only about one fourth of the sample households (27%) have taken any loan in the last three years period. Among the households who availed loans, Sangalwadi residents are proportionately, more (45%), followed by the Gunthewari settlement residents

Table 2.6 Distribution Of Household By Different Income Group

| Income Group | Number | Percentage |
|----------------|--------|------------|
| Less than 1000 | 12504 | 17.6 |
| 1001-2000 | 20816 | 29.3 |
| 2001-5000 | 23303 | 32.8 |
| 5001-10000 | 10444 | 14.7 |
| 10001-15000 | 2700 | 3.8 |
| 15001-20000 | 568 | 0.8 |
| 20001-25000 | 426 | 0.6 |
| above 25000 | 284 | 0.4 |

Source: Sample Household Surveys

2.9 POPULATION AND DENSITY OF SMKMC IN 1998

Sangli Miraj Kupwad Municipal Corporation area includes 68 wards and Wanleswadi. There are 38 wards in Sangli, 24 in Miraj and 6 in Kupwad. The total area of Sangli, Miraj Kupwad Municipal Corporation is 111.74 Sq. Km. Distribution of population and density of each ward are given in the table given below.

Table 2.7 Population and Density of SMKMC in 1998

| Ward No. | Total Population of Ward | Approx. Area (sq.km) | Approx.Density (persons/sqkm) |
|-----------------|---------------------------------|-----------------------------|--------------------------------------|
| 1 | 5602 | 6.84 | 819 |
| 2 | 5564 | 1.41 | 3940 |
| 3 | 5486 | 6.34 | 866 |
| 4 | 5522 | 5.80 | 952 |
| 5 | 4947 | 7.06 | 701 |
| 6 | 4965 | 1.98 | 2514 |
| 7 | 4674 | 4.87 | 959 |
| 8 | 4946 | 16.43 | 301 |
| 9 | 5617 | 5.10 | 1102 |
| 10 | 4970 | 2.52 | 1974 |
| 11 | 5134 | 1.13 | 4560 |
| 12 | 5529 | 3.84 | 1441 |
| 13 | 5147 | 1.14 | 4531 |
| 14 | 4999 | 4.21 | 1188 |
| 15 | 5290 | 0.36 | 14768 |
| 16 | 4636 | 5.03 | 923 |
| 17 | 5176 | 0.28 | 18731 |
| 18 | 4996 | 7.91 | 632 |
| 19 | 4948 | 0.28 | 17906 |
| 20 | 5569 | 0.16 | 34009 |
| 21 | 5554 | 0.50 | 11075 |
| 22 | 5278 | 1.96 | 2686 |
| 23 | 4962 | 0.95 | 5213 |
| 24 | 5181 | 1.12 | 4644 |
| 25 | 5359 | 1.18 | 4553 |
| 26 | 5157 | 4.33 | 1191 |
| 27 | 5222 | 0.52 | 10005 |
| 28 | 4696 | 0.46 | 10197 |
| 29 | 4919 | 0.24 | 20897 |
| 30 | 5170 | 0.11 | 45924 |
| 31 | 4863 | 0.14 | 33940 |
| 32 | 5597 | 0.20 | 27344 |
| 33 | 5034 | 0.27 | 18918 |
| 34 | 4802 | 0.10 | 46921 |
| 35 | 5343 | 0.10 | 52207 |
| 36 | 4973 | 1.12 | 4458 |
| 37 | 5228 | 1.05 | 4960 |
| 38 | 5481 | 3.39 | 1618 |
| 39 | 5629 | 1.13 | 5000 |
| 40 | 4846 | 0.56 | 8609 |
| 41 | 5245 | 0.42 | 12500 |

| Ward No. | Total Population of Ward | Approx. Area (sq.km) | Approx.Density (persons/sqkm) |
|--------------|--------------------------|----------------------|-------------------------------|
| 42 | 4771 | 0.27 | 17930 |
| 43 | 4840 | 0.55 | 8758 |
| 44 | 4830 | 0.14 | 33710 |
| 45 | 4611 | 0.15 | 30036 |
| 46 | 5506 | 0.18 | 29889 |
| 47 | 5006 | 0.13 | 37626 |
| 48 | 4992 | 0.20 | 24389 |
| 49 | 4813 | 0.24 | 20447 |
| 50 | 4729 | 0.19 | 24320 |
| 51 | 5082 | 0.49 | 10345 |
| 52 | 4866 | 0.30 | 16395 |
| 53 | 5478 | 1.15 | 4779 |
| 54 | 5490 | 0.15 | 35762 |
| 55 | 5299 | 0.10 | 51777 |
| 56 | 4948 | 0.08 | 60434 |
| 57 | 4754 | 0.07 | 66359 |
| 58 | 5089 | 0.11 | 45204 |
| 59 | 4736 | 0.10 | 46276 |
| 60 | 4871 | 0.06 | 79325 |
| 61 | 5245 | 0.97 | 5395 |
| 62 | 5473 | 0.15 | 35651 |
| 63 | 5080 | 0.65 | 7756 |
| 64 | 4925 | 0.14 | 34373 |
| 65 | 4757 | 0.06 | 77468 |
| 66 | 5033 | 0.28 | 18214 |
| 67 | 5087 | 0.06 | 82842 |
| 68 | 4766 | 0.06 | 77615 |
| Wanlesswadi | Not available | 2.18 | |
| Total | 347333 | 111.8 | 3106 |

Source: SMKMC figures (except figures on area, which have been worked out from maps)

2.9.1 POPULATION AND DENSITY IN DIFFERENT PRABHAG SAMITI

Out of 68 wards, Prabhag Samiti I includes 17 wards, Prabhag samiti II includes 19 wards, Prabhag Samiti III includes 15 wards and Prabhag Samiti IV includes 17 wards. Prabhag Samiti II has the highest density of 5380 persons per square kilometer while Prabhag Samiti III has the lowest density of 1866 persons per square kilometer.

Table 2.8 Population And Density In Different Prabhag Samiti

| Prabhag Samiti | Total No. of wards | Population | Area (sq.km) | Density (persons/sq km) |
|----------------|--------------------|------------|--------------|-------------------------|
| I | 17 | 86752 | 25.62 | 3385 |
| II | 19 | 96208 | 17.88 | 5380 |

| | | | | |
|--------------|------------------------|---------------|---------------|-------------|
| III | 15 + wanleswadi | 78819 | 42.24 | 1866 |
| IV | 17 | 85554 | 25.99 | 3291 |
| Total | 68 + wanleswadi | 347333 | 111.74 | 3108 |

2.9.2 PRABHAG SAMITI I

Prabhag samiti I consists of 17 wards. The total population of this area is about 90,000 and area is about 25.62 square kilometers. Area under the Prabhag Samiti includes Shantiniketan area, Sangalwadi, Peth bhag, Ratnashinagar, area surrounding cattle market, station road area, Ambedkar stadium, Kalikhan, Sanjog colony, Rajwada and Timber area. Population density of Prabhag is 33.85 persons per Hectare. Density of wards in Prabhag I ranges from 6 persons per Hectare to 355 persons per Hectare.

Table 2.9 Population And Density Of Prabhag Samiti I

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) |
|--------------|-----------------------|----------------|------------------------------|
| 1 | 5602 | 683.50 | 8 |
| 16 | 4636 | 502.12 | 9 |
| 17 | 5176 | 27.79 | 186 |
| 18 | 4996 | 790.90 | 6 |
| 19 | 4948 | 27.83 | 178 |
| 20 | 5569 | 16.37 | 340 |
| 21 | 5554 | 50.53 | 110 |
| 22 | 5278 | 196.21 | 27 |
| 48 | 4992 | 20.60 | 242 |
| 49 | 4813 | 23.99 | 201 |
| 50 | 4729 | 19.86 | 238 |
| 51 | 5082 | 49.06 | 104 |
| 52 | 4866 | 29.96 | 162 |
| 62 | 5473 | 15.40 | 355 |
| 63 | 5080 | 65.87 | 77 |
| 64 | 4925 | 14.62 | 337 |
| 66 | 5033 | 27.84 | 181 |
| Total | 86752 | 2562.46 | 3385 persons / sq km |

2.9.3 PRABHAG SAMITI II

Prabhag samiti II consists of 19 wards. The total population of this area is about 100,000 and area is about 17.88 square kilometers. Area under the Prabhag Samiti includes Vishrambagh area, Walchand college, Kolhapur road, Haripur road, Civil Hospital area, Indiranagar slums, Heerabag Water Works, Laxmi temple, Goanbhag and Khanbhag. . Population density of Prabhag is 53.80 persons per Hectare. Density of wards in Prabhag ranges from 12 persons per Hectare to 851 persons per hectare.

Table 2.10 Population And Density Of Prabhag Samiti II

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) |
|-----------------|------------------------------|------------------|-------------------------------------|
| 10 | 4970 | 251.97 | 20 |
| 11 | 5134 | 112.22 | 46 |
| 12 | 5529 | 383.83 | 14 |
| 13 | 5147 | 113.33 | 45 |
| 14 | 4999 | 421.00 | 12 |
| 15 | 5290 | 36.18 | 146 |
| 39 | 5629 | 112.97 | 50 |
| 40 | 4846 | 55.88 | 87 |
| 41 | 5245 | 41.94 | 125 |
| 42 | 4771 | 26.41 | 181 |
| 43 | 4840 | 55.20 | 88 |
| 44 | 4830 | 14.13 | 342 |
| 45 | 4611 | 15.58 | 296 |
| 46 | 5506 | 18.32 | 301 |
| 47 | 5006 | 13.05 | 384 |
| 61 | 5245 | 97.30 | 54 |
| 65 | 4757 | 6.55 | 726 |
| 67 | 5087 | 5.98 | 851 |
| 68 | 4766 | 6.36 | 749 |
| Total | 96208 | 1788.21 | 5380persons/sq km |

2.9.4 PRABHAG SAMITI III

Prabhag samiti III consists of 15 wards. The total population of this area is about 80,000 and area is about 40.10 square kilometers. Area under the Prabhag Samiti includes Kupwad, Sakhar Karkhana, Sanjaynagar, Wellington College, HUDCO colony, Mangalwarpath and Miraj MIDC. Population density of this Prabhag is 1866 persons per sq.km. Density of wards in Prabhag samiti ranges from 7 persons per Hectare to 213 persons per Hectare.

Table 2.11 Population And Density Of Prabhag Samiti III

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) |
|-----------------|------------------------------|------------------|-------------------------------------|
| 2 | 5564 | 140.73 | 40 |
| 3 | 5486 | 633.00 | 9 |
| 4 | 5522 | 579.82 | 10 |
| 5 | 4947 | 706.12 | 7 |
| 9 | 5617 | 509.09 | 11 |

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) |
|-------------------|------------------------------|------------------|-------------------------------------|
| 23 | 4962 | 94.72 | 52 |
| 24 | 5181 | 111.93 | 46 |
| 25 | 5359 | 117.61 | 46 |
| 26 | 5157 | 432.73 | 12 |
| 27 | 5222 | 52.47 | 100 |
| 28 | 4696 | 46.40 | 101 |
| 29 | 4919 | 23.14 | 213 |
| 37 | 5228 | 105.76 | 49 |
| 38 | 5481 | 338.56 | 16 |
| 53 | 5478 | 114.61 | 48 |
| Wanleswadi | 5200 | 218.00 | 24 |
| Total | 78819 | 4224.67 | 1866 person /sq km |

- Population of Wanleswadi in 1998 has been estimated from 1991 and 1981 figures, Population figures for wards 1-68 are figures provided by SMKMC

2.9.5 PRABHAG SAMITI IV

Prabhag samiti IV consists of 17 wards. The total population of this area is about 85,000 and area is about 25.99 square kilometers. Area under the Prabhag Samiti includes Indiranagar, Vakharbhag, Krishna ghat, Brahmanpuri, Uttamnagar, area near Laxmi market, Station road, Shivaji nagar and Sanglives. Population density of Prabhag is 3291 persons/sqkm. Density of wards in Prabhag ranges from 3 persons per Hectare to 838 persons per Hectare.

Table 2.12 Population And Density Of Prabhag Samiti IV

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) |
|-----------------|------------------------------|------------------|-------------------------------------|
| 6 | 4965 | 196.98 | 25 |
| 7 | 4674 | 487.09 | 10 |
| 8 | 4946 | 1642.69 | 3 |
| 30 | 5170 | 11.14 | 464 |
| 31 | 4863 | 13.82 | 352 |
| 32 | 5597 | 20.09 | 279 |
| 33 | 5034 | 26.78 | 188 |
| 34 | 4802 | 10.64 | 451 |
| 35 | 5343 | 10.41 | 513 |
| 36 | 4973 | 111.83 | 44 |
| 54 | 5490 | 15.29 | 359 |
| 55 | 5299 | 10.07 | 526 |
| 56 | 4948 | 8.20 | 604 |

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) |
|--------------|-----------------------|----------------|------------------------------|
| 57 | 4754 | 7.60 | 625 |
| 58 | 5089 | 10.98 | 463 |
| 59 | 4736 | 9.83 | 482 |
| 60 | 4871 | 5.81 | 838 |
| Total | 85554 | 2599.25 | 3291 person /sq km |

2.10 POPULATION PROJECTIONS

Following standard methods are used for forecasting the population

1. Arithmetic increase method
2. Geometrical increase method.
3. Incremental increase method.
4. Percentage increase method
5. Decreasing rate of growth method
6. Formula of public health department.

2.10.1 Arithmetic Increase Method

Formula

$$P_n = P_0 + NR$$

Where P_n = Projected Population after n decades

P_0 = Population at any time

N = Number of decades

R = Rate of increase per decade

| YEAR | POPULATION | INCREASE IN POPULATION | AVERAGE |
|------|------------|------------------------|------------------|
| 1961 | 134458 | - | |
| 1971 | 202461 | 68003 | |
| 1981 | 271096 | 68635 | 296556/4 = 74139 |
| 1991 | 351917 | 80821 | |
| 2001 | 431014 | 79097 | |
| | | 296556 | |

$$P_{2011} = 431014 + (1 * 74139) = 505153$$

$$P_{2021} = 431014 + (2 * 74139) = 579292$$

2.10.2 Geometrical Increase Method

Formula

$$P_n = P_0 (1 + Ig/100)$$

Where P_n = Projected Population after n decades

P_0 = Population at any time

Ig = Average percentage increase in population

N = Number of years

| YEAR | POPULATION | INCREASE IN POPULATION | PERCENTAGE INCREASE IN POPULATION |
|------|------------|------------------------|-----------------------------------|
| 1961 | 134458 | - | |
| 1971 | 202461 | 68003 | 51 |
| 1981 | 271096 | 68635 | 34 |
| 1991 | 351917 | 80821 | 30 |
| 2001 | 431014 | 79097 | 22 |
| | | 296556 | 34 |

$$P_{2011} = 431014 * (1 + 34/100) * 431014 = 650831$$

$$P_{2021} = 650831 * (1 + 34/100) * 872113 = 772435$$

2.10.3 Incremental Increase Method

| YEAR | POPULATION | INCREASE IN POPULATION | INCREMENTAL INCREASE IN POPULATION (Y) |
|------|------------|------------------------|--|
| 1961 | 134458 | - | |
| 1971 | 202461 | 68003 | |
| 1981 | 271096 | 68635 | 632 |
| 1991 | 351917 | 80821 | 12186 |
| 2001 | 431014 | 79097 | -1724 |
| | TOTAL | 296556 | 11094 |
| | | 296556/4 = | 11034/3 = |
| | AVERAGE | X = 74139 | Y = 3678 |

$$P_n = P_0 + (X+Y)*N$$

Where P_n = Projected Population after n decades

P_0 = Population at any time

N = Number of decades

X = Average Increase in population

Y = Average Incremental increase in population

$$P_{2011} = 431014 + (74139 + 3678)*1 = 508831$$

$$P_{2021} = 431014 + (74139 + 3678)*2 = 585548$$

2.10.4 Decrease Rate Of Growth Method

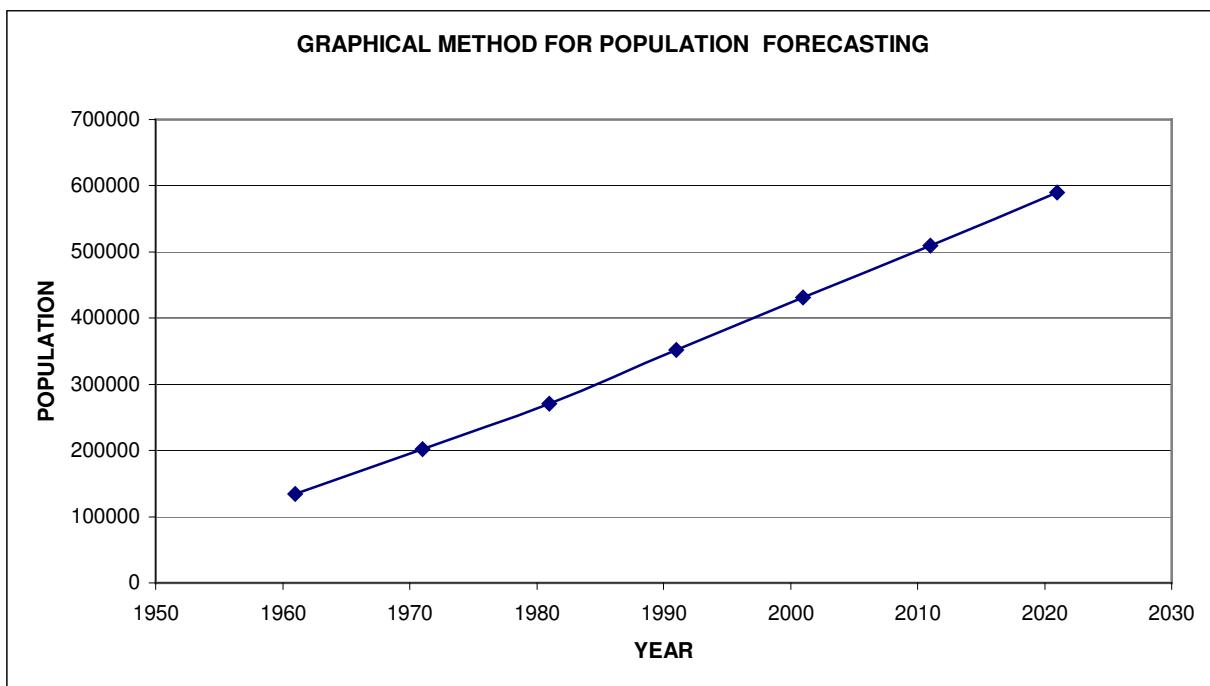
| YEAR | | INCREASE IN POPULATION | PERCENTAGE INCREASE IN POPULATION | DECREASE IN THE PERCENTAGE INCREASE |
|------|---------|------------------------|-----------------------------------|-------------------------------------|
| 1961 | 134458 | - | | |
| 1971 | 202461 | 68003 | 51 | |
| 1981 | 271096 | 68635 | 34 | 17 |
| 1991 | 351917 | 80821 | 30 | 4 |
| 2001 | 431014 | 79097 | 22 | 7 |
| | TOTAL | 296556 | | 28 |
| | AVERAGE | 74139 | | 9.37 |

POPULATION PROJECTED

| YEAR | NET PERCENTAGE INCREASE IN POPULATION | POPULATION |
|------|---------------------------------------|---------------------------------------|
| 2011 | 22.9.4 = 12.6 | $431014 + 12.6/100 * 431014 = 485321$ |
| 2021 | 12.6-9.4 = 3.2 | $485321 + 3.3/100 * 485321 = 501336$ |

2.10.5 Graphical Method

In this method, population from 1961 to 1971 was plotted in a graph paper and from the growth curve, the projected population by 2021 is estimated to be 5.9 lakhs.

**2.10.6 Formula Of Public Health Department**

$$P_n = P_0 * (200 + NC) / (200 - NC)$$

Where N = No of years after P_0

$$\begin{aligned} C &= \text{Constant to be determined} \\ &= (P_n - P_0) / (P_n + P_0) * (200/n) \end{aligned}$$

Taking population figures of 1991 and 2001

$$\begin{aligned} C &= (431014 - 351917) / (431014 + 351917) * 200/10 \\ &= (79097/782931) * 20 = 2.02 \end{aligned}$$

$$\begin{aligned} P_{2011} &= P_{2001} (200 + 10 * 2.02) / (200 - 10 * 2.02) \\ &= 431014 * (220.2/179.8) = 527860 \end{aligned}$$

$$\begin{aligned} P_{2011} &= P_{2001} (200 + 10 * 2.02) / (200 - 10 * 2.02) \\ &= 527860 * (220.2/179.8) = 646467 \end{aligned}$$

2.10.7 Registrar General (Census of India) Method

Formula: $P_t = P_{2001} + P_{2001} * (P_{1991} - P_{1981}) / P_{1981} * t / 10$
 Where P_t = Population of required year, T = No of years
 P_{2001} = Population in the year 2001
 P_{1991} = Population in the year 1991
 P_{1981} = Population in the year 1981

$$\begin{aligned} P_{2011} &= 431014 + 431014 * (351917 - 271096) / 271096 * 10 / 10 &= 559510 \\ P_{2021} &= 431014 + 431014 * (351917 - 271096) / 271096 * 20 / 10 &= 688007 \end{aligned}$$

Table 2.13 Projected population by various formula

| METHOD | Population in 2011 | Population in 2021 |
|---|--------------------|--------------------|
| ARTHIMETIC INCREASE METHOD | 505153 | 579292 |
| GEOMETRIC INCREASE METHOD | 650831 | 872113 |
| INCREMENTAL INCREASE METHOD | 508831 | 586648 |
| DECREASE RATE OF GROWTH METHOD | 485321 | 501336 |
| GRAPHICAL METHOD | 510000 | 590000 |
| FORMULA OF PUBLIC HEALTH DEPARTMENT | 527860 | 646467 |
| REGISTRAR GENERAL METHOD | 559510 | 688007 |
| AVERAGE | 535358 | 637695 |
| Average excluding G.I and Decrease Rate of Growth Methods | 522270 | 618082 |

Thus excluding the non-confirming values of Geometric Increase method (very high value) and Decrease Rate of Growth Method (very low value), the average of population figures works out to 618082. This is rounded off to **620000 persons as the population in 2021**.

2.10.8 Population Projection For 2016 & 2026

Complying with the GR guidelines of estimating facilities on the basis of 15 years hence and that of zone for 25 years, population have been forecasted for 2016 and 2026 too. The table below depicts the figures obtained by various methods. The values obtained by geometric increase and decrease rate of growth methods are found to be inconsistent (too high or too low) with that obtained by other methods and hence ignored. **The population for 2016 and 2026 have been forecasted as 560000 persons and 670000 persons respectively.**

Table 2.14: Population Forecast for 2016 and 2026

| METHOD | Population in 2011 | Population in 2021 | Population in 2016 | Population in 2026 |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|
| ARTHIMETIC INCREASE METHOD | 505153 | 579292 | 542000 | 616000 |
| INCREMENTAL INCREASE METHOD | 508831 | 586648 | 548000 | 626000 |
| DECREASE RATE OF GROWTH METHOD | | | | |
| GRAPHICAL METHOD | 510000 | 590000 | 510000 | 620000 |

| | | | | |
|--|---------------|-----------------|---------------|---------------|
| FORMULA OF PUBLIC HEALTH DEPARTMENT | 527860 | 646467 | 585000 | 722000 |
| REGISTRAR GENERAL METHOD | 559510 | 688007 | 624000 | 752000 |
| AVERAGE | 435226 | 618082.8 | 561800 | 667200 |
| Approx. Population | 435000 | 620000 | 560000 | 670000 |

2.11 DISTRIBUTION OF POPULATION

The distribution of the projected population and the rationale is detailed out in the tables.

Table 2.15 Projected Population Of Prabhag Samiti

| Prabh ag Samiti | Total No. of wards | Population 1998 | Population 2001 | Projected Population 2021 | Approx.area under Gunthewari (ha) | % of Area under Gunthewari to total gunthewari area (%) | % of addl area available for development |
|-----------------------|-----------------------------|--------------------|--------------------|---------------------------------|--|--|--|
| I | 17 | 86752 | 107653 | 620000 | 71.6911 | 7.24 | 18 |
| II | 19 | 96208 | 119387 | | 398.3627 | 40.24 | 27 |
| III | 15 + wanle swadi | 78819 | 97808 | | 448.6095 | 45.31 | 46 |
| IV | 17 | 85554 | 106166 | | 71.3655 | 7.21 | 9 |
| Total | 68 + wanle swadi | 347333 | 431014 | | 990.028 | 100 | 100 |

Thus, the additional population to be accommodated by 2021

$$= 620000 - 431014 = 188986,
say 190000 persons.$$

As reflected from Gunthewari surveys in June-Sep 2001, additional population which can be accommodated in the undeveloped (open) plots in Gunthewari = 100000 persons approx. (assuming average plot size as 200sqm with DU size as 45 sqm.)

Therefore, population to be accommodated in areas to be developed in future = 90000 persons

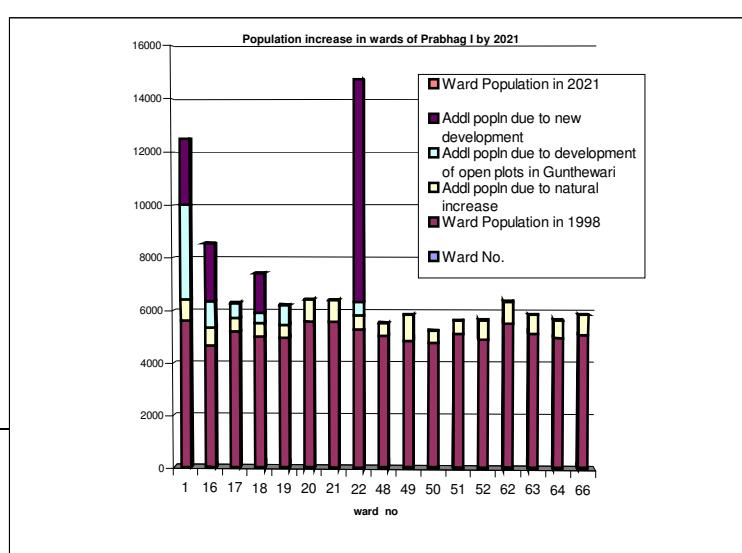
Thus the future population distribution in a ward (and hence the Prabhag Samitis) would be a function of:

1. Natural increase of population in each ward (approx 15%)
2. Availability of undeveloped Gunthewari plots in the ward/Prabhag
3. Availability of land for further development in the respective ward/Prabhag.

Based on these criteria, the population has been distributed in the wards and the final population distribution is detailed out in the tables below.

2.11.1 Population distribution in wards of Prabhag Samiti I

As evident from the figure on Population increase by 2021 in wards of Prabhag I , ward nos. 1,16,18 and 22 are assigned additional population envisaging new development in these areas. Of these ward no 22 is assigned the maximum additional population due to new development as this ward has large areas under vacant land use



as per the existing land use plan. Also many layouts of housing complexes have been sanctioned along the toll road in this ward. The addition of population makes this ward to achieve a density of 75ppha, while the density based on population in 1998 of wards in Prabhag vary from 6-355 ppha.

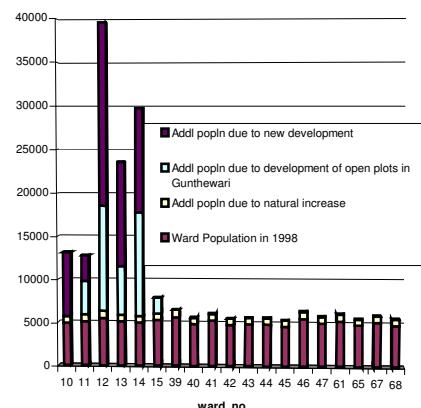
Table 2.16 Existing & Projected Population Distribution In Prabhag I

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) | Addl popln due to natural increase | Addl popln due to development of open plots in Gunthewari | Addl popln due to new development | Population in 2021 | Density in 2021 (ppha) |
|----------|-----------------------|-----------|------------------------------|------------------------------------|---|-----------------------------------|--------------------|------------------------|
| 1 | 5602 | 683.50 | 8 | 800 | 3600 | 2500 | 12500 | 18 |
| 16 | 4636 | 502.12 | 9 | 700 | 1000 | 2200 | 8500 | 17 |
| 17 | 5176 | 27.79 | 186 | 518 | 573 | | 6200 | 225 |
| 18 | 4996 | 790.90 | 6 | 500 | 400 | 1500 | 7400 | 9 |
| 19 | 4948 | 27.83 | 178 | 495 | 750 | | 6200 | 222 |
| 20 | 5569 | 16.37 | 340 | 835 | | | 6400 | 390 |
| 21 | 5554 | 50.53 | 110 | 833 | | | 6400 | 126 |
| 22 | 5278 | 196.21 | 27 | 528 | 500 | 8400 | 14700 | 75 |
| 48 | 4992 | 20.60 | 242 | 499 | | | 5500 | 266 |
| 49 | 4813 | 23.99 | 201 | 987 | | | 5800 | 241 |
| 50 | 4729 | 19.86 | 238 | 473 | | | 5500 | 276 |
| 51 | 5082 | 49.06 | 104 | 508 | | | 5800 | 118 |
| 52 | 4866 | 29.96 | 162 | 734 | | | 5600 | 186 |
| 62 | 5473 | 15.40 | 355 | 827 | | | 6300 | 408 |
| 63 | 5080 | 65.87 | 77 | 720 | | | 5800 | 88 |
| 64 | 4925 | 14.62 | 337 | 675 | | | 5600 | 382 |
| 66 | 5033 | 27.84 | 181 | 767 | | | 5800 | 208 |
| Total | 86752 | 2562.46 | 3385 persons / sq km | 11399 | 6823 | 14600 | 120000 | 47 |

2.11.2 Population distribution in wards of Prabhag II

As evident from the figure below, ward nos. 11,12,13,14, and 15 are allocated additional population due to development of Gunthewari plots. These areas have D.U, which have come up mostly after 1998, and hence the 1998 ward population would not have accounted these. Ward no 12 and 14 are allocated the maximum of additional Gunthewari population due to existence

Population increase in wards of Prabhag II by 2021



of 'open plots' in them (which would be developed in due course of time'). Ward nos. 1-14 are allocated additional population due to new development as these wards have been classified as suitable for development as per the 'Land Suitability Analysis' study (which forms Section V of the Draft Development Plan report).

Table 2.17 Existing & Projected Population Distribution In Prabhag II

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) | Addl popln due to natural increase | Addl popln due to development of open plots in Gunthewari | Addl popln due to new development | Population in 2021 | Density in 2021 (ppha) |
|--------------|-----------------------|----------------|-------------------------------|------------------------------------|---|-----------------------------------|--------------------|------------------------|
| 10 | 4970 | 251.97 | 20 | 746 | | 7400 | 14700 | 52 |
| 11 | 5134 | 112.22 | 46 | 770 | 3870 | 3000 | 12800 | 114 |
| 12 | 5529 | 383.83 | 14 | 829 | 12170 | 21000 | 38500 | 103 |
| 13 | 5147 | 113.33 | 45 | 772 | 5650 | 12000 | 23500 | 207 |
| 14 | 4999 | 421.00 | 12 | 750 | 12000 | 12000 | 29750 | 70 |
| 15 | 5290 | 36.18 | 146 | 794 | 1840 | | 8000 | 218 |
| 39 | 5629 | 112.97 | 50 | 844 | | | 6500 | 57 |
| 40 | 4846 | 55.88 | 87 | 727 | | | 5600 | 99 |
| 41 | 5245 | 41.94 | 125 | 787 | | | 6000 | 143 |
| 42 | 4771 | 26.41 | 181 | 716 | | | 5500 | 207 |
| 43 | 4840 | 55.20 | 88 | 726 | | | 5500 | 101 |
| 44 | 4830 | 14.13 | 342 | 725 | | | 5500 | 392 |
| 45 | 4611 | 15.58 | 296 | 692 | | | 5300 | 339 |
| 46 | 5506 | 18.32 | 301 | 826 | | | 6300 | 345 |
| 47 | 5006 | 13.05 | 384 | 751 | | | 5700 | 440 |
| 61 | 5245 | 97.30 | 54 | 787 | | | 6000 | 62 |
| 65 | 4757 | 6.55 | 726 | 714 | | | 5000 | 762 |
| 67 | 5087 | 5.98 | 851 | 763 | | | 5000 | 826 |
| 68 | 4766 | 6.36 | 749 | 715 | | | 5000 | 784 |
| Total | 96208 | 1788.21 | 5380pers ons/sq km | 14431 | 35530 | 55400 | 200000 | 112 |

2.11.3 Population distribution in wards of Prabhag samiti III

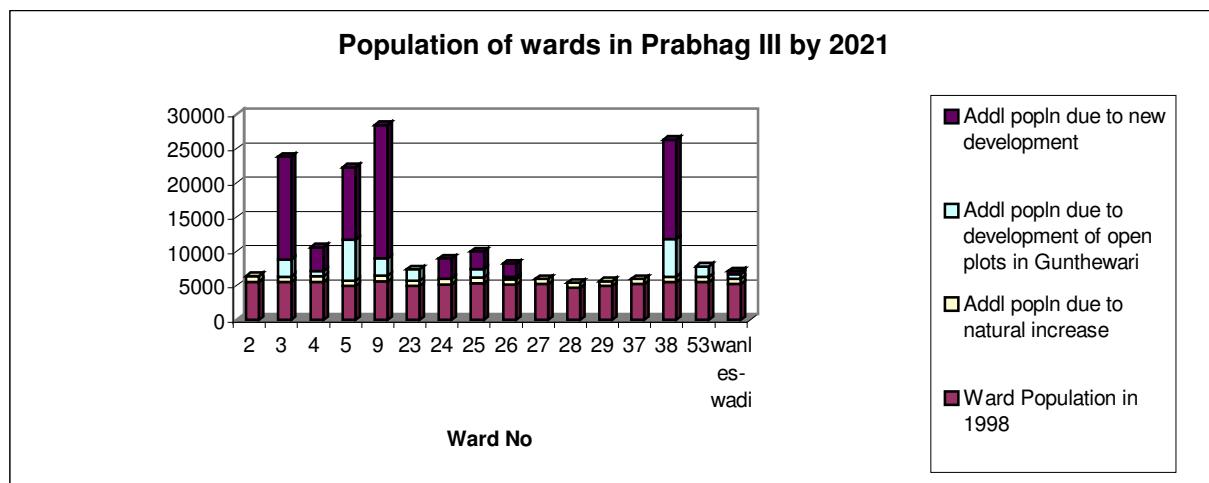
Although population due to new development has been allocated to wards 3,4,5,9,24,25,26, and 38; substantial values of this have been allocated to 3,9,38. This is on the basis of extent of suitable land availability, and vacant plots.

Table 2.18 Population And Density Of Prabhag Samiti III

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) | Addl popln due to natural increase | Addl popln due to development of open plots in Gunthewari | Addl popln due to new development | Population in 2021 | Density in 2021 (ppha) |
|--------------|-----------------------|----------------|------------------------------|------------------------------------|---|-----------------------------------|--------------------|------------------------|
| 2 | 5564 | 140.73 | 40 | 835 | | | 6400 | 45 |
| 3 | 5486 | 633.00 | 9 | 823 | 2500 | 15000 | 23800 | 38 |
| 4 | 5522 | 579.82 | 10 | 828 | 750 | 3500 | 10600 | 18 |
| 5 | 4947 | 706.12 | 7 | 742 | 6000 | 10600 | 22300 | 31 |
| 9 | 5617 | 509.09 | 11 | 843 | 2500 | 19500 | 28400 | 56 |
| 23 | 4962 | 94.72 | 52 | 744 | 1700 | | 7400 | 78 |
| 24 | 5181 | 111.93 | 46 | 777 | | 3000 | 8900 | 80 |
| 25 | 5359 | 117.61 | 46 | 804 | 1250 | 2600 | 10000 | 85 |
| 26 | 5157 | 432.73 | 12 | 774 | 300 | 2000 | 8200 | 19 |
| 27 | 5222 | 52.47 | 100 | 783 | | | 6000 | 114 |
| 28 | 4696 | 46.40 | 101 | 704 | | | 5400 | 116 |
| 29 | 4919 | 23.14 | 213 | 738 | | | 5700 | 244 |
| 37 | 5228 | 105.76 | 49 | 784 | | | 6000 | 57 |
| 38 | 5481 | 338.56 | 16 | 822 | 5500 | 14500 | 26300 | 78 |
| 53 | 5478 | 114.61 | 48 | 822 | 1500 | | 7700 | 68 |
| wanleswadi | 5200* | 218.00 | 24 | 780 | 700 | 400 | 7080 | 32 |
| Total | 78819 | 4224.67 | 1866 person /sq km | 12603 | 22000 | 70700 | 190180 | 45 |

- Population of Wanleswadi in 1998 has been estimated from 1991 and 1981 figures, Population figures for wards 1-68 are figures provided by SMKMC

Population Increase by 2021 in wards of Prabhag Samiti III

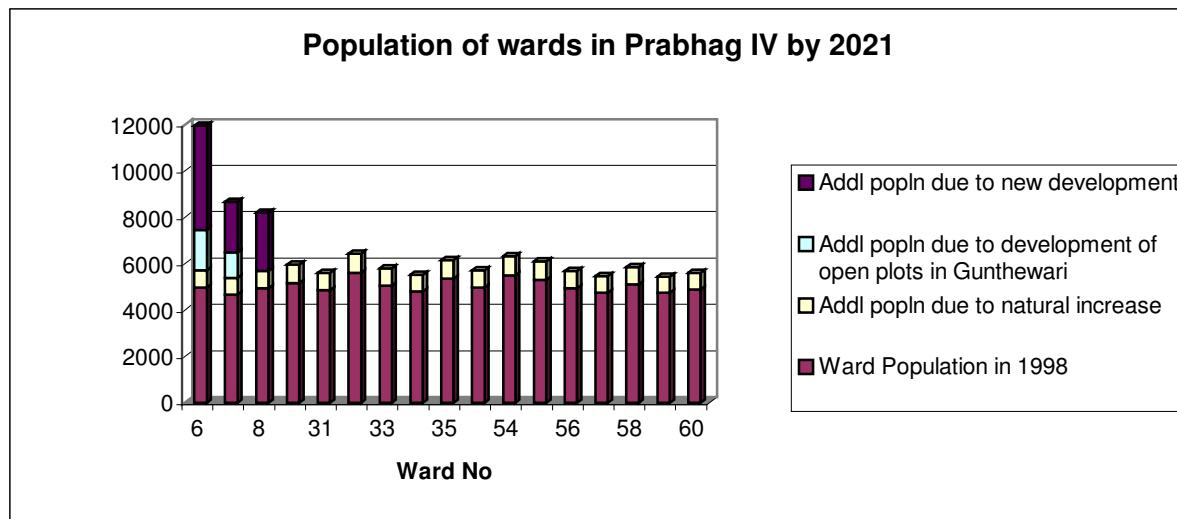


2.11.4 Population distribution in wards of Prabhag Samiti IV

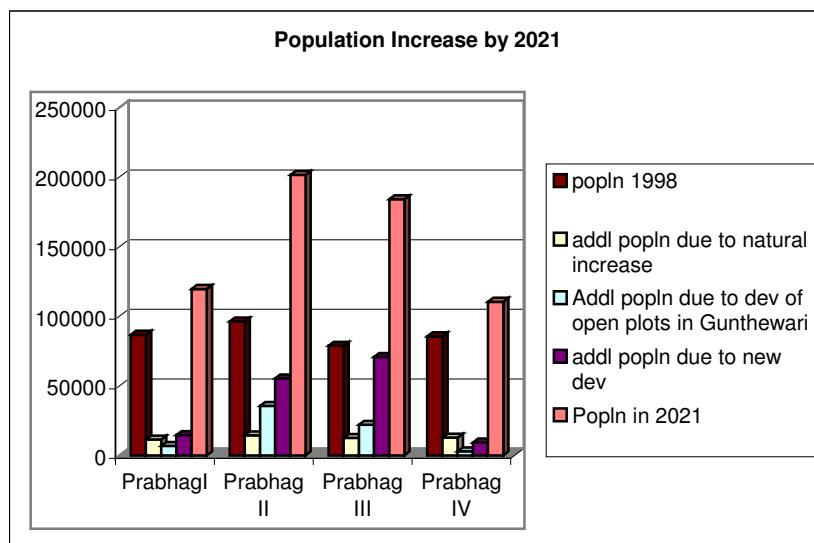
In Prabhag IV, additional population due to Gunthewari development has been allocated to wards 6 and 7 on the basis of existence of gunthewari settlements in them and presence of open plots. Additional population due to new development has been allocated to wards 6,7,8 of which ward no 6 accommodates a significant share as the growth trends depict the settlement to be growing along the Miraj –Pandharpur road in this region.

Table 2.19 Population And Density Of Prabhag Samiti IV

| Ward No. | Ward Total Population | Area (Ha) | Density (person per hectare) | Addl popln due to natural increase | Addl popln due to development of open plots in Gunthewari | Addl popln due to new development | Population in 2021 | Density in 2021 (ppha) |
|--------------|-----------------------|----------------|------------------------------|------------------------------------|---|-----------------------------------|--------------------|------------------------|
| 6 | 4965 | 196.98 | 25 | 745 | 1750 | 4500 | 12000 | 61 |
| 7 | 4674 | 487.09 | 10 | 701 | 1100 | 2200 | 8700 | 18 |
| 8 | 4946 | 1642.69 | 3 | 742 | | 2500 | 8200 | 5 |
| 30 | 5170 | 11.14 | 464 | 776 | | | 5900 | 532 |
| 31 | 4863 | 13.82 | 352 | 729 | | | 5600 | 404 |
| 32 | 5597 | 20.09 | 279 | 840 | | | 6400 | 320 |
| 33 | 5034 | 26.78 | 188 | 755 | | | 5800 | 216 |
| 34 | 4802 | 10.64 | 451 | 720 | | | 5500 | 518 |
| 35 | 5343 | 10.41 | 513 | 801 | | | 6100 | 589 |
| 36 | 4973 | 111.83 | 44 | 746 | | | 5700 | 51 |
| 54 | 5490 | 15.29 | 359 | 824 | | | 6300 | 412 |
| 55 | 5299 | 10.07 | 526 | 795 | | | 6100 | 604 |
| 56 | 4948 | 8.20 | 604 | 742 | | | 5700 | 693 |
| 57 | 4754 | 7.60 | 625 | 713 | | | 5000 | 656 |
| 58 | 5089 | 10.98 | 463 | 763 | | | 5900 | 532 |
| 59 | 4736 | 9.83 | 482 | 710 | | | 5400 | 553 |
| 60 | 4871 | 5.81 | 838 | 731 | | | 5600 | 962 |
| Total | 85554 | 2599.25 | 3291 person /sq km | 12833 | 2850 | 9200 | 109900 | 42 |

**Table 2.20 POPULATION DISTRIBUTION PRABHAG SAMITI WISE**

| Prabhag Samiti | Approx Area (ha) | Population 1998 | Density (ppha) In 1998 | Addl popln due to natural increase | Addl popln due to development of open plots in Gunthewari | Addl popln due to new development | Projected Population 2021 | Density (ppha) In 2021 |
|----------------|------------------|-----------------|------------------------|------------------------------------|---|-----------------------------------|---------------------------|------------------------|
| I | 2562.46 | 86752 | 34 | 11399 | 6823 | 14600 | 120000 | 47 |
| II | 1788.21 | 96208 | 54 | 14431 | 35530 | 55400 | 200000 | 112 |
| III | 4224.67 | 78819 | 19 | 12603 | 22000 | 70700 | 190000 | 45 |
| IV | 2599.25 | 85554 | 33 | 12833 | 2850 | 9200 | 110000 | 42 |
| Total | 111.74 | 347333 | 31 | 51266 | 67203 | 149900 | 620000 | 55 |



2.11.5 Population Distribution in Wards & Prabhag Samitis for year 2016

Prabhag Samiti wise distribution of population in 2016 has been estimated on the same lines as discussed for 2021.

Final population distribution in each of the Prabhags and wards for 2016 is detailed out in the tables 2.20 to 2.24.

Table 2.21: Prabhag Samiti wise distribution of Population in 2016

| Prabhag No. | popln 1998 | ApproxArea sqkm | Density 1998(person per sqkm) | Approx. Popln in 2016 | Density 2016(person per sqkm) |
|-------------|---------------|-----------------|-------------------------------|-----------------------|-------------------------------|
| 1 | 86752 | 25.62435 | 3386 | 108000 | 4215 |
| 2 | 96208 | 17.88213 | 5380 | 181000 | 10122 |
| 3 | 78819 | 42.24189 | 1866 | 172000 | 4072 |
| 4 | 85554 | 25.99162 | 3292 | 99000 | 3809 |
| | 347333 | 111.74 | 3108 | 560000 | 5012 |

Table 2.22: Population And Density Of Prabhag Samiti I for year 2016

| Ward No. | Ward Total Population | Density 1998(person per hectare) | Approx popln 2016, say | Density 2016(person per hectare) |
|--------------|-----------------------|----------------------------------|------------------------|----------------------------------|
| 1 | 5602 | 8 | 11200 | 16 |
| 16 | 4636 | 9 | 7600 | 15 |
| 17 | 5176 | 186 | 5600 | 201 |
| 18 | 4996 | 6 | 6700 | 8 |
| 19 | 4948 | 178 | 5600 | 201 |
| 20 | 5569 | 340 | 5800 | 354 |
| 21 | 5554 | 110 | 5800 | 115 |
| 22 | 5278 | 27 | 13200 | 67 |
| 48 | 4992 | 242 | 5000 | 243 |
| 49 | 4813 | 201 | 5200 | 217 |
| 50 | 4729 | 238 | 5000 | 252 |
| 51 | 5082 | 104 | 5200 | 106 |
| 52 | 4866 | 162 | 5000 | 167 |
| 62 | 5473 | 355 | 5700 | 370 |
| 63 | 5080 | 77 | 5200 | 79 |
| 64 | 4925 | 337 | 5000 | 342 |
| 66 | 5033 | 181 | 5200 | 187 |
| Total | 86752 | 34 | 108000 | 42 |

Table 2.23: Population And Density Of Prabhag Samiti II for year 2016

| Ward No. | Ward Total Population | Density (person per hectare) | Approx popln 2016, say | Density 2016(person per hectare) |
|----------|-----------------------|------------------------------|------------------------|----------------------------------|
| | | | | |

| Ward No. | Ward Total Population | Density (person per hectare) | Approx popln 2016, say | Density 2016(person per hectare) |
|-----------------|------------------------------|-------------------------------------|-------------------------------|---|
| 10 | 4970 | 20 | 11900 | 47 |
| 11 | 5134 | 46 | 11600 | 103 |
| 12 | 5529 | 14 | 35800 | 93 |
| 13 | 5147 | 45 | 14100 | 124 |
| 14 | 4999 | 12 | 34100 | 81 |
| 15 | 5290 | 146 | 7100 | 196 |
| 39 | 5629 | 50 | 5900 | 52 |
| 40 | 4846 | 87 | 5100 | 91 |
| 41 | 5245 | 125 | 5400 | 129 |
| 42 | 4771 | 181 | 5000 | 189 |
| 43 | 4840 | 88 | 5100 | 92 |
| 44 | 4830 | 342 | 5000 | 354 |
| 45 | 4611 | 296 | 4800 | 308 |
| 46 | 5506 | 301 | 5700 | 311 |
| 47 | 5006 | 384 | 5100 | 391 |
| 61 | 5245 | 54 | 5400 | 55 |
| 65 | 4757 | 726 | 4500 | 687 |
| 67 | 5087 | 851 | 4400 | 736 |
| 68 | 4766 | 749 | 5000 | 786 |
| Total | 96208 | 54 | 181000 | 101 |

Table 2.24: Population And Density Of Prabhag Samiti III for year 2016

| Ward No. | Ward Total Population | Density (person per hectare) | Approx popln 2016, say | Density 2016(person per hectare) |
|-----------------|------------------------------|-------------------------------------|-------------------------------|---|
| 2 | 5564 | 40 | 5800 | 41 |
| 3 | 5486 | 9 | 14700 | 23 |
| 4 | 5522 | 10 | 16500 | 28 |
| 5 | 4947 | 7 | 20200 | 29 |
| 9 | 5617 | 11 | 25700 | 50 |
| 23 | 4962 | 52 | 6700 | 71 |
| 24 | 5181 | 46 | 8000 | 71 |
| 25 | 5359 | 46 | 9000 | 77 |
| 26 | 5157 | 12 | 7400 | 17 |
| 27 | 5222 | 100 | 5400 | 103 |
| 28 | 4696 | 101 | 4900 | 106 |
| 29 | 4919 | 213 | 5200 | 225 |

| Ward No. | Ward Total Population | Density (person per hectare) | Approx popln 2016, say | Density 2016(person per hectare) |
|------------------|-----------------------|------------------------------|------------------------|----------------------------------|
| 37 | 5228 | 49 | 5400 | 51 |
| 38 | 5481 | 16 | 23800 | 70 |
| 53 | 5478 | 48 | 7000 | 61 |
| wanless swadi | 5200 | 24 | 6300 | 29 |
| Total | 78819 | 19 | 172000 | 41 |

Table 2.25: Population And Density Of Prabhag Samiti IV for year 2016

| Ward No. | Ward Total Population | Density (person per hectare) | Approx popln 2016, say | Density 2016(person per hectare) |
|--------------|-----------------------|------------------------------|------------------------|----------------------------------|
| 6 | 4965 | 25 | 10800 | 55 |
| 7 | 4674 | 10 | 7800 | 16 |
| 8 | 4946 | 3 | 7400 | 5 |
| 30 | 5170 | 464 | 5300 | 476 |
| 31 | 4863 | 352 | 5100 | 369 |
| 32 | 5597 | 279 | 5800 | 289 |
| 33 | 5034 | 188 | 5200 | 194 |
| 34 | 4802 | 451 | 5000 | 470 |
| 35 | 5343 | 513 | 5500 | 528 |
| 36 | 4973 | 44 | 5100 | 46 |
| 54 | 5490 | 359 | 5700 | 373 |
| 55 | 5299 | 526 | 5500 | 546 |
| 56 | 4948 | 604 | 5100 | 622 |
| 57 | 4754 | 625 | 4500 | 592 |
| 58 | 5089 | 463 | 5300 | 483 |
| 59 | 4736 | 482 | 4900 | 498 |
| 60 | 4871 | 838 | 5000 | 860 |
| Total | 85554 | 33 | 99000 | 38 |

2.11.6 Population distribution in Sectors for year 2016

The Planning Area of SMKMC comprising of 4 Prabhag Samitis have been further subdivided into 18 Sectors (A-R), as shown in the map enclosed. The wards enjoined in each sector and the distributed population has been summarized in the following tables.

Table 2.26: Sector wise Population And Density for year 2016

| S No | Sector | Approx. Area (Ha) | Population in 2016 | Density (ppha) |
|------|--------|-------------------|--------------------|----------------|
| 1 | A | 1534.2 | 24380 | 16 |

| S No | Sector | Approx. Area (Ha) | Population in 2016 | Density (ppha) |
|------|--------|-------------------|--------------------|----------------|
| 2 | B | 564.9 | 29570 | 52 |
| 3 | C | 579.7 | 24940 | 43 |
| 4 | D | 97.7 | 28330 | 290 |
| 5 | E | 97.8 | 33940 | 347 |
| 6 | F | 160.2 | 21100 | 132 |
| 7 | G | 379.8 | 27316 | 72 |
| 8 | H | 248.6 | 31685 | 127 |
| 9 | I | 437.1 | 38855 | 89 |
| 10 | J | 382.3 | 36230 | 95 |
| 11 | K | 1278.1 | 47550 | 37 |
| 12 | L | 754.7 | 42750 | 57 |
| 13 | M | 704.3 | 33650 | 48 |
| 14 | N | 672.8 | 23760 | 35 |
| 15 | O | 1272.1 | 37940 | 30 |
| 16 | P | 76.3 | 36050 | 472 |
| 17 | Q | 106.6 | 34400 | 323 |
| 18 | R | 1643 | 7400 | 5 |

Table 2.27: Wards incorporated in Sector A-R and assigned population for 2016

| Sector No | Prabhag No | Ward No. | Ward Population 1998 | Approx Ward popln 2016 | Assigned Popln | % of ward popln assigned in shared wards |
|--------------------------------|------------|----------|----------------------|------------------------|----------------|--|
| A | 1 | 1 | 5602 | 11200 | 2800 | 25% |
| | 1 | 16 | 4636 | 7600 | 7600 | |
| | 1 | 17 | 5176 | 5600 | 5600 | |
| | 1 | 18 | 4996 | 6700 | 6700 | |
| | 1 | 19 | 4948 | 5600 | 1680 | 30% |
| Total Sector Population | | | | | 24380 | |
| B | 1 | 20 | 5569 | 5800 | 1450 | 25% |
| | 1 | 21 | 5554 | 5800 | 5800 | |
| | 1 | 22 | 5278 | 13200 | 10560 | 80% |
| | 1 | 1 | 5602 | 11200 | 5600 | 50% |
| | 1 | 49 | 4813 | 5200 | 4160 | 80% |
| | 1 | 50 | 4729 | 5000 | 2000 | 40% |
| Total Sector Population | | | | | 29570 | |
| C | 1 | 22 | 5278 | 13200 | 2640 | 20% |
| | 1 | 1 | 5602 | 11200 | 2800 | 25% |
| | 3 | 2 | 5564 | 5800 | 5800 | |
| | 3 | 23 | 4962 | 6700 | 6700 | |
| | 3 | 53 | 5478 | 7000 | 7000 | |
| Total Sector Population | | | | | 24940 | |
| D | 1 | 19 | 4948 | 5600 | 3920 | 70% |

| Sector No | Prabhag No | Ward No. | Ward Population 1998 | Approx Ward popn 2016 | Assigned Popn | % of ward popn assigned in shared wards |
|--------------------------------|--------------------------------|----------|----------------------|-----------------------|---------------|---|
| E | 1 | 20 | 5569 | 5800 | 4350 | 75% |
| | 1 | 48 | 4992 | 5000 | 5000 | |
| | 2 | 47 | 5006 | 5100 | 5100 | |
| | 2 | 46 | 5506 | 5700 | 5700 | |
| | 2 | 15 | 5290 | 7100 | 4260 | 60% |
| | Total Sector Population | | | | 28330 | |
| | 2 | 45 | 4611 | 4800 | 4800 | |
| | 1 | 66 | 5033 | 5200 | 5200 | |
| | 2 | 65 | 4757 | 4500 | 4500 | |
| | 2 | 67 | 5087 | 4400 | 4400 | |
| F | 2 | 68 | 4766 | 5000 | 5000 | |
| | 1 | 49 | 4813 | 5200 | 1040 | 20% |
| | 1 | 50 | 4729 | 5000 | 3000 | 60% |
| | 2 | 44 | 4830 | 5000 | 1000 | 20% |
| G | 1 | 64 | 4925 | 5000 | 5000 | |
| | 1 | 51 | 5082 | 5200 | 5200 | |
| | 1 | 52 | 4866 | 5000 | 5000 | |
| | 1 | 62 | 5473 | 5700 | 5700 | |
| | 1 | 63 | 5080 | 5200 | 5200 | |
| Total Sector Population | | | | 21100 | | |
| H | 2 | 11 | 5134 | 11600 | 5800 | 50% |
| | 2 | 12 | 5529 | 35800 | 5370 | 15% |
| | 2 | 39 | 5629 | 5900 | 5900 | |
| | 2 | 40 | 4846 | 5100 | 4846 | |
| | 2 | 61 | 5245 | 5400 | 5400 | |
| Total Sector Population | | | | 27316 | | |
| I | 2 | 13 | 5147 | 14100 | 4230 | 30% |
| | 2 | 14 | 4999 | 34100 | 5115 | 15% |
| | 2 | 15 | 5290 | 7100 | 2840 | 40% |
| | 2 | 41 | 5245 | 5400 | 5400 | |
| | 2 | 42 | 4771 | 5000 | 5000 | |
| | 2 | 43 | 4840 | 5100 | 5100 | |
| | 2 | 44 | 4830 | 5000 | 4000 | 80% |
| Total Sector Population | | | | 31685 | | |
| | 2 | 13 | 5147 | 14100 | 9870 | 70% |
| | 2 | 14 | 4999 | 34100 | 28985 | 85% |

| Sector No | Prabhag No | Ward No. | Ward Population 1998 | Approx Ward popn 2016 | Assigned Popn | % of ward popn assigned in shared wards |
|--------------------------------|------------|-------------------|----------------------|-----------------------|---------------|---|
| Total Sector Population | | | | | 38855 | |
| J | 2 | 11 | 5134 | 11600 | 5800 | 50% |
| | 2 | 12 | 5529 | 35800 | 30430 | 85% |
| Total Sector Population | | | | | 36230 | |
| K | 3 | 3 | 5486 | 14700 | 14700 | |
| | 3 | 4 | 5522 | 16500 | 9900 | 60% |
| | 3 | 24 | 5181 | 8000 | 8000 | |
| | 3 | 25 | 5359 | 9000 | 9000 | |
| | 3 | 38 | 5481 | 23800 | 5950 | 25% |
| Total Sector Population | | | | | 47550 | |
| L | 3 | 4 | 5522 | 16500 | 6600 | 40% |
| | 2 | 10 | 4970 | 11900 | 11900 | |
| | 3 | 38 | 5481 | 23800 | 17850 | 75% |
| | 3 | wanlessss wadi | 5200 | 6400 | 6400 | |
| Total Sector Population | | | | | 42750 | |
| M | 3 | 9 | 5617 | 25700 | 25700 | |
| | 3 | 37 | 5228 | 5400 | 5400 | |
| | 4 | 36 | 4973 | 5100 | 2550 | |
| Total Sector Population | | | | | 33650 | |
| N | 3 | 5 | 4947 | 20200 | 6060 | |
| | 3 | 26 | 5157 | 7400 | 7400 | |
| | 3 | 27 | 5222 | 5400 | 5400 | |
| | 3 | 28 | 4696 | 4900 | 4900 | |
| Total Sector Population | | | | | 23760 | |
| O | 3 | 5 | 4947 | 20200 | 14140 | |
| | 3 | 29 | 4919 | 5200 | 5200 | |
| | 4 | 6 | 4965 | 10800 | 10800 | |
| | 4 | 7 | 4674 | 7800 | 7800 | |
| Total Sector Population | | | | | 37940 | |
| P | 4 | 30 | 5170 | 5300 | 5300 | |
| | 4 | 31 | 4863 | 5100 | 5100 | |
| | 4 | 32 | 5597 | 5800 | 4350 | |
| | 4 | 54 | 5490 | 5700 | 5700 | |
| | 4 | 55 | 5299 | 5500 | 5500 | |
| | 4 | 56 | 4948 | 5100 | 5100 | |

| Sector No | Prabhag No | Ward No. | Ward Population 1998 | Approx Ward popln 2016 | Assigned Popln | % of ward popln assigned in shared wards |
|--------------------------------|------------|----------|----------------------|------------------------|----------------|--|
| | 4 | 60 | 4871 | 5000 | 5000 | |
| Total Sector Population | | | | 36050 | | |
| Q | 4 | 32 | 5597 | 5800 | 1450 | |
| | 4 | 33 | 5034 | 5200 | 5200 | |
| | 4 | 34 | 4802 | 5000 | 5000 | |
| | 4 | 35 | 5343 | 5500 | 5500 | |
| | 4 | 36 | 4973 | 5100 | 2550 | |
| | 4 | 57 | 4754 | 4500 | 4500 | |
| | 4 | 58 | 5089 | 5300 | 5300 | |
| | 4 | 59 | 4736 | 4900 | 4900 | |
| Total Sector Population | | | | 34400 | | |
| R | 4 | 8 | 4946 | 7400 | 7400 | |
| Total Sector Population | | | | 7400 | | |

2.12 TO SUMMARIZE:

1. Although the population of Sangli Miraj Kupwad Municipal Corporation area increased from 351917 persons in 1991 to 431014 persons in the year there is a constant decline in percentage variation of population in each decade from 1961 to 2001(50.4% in 1961-71 to 22% in 1991-2001) and there is very less variation in increase in population. This depicts that growth of city has almost stabilized.
2. Household size has decreased from 5.42 in 1971 to 5.03 in 1991. The Sample Household surveys reflect the average households size of the respondent households in the SMKMC area to be 4.8.
3. As per Census records of 1991, about 64 % of the total population is literate. The sample surveys indicated 55% to be moderately educated (education levels up to primary and high school), while only 12% to be illiterate.
4. On the basis of sample household surveys, it can be inferred that similar to the state profile a large majority (81%) of households in corporation area are the Hindus followed by the Muslims. Miraj reflects a relatively high population of Muslim households.
5. The sample household surveys depict the overall Workforce participation rate to be 34%. Among females this rate is 8.66. Overall, the occupational structure is more oriented to business, self-employment and white-collar workers, except in the slums where causal work or low earning self employed workers prevail and Sangalwadi where agriculture sector does have significance.
6. Almost half of the respondent households (46%) show their income up to or below Rs 2000 per month in the sample household surveys.
7. Overall, the data on household assets depict a better economic status than that was reflected from the monthly income of the sample households. Township/settlement wise variations are also visible with the sample residents of Sangli and Kupwad being better placed in terms of ownership. About two third of the households have a bank account.
8. SMKMC area includes four Prabhag subdivided into 68 wards and Wanleswadi. As per 1998 estimates by SMKMC, Prabhag II had the highest density of 54 persons per hectare while Prabhag III had the lowest density of 19 persons per hectare. Similarly while ward no 1 had the highest population of 5602 persons, ward no. 7 had the lowest population with 4674 persons. The ward density varied from 3 persons per hectare in ward no 8 to 828 ppha in ward no 67.

The average of confirming values obtained from various statistical methods used for population projections for the year 2021 works out to 618082. This is rounded off to 620000 persons as the estimated population in 2021. The population for 2016 and 2026 has been forecasted as 560000 persons and 670000 persons respectively.

9. The future population has been distributed in ward (and Prabhag Samitis) on the basis of:
 - Natural increase of population in each ward (approx 3%)
 - Availability of undeveloped Gunthewari plots in the ward/Prabhag
 - Availability of land for further development in the respective ward/Prabhag.
10. Among the wards of Prabhag I, ward nos. 1,16,18 and 22 are assigned additional population envisaging new development in these areas. After addition of population the ward density in 2021 would vary from 18-408ppha, while the density based on population in 1998 vary from 6-355 ppha.

11. Among the wards in Prabhag II, ward nos. 11,12,13,14, and 15 are allocated additional population due to development of Gunthewari plots. Ward no 12 and 14 are allocated the maximum of additional Gunthewari population due to existence of 'open plots' in them (which would be developed in due course of time'). Ward nos. 1-14 are allocated additional population due to new development as these wards have been classified as suitable for development as per the 'Land Suitability Analysis'. The density of wards in 2021 would vary between 52-851 ppha, while the density as per 1998 estimates vary between 12-826 ppha
12. Although population due to new development has been allocated to wards 3,4,5,9,24,25,26, and 38 in Prabhag III; substantial values of this have been allocated to 3,9,38. This is on the basis of extent of suitable land availability, and vacant plots. The population density of wards in 2021 would vary between 18-244 ppha, while that in 1998 was 7-213 ppha.
13. In Prabhag IV, additional population due to Gunthewari development has been allocated to wards 6 and 7 on the basis of existence of gunthewari settlements in them and presence of open plots. Additional population due to new development has been allocated to wards 6,7,8 of which ward no 6 accommodates a significant share as the growth trends depict the settlement to be growing along the Miraj –Pandharpur road in this region. The ward density in 2021 would vary between 5-962 ppha.
14. The Planning Area of SMKMC comprising of 4 Prabhag Samitis have been further subdivided into 18 Sectors (A-R). Average forecasted population in Sectors A-Q is 32500, while that of Sector R is 7400 persons.