

DEMOGRAPHY AND ECONOMIC BASE

2.1 Decadal Growth of Population

The state of Kerala is a green strip of land located in the southwest corner of India. It is only 1.18% of the total area of the country, but houses 3.43% of the country’s population. It is one of the most densely populated states in the country with a density of population of 819 persons per Sq. Km.. As per latest census figure, the state has registered a total population of 31.80 million and more than 25% of the population is urbanites. Demographically the state enjoys a very advanced status with rapidly declining birth and death rates, low infant mortality and very high literacy and health delivery system.

Kochi, the largest urban agglomeration in Kerala, consists of the Municipal Corporation of Cochin, Municipalities of Thrippunithura and Kalamassery and adjoining fifteen GramaPanchayaths. The delineated Kochi city consists of the Kochi Municipal Corporation, Two Municipalities and thirteen adjoining Panchayats (refer map)

The Cochin City has a flat topography characterized by small and large islands scattered in the area within the Vembanad Lake.

Kochi witnessed a rapid population growth during the past 30 years. The average decadal growth in Cochin Corporation is 7.83% whereas the nearby municipal areas registered decadal average of 18.65%, and the adjoining Panchayaths had an average decadal growth of 12.13%. The Semi-urban areas around the city is showing high rate of population growth and also fast developing trends.

Table 2.1 Population Growth of Kochi City

Name of Local Body	Area in Sq. KM	Population			Decadal Growth Rate (%)	
		1981	1991	2001	1981-91	1991-2001
Cochin Corporation	94.88	513249	564589	596473	10.00	5.65
Kalamassery Municipality	27.00	43767	54342	63116	24.16	16.15
Thripunithura Municipality	18.69	43646	51078	59884	17.03	17.24
Elankunnapuzha Panchayath	11.66	43911	47878	50563	9.03	5.61
Njarakkal Panchayath	8.60	21672	22322	24166	3.00	8.26
Mulavukadu Panchayath	19.27	21397	22322	22842	4.32	2.33
Kadamakkudy Panchayath	12.92	13696	14668	15824	7.10	7.88
Cheranallur Panchayath	10.59	18381	21407	26316	16.46	22.93
Eloor Panchayath	14.21	32011	34455	35573	7.63	3.24
Varapuzha Panchayath	7.74	20917	22514	24524	7.63	8.93
Thrikkakara Panchayath	27.46	38318	51166	65984	33.53	28.96
Thiruvankulam Panchayath	10.49	15517	18412	21717	18.66	17.95
Maradu Panchayath	12.35	28749	34995	41012	21.73	17.19
Kumbalam Panchayath	20.79	22826	24143	27549	5.77	14.11
Kumbalangi Panchayath	15.77	22376	24601	26661	9.94	11.98
Chellanam Panchayath	17.60	29536	32978	36209	11.65	9.60

The above details are represented graphically in the Pie diagrams in figure 2.1 in Annexure II

The contributing factors of population growth in the area are mainly the natural increase and the in migration from nearby villages for trade and employment. The population of Kochi Urban Agglomeration increased from 10.41 in 1991 to 11.41 lakhs in 2001.

2.2 Age Structure

The age wise distribution of population in Corporation of Cochin in 2001 is given below.

Table 2.2 Age Structure – 2001

Age Group	No. of persons	Percentage
0-4	46942	7.87
5-19	139276	23.35
20-59	349116	58.53
60-79	54518	9.14
80	6621	1.11
Total	596473	100.00

The trend projection study on age structure conducted by the department of statistics of CUSAT reveals that, child population along with youth and middle aged population will consist of a major portion of total population, whereas percentage of old age population will be quite small in 2006.

2.3 Sex Ratio

In 2001, the Corporation of Cochin had 290095 males to 295764 females, which is in favour of females.

2.4 Literacy

The sex wise education status of the population in the categories of most vulnerable (MV), just above vulnerable (JV), urban poor (UP), low income group (LIG), middle income group (MIG) and high income group (HIG) are given in Table 2.3 in Annexure II. The educational status of the constituent areas was evaluated based on a sample survey.

There is only negligible percentage of the population who are illiterate. About 2 % of the populations even in the most vulnerable group are graduates.

2.5 Spatial Distribution of Density of Population.

The intensity of population in various parts of the CDP area is depicted in the table below.

Table 2.4 Spatial Distribution of Density of Population – 2001.

Sl. No.	Name of Local Body	Area in Hectare	Population 2001	Density Persons per hectare
1	Cochin Corporation	9488	596473	63
2	Kalamassery Municipality	2700	63176	23
3	Thrippunithura Municipality	1869	59881	32
4	Elamkunnappuzha Panchayat	1166	50563	21
5	Njarakkal Panchayat	860	24166	12
6	Mulavukad Panchayat	1927	22842	28
7	Kadamakkudy Panchayat	1292	15824	43
8	Cheranallur Panchayat	1059	26316	25
9	Eloor Panchayat	1421	35573	25

10	Varapuzha Panchayat	774	24524	32
11	Thrikkakara Panchayat	2746	65984	21
12	Thiruvankulam Panchayat	1049	21717	33
13	Maradu Panchayat	1235	41012	13
14	Kumbalam Panchayat	2079	27549	17
15	Kumbalamngi Panchayat	1577	26661	12
16	Chellanam Panchayat	1760	36209	24
	TOTAL	33002	1138413	35

2.6 Population below poverty line

The percentage of population below poverty is higher in the coastal areas, where fishermen constitute a major share of the population. Thrippunithura, the capital of the erstwhile kingdom of Kochi has the lowest number of urban poor – 12% of the total population. The table 2.5 in Annexure II shows the number of people below poverty line in the constituent local bodies.

2.7 Economic Base

2.7.1 Occupational Pattern

34.3% of the population of is the work force of the city. The percentage of male work force is greater than the female work force. A detailed composition of the work force is enumerated in Table 2.6(Annexure 2.6)

2.8 Demography: Emerging Issues and Concerns

Even though the natural growth rate of population does not show an exorbitant increase, the floating population in Kochi is to be considered while earmarking the infrastructural requirements. There is no intensive migration to any of the cities in Kerala mainly due to the following reasons.

1. Employment opportunities in the main cities are not sufficient to exert a pulling effect
2. High land values in cities prohibit establishment of residences in cities especially among the middle and low-income categories.
3. The homestead nature of holdings in sub urban areas allows fragmentation of property for new family housing.
4. Availability of transport facilities allows daily commutation to the city from out lying areas and districts with in a radius of about 100 k.m.

It must be noted that the daily commutation adds to the increased number of floating population in the core city. A transportation study conducted has shown that nearly 2.5 lakhs of people commute to the core city daily thereby increasing the pressure on civic amenities and congestion on major traffic corridors.

The Kochi City is experiencing population growth higher than the state average. In the next 2 decades it is expected to touch 2 million mark. Most of the growth is taking place out of the Cochin Municipal Corporation boundary within the Kochi city. This coupled with the high level of floating population, necessitates integrated planning development and service delivery.

2.9 Future Population

Kochi being the industrial and commercial capital of Kerala, the population growth in Kochi Municipal Corporation alone is expected to be 10% per decade. But the growth of population of the remaining areas of KUA is expected to be to the tune of 19 % in ten years.

Table 2.7 Projected Population of Proposed Kochi City based on natural growth trend

Sl. No.	Area	2001	2011	2021	2026
01.	Cochin corporation	596473	618348	640379	648398
02.	Municipalities-2	123000	142360	159233	165750
03.	Panchayaths -13	418940	491317	569927	615521
	Total	1138413	1252025	1369539	1429669

Source: Center for Population Studies CUSAT

In addition to the natural growth, there will also be migration from other areas to the city. The large-scale projects already in progress and those envisaged in this area will be the deciding factors. It is assumed that for every 10 Lakhs investment in development projects, there will be a migration of one family. Analysing the current scenario it is estimated that investment to the tune of Rs. 15,000 Crores will materialize with in the CDP area during the span of coming 20 years. Accordingly, an in-migration of 1.5 Lakhs families or 6 Lakhs population, will have to be accommodated with in the CDP area, which comes to 20.29 lakhs persons. This whole population will not be concentrated in the City but distributed in the various local bodies based on the type and intensity of developmental activities coming in each area and the transportation facilities available.

Table 2.8 Population Projection including expected migration in CDP area

Year	2001	2011	2021	2026
CDP Area	11.38	14.52	17.69	20.29

Total projected population including migration and floating population (in lakhs)

Year	2011	2021	2026
CDP area	17.52	21.69	25.29

Considering the migration component and the large number of floating population, as revealed by the outer corden survey conducted as part of the comprehensive transportation study carried out by M/s RITES, the infrastructural amenities will have to cater to a total population of **17.52 lakhs by 2011, 21.69 lakhs by 2021 and 25.29 lakhs by year 2026.**

Conclusion:

Population growth rate is showing a declining trend in the Corporation area during the past three decades. The suburban area around the city included in CDP shows considerably high population growth. The projected population is based on natural growth, expected migration & the floating population.

The density of population in the Corporation area is 63 PPH compared to the average f 35 PPH in the CDP area taken as a whole. The share of urban poor (BPL) population is 34% in the CDP area. The sector wise workforce shows that the highest percentage of main workers is in Trade & Commerce, which shows the characteristic feature of the area.