

SOCIAL INFRASTRUCTURE

Social infrastructure facilities make a city habitable by catering to the daily needs of the inhabitants. Planning of social amenities requires careful computation of not only its number, but also its location as its viability is very much dependent on the catchment population it intends to serve. Hence this section attempts to analyze:

- Existing social amenities
- Planning norms formulated by state govt/national bodies.
- Estimation of requirements for the projected population in 2021.

10.1 EDUCATIONAL FACILITIES IN SANGLI MIRAJ KUPWAD MUNICIPAL CORPORATION

SMKMC area has about 138 primary schools catering to about 50498 students. There are 60 High Schools, 22 junior colleges, 10 colleges and 15 technical institutions too in the area, imparting education not only to the resident population of the SMKMC area but also attracting students from the hinterland for academic pursuits.

10.1.1 Primary Schools

According to estimates by Education Deptt the total number of primary schools in Municipal Corporation area is 162 (of these only 138 could be located and have been marked on the enclosed map). Out of these, 55% are in Sangli, 36% are in Miraj and 9% are in Kupwad & Wanleswadi.

Table 10.1 Primary Schools in SMKMC

Area	No. of Primary Schools	Students
Sangli	88	26663
Miraj	58	17494
Kupwad	14	6121
Wanleswadi	02	220
Total	162	50498

Source: Education Deptt, Sangli

In Sangli, out of 88 primary schools, 43 are municipal schools and 45 are private schools, with about 26663 students studying in these schools. Medium of study in these schools is mostly Marathi, the other mediums being English, Urdu, Kannada and Gujarati. Out of total 45 private schools, 24 schools receive State Govt grant.

Table 10.2 Medium-wise Primary Schools in SMKMC

Sr. No	Type of Schools	Marathi	Urdu	Kannada	Gujarati	English	Total
1	Municipal	36	6	1	-	-	43
2	Private Granted	19	2	-	1	1	23
3	Private Non Granted	10	-	-	-	11	21
4	Govt. Granted School	1	-	-	-	-	1
	Total	66	8	1	1	12	88

Table no 10.3 Details of Students in Sangli:

Sr. No.	Management	Total	Male	Female	Total
1	Municipal	43	6233	6189	12422
2	Grant	23	6092	4963	11055
3	Non Granted	21	1591	1221	2812
4	Govt. Granted	1	237	137	374
	Total	88	14153	12510	26663

In Miraj there are 58 schools, of which 23 belong to Municipal Corporation, 1 school is run by central govt. and state government runs 3 schools. Total number of private school is 31. Out of total private primary schools, 15 schools are with grant and 5 are without grant. Total numbers of students in all schools are 17474.

Table no 10. 4: Details of Schools in Miraj

Sr. No.	Type of Schools	Marathi	Urdu	Kannada	Gujarathi	English	Total
1	Municipal	17	5	1	-	-	23
2	Private Granted	15	-	-	-	1	16
3	Private Non Granted	5	1	-	-	9	15
4	Govt. Granted School	3	-	-	-	1	4
	Total	40	6	1	-	11	58

Table no 10.5: Details of Students in Miraj

Sr. No.	Management	Total	Male	Female	Total
1	Municipal schools	23	2909	3931	6840
2	Granted schools	16	5171	3426	8597
3	Non Granted schools	15	927	583	1510
4	Govt. schools	4	334	193	527
	Total	58	9341	8133	17474

In Kupwad, out of 14 schools 9 are municipal schools and 5 are private schools. Wanleswadi has 2 private primary schools. Total number of students in Kupwad and Wanleswadi are 6543.

Table no 10.6: Details of Schools in Kupwad & Wanleswadi

Sr. No.	Type of Schools	No. of Schools
1	Municipal Primary Schools	10
2	Private Primary Schools	6
	Total	16

Table no 10. 7: Details of Students in Kupwad & Wanleswadi

Sr. No.	Management	Total	Male	Female	Total
1	Municipal	10	2144	1688	3832
2	Grant	6	1419	1292	2711
	Total	16	3563	2980	6543

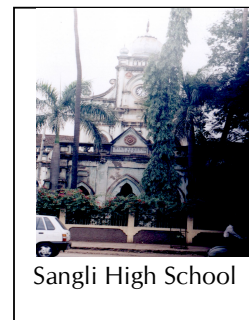
10.1.2 High Schools

In Sangli Miraj & Kupwad, there are 60 High Schools, out of which 57% of the Schools are in Sangli, 33 % are in Miraj and 10% are in Kupwad.

In Sangli out of 34 schools, 27 schools are of Marathi Medium. There are 1 school in Gujarathi medium, 2 Schools in Urdu medium and 4 schools in English medium.

Table no 10. 8: High Schools in SMKMC

Sr. No.	Name of Settlement	No. of High Schools
1	Sangli	34



2	Miraj	20
3	Kupwad	6
	Total	60

Table no 10. 9: High Schools in Sangli

Sr. No.	Medium	No. of Schools
1	Marathi	27
2	Gujarathi	1
3	Urdu	2
4	English	4
	Total	34

In Miraj out of 20 schools there is only one school run by Nagar Parishad, 19 others are private schools, 13 are with grant and 6 are without grant.

Table no 10. 10: High Schools in Miraj

Sr.No.	Medium	No. of Schools
1	Marathi	11
2	Urdu	3
3	English	5
4	Kannada	1
	Total	20

In Kupwad, there are six secondary schools out of which 5 are Marathi medium and one is English.

10.1.3 Junior Colleges

There are 22 junior colleges in Sangli Miraj Kupwad Municipal Corporation, out of which 16 are in Sangli and 3 each in Miraj & Kupwad.

Table no 10. 11: Junior Colleges in SMKMC

Area	SAC	S&A	A&C	A	S	C	Total
Sangli	3	4	2	2	3	2	16
Miraj	1	1	1	1	1		5
Kupwad				1			1
Total	4	5	3	4	4	2	22

Note

SAC	Junior College having science, arts and commerce
S&A	Junior College having science& arts.
A&C	Junior College having Arts & commerce
A	Junior College having arts only.
S	Junior College having Science only.
C	Junior College having commerce only.

10.1.4 Colleges In Sangli Miraj Kupwad Municipal Corporation

There are ten colleges in SMKMC having arts, science and commerce streams. The total strength of these colleges is 5623. Out of ten colleges nine are subsidized. Only N D Patil Night College is non-subsidized college.

10.1.5 Technical Education Institutions In Sangli & Miraj

There are fifteen institutions imparting technical education apart from an engineering college, a Medical college, an Ayurvedic College, a Dental college and a College of Pharmacy.

10.1.6 Distribution And Problems Of Educational Facilities

Educational faculties are mainly concentrated in the inner areas of Sangli, Miraj and Kupwad. There are very few schools and colleges in Gunthewari areas. Large portion of primary schools in SMKMC have no playground and there are cases where two or three schools are in same compound. There are lots of primary schools, which are run in rented houses.

10.2 MEDICAL FACILITIES IN SANGLI MIRAJ KUPWAD MUNICIPAL CORPORATION

There are 351 medical centers, which includes hospitals, dispensaries and clinics. Out of this, 163 are hospitals with bed. These are spread all over SMKMC except in Kupwad, Wanleswadi and Gunthewari areas, which have very few hospitals or clinics. The sample household surveys indicated that most of the households in SMKMC area are satisfied with the medical facilities.



Table 10.12: Medical facilities in SMKMC

S No	Planning Unit	No. of hospitals	Total no. of beds
1	I	39	502
2	II	58	1074
3	III	47	1870
4	IV	19	307
Total		163	3753

Table 10.13: Planning Unit wise distribution of bedded hospitals

S. No	No. of beds	No. of bedded hospitals			
		Planning Unit I	Planning Unit II	Planning Unit III	Planning Unit IV
1	< 5	4	10	2	3
2	5-10	15	25	17	7
3	11-20	12	11	14	5
4	21-30	7	9	6	1
5	> 30	1	3	8	3
Total		39	58	47	19

Planning Unit 2 and 3 have 5 large hospitals in them, with Civil hospital (388 beds) inPrabhag II and Mission hospital (700 beds), Siddhivinayak Cancer Hospital (100 beds), Krupamayi Hospital (200 beds) and Sarvopachar Hospital (200 beds) in Planning Unit III.

10.3 POST OFFICES IN SANGLI MIRAJ KUPWAD MUNICIPAL CORPORATION

There are 18 post offices in SMKMC, out of which 11 are in Sangli and Kupwad. These are distributed all over SMKMC. Of these, only two are situated in their own land. Others are in rented premises.

Table 10.14: Post Offices In Sangli And Kupwad

S.No	Post office	Location
1	Sangli H.O.	Rajwada Chowk, Sangli
2	Factory Area, Sangli	Timber Area, Sangli
3	Gajanan Mills, Sangli	Velankar Hall, Ram Mandir, Sangli
4	Ganpati Peth, Sangli	Near Ganpati Tempale, Sangli
5	Kupwad MIDC Area	Krishna Valley Chamber of Commerce, Kupwad MIDC.
6	Market Yard, Sangli	Market Yard, Sangli

S.No	Post office	Location
7	R.K.Exten. Sangli	Near Sangli S.T.Stand Radhakrishna Vasahat, Sangli
8	Sangli City P.O.	Near Shivaji Mandai, Shivaji Statua, Sangli
9	S.S.K.Sangli	Vasantdada Sahakari Sakhar karkhana, Sangli
10	Willingdon Colloge	Willindgon College, Near Walchand College of Engineering, Vishrambag, Sangli
11	Kupwad EDSO	Kupwad.

Table 10.15: Post Offices In Miraj And Wanleswadi

S.No	Post office	Location
1	Miraj H.O.	Sukhnivas Railway Station, Miraj
2	Brahmanpuri, Miraj	Brahmanpuri, Malgaon Ves, Miraj
3	Govt.Med.College Miraj	Medical College, Near Mission Hospital, Miraj
4	M.Peth Miraj	Near Masjid M.Peth, Miraj
5	Miraj Station Road, Miraj	Miraj Laxmi Tandul Market, Miraj
6	S.Peth, Miraj	S.Peth, Deval Building, Miraj
7	Wanleswadi	William Wanles Chest Hospital, Sangli-Miraj Road, Wallesswadi

10.4 CINEMA & DRAMA THEATRES IN SANGLI & MIRAJ

There are fourteen cinema theatres and two drama theatres with a total seating capacity of more than 10000. Details of the cinema and drama theatres are given in table below.

Table 10.16: Cinema & Drama Theatres in SMKMC

Sr. No.	Name & Address	Seating Capacity
1	Samarth Chitramandir	396
2	Swarup Chitramandir, Near Balaji Mills, Shivajinagar	674
3	Saraswati Chitramandir, Vakhar Bhag, Sangli	582
4	Pratap Chitramandir, Old Station Road, Sangli	619
5	Trimurti Chitramandir, Vakhar Bhag, Sangli	1265
6	Sadasukh Chitramandir, Near Main Bhaji Market, Sangli	843
7	Anand Chitramandir, Maruti Road, Sangli	905
8	Mali Chitramandir, Near Gulmohar Colony, Sangli	1000
9	Bhave Natyagruha, Harbhat Road, Sangli	650
10	Dinanath Mangeshkar Natyagruha, Sangli	950
11	Deval Talkies, Near Bhaji Mandai, Miraj	550
12	Madhav Talkies, Darga Road, Miraj	350
13	Asha Talkies, Satar market Lane, Miraj	392
14	Shivshankar Talkies, Near Mayur Hotel, Miraj	606
15	Amar Talkies, Near Rly. Stn., Miraj	520
16	Mangal Talkies, Dargah Road, Miraj	304

10.5 FIRE STATIONS

There are four fire stations in SMKMC. Three fire stations are in Sangli and one in Miraj.

Table 10.17: Fire stations in SMKMC

Sr. No.	Address
1	Sangli, Miraj and Kupwad Municipal Corporation Revani Road, Sangli
2	Vasantdada Industrial Estate Madhavnagar Road, Sangli
3	Main Fire Station Timber Area, Sangli
4	Miraj Fire Station No.3, Laxmi Market, Miraj

10.6 PUBLIC PARKS/GARDENS/ZOO

There are 18 gardens/parks in SMKMC area apart from a zoo. Of these the prominent ones are Aamrai garden in Sangli and Ambedkar Garden in Miraj.

There are two stadiums in Sangli and one in Miraj.



10.7 WARD WISE DISTRIBUTION OF EXISTING FACILITIES

The existing facilities have been summarized in the table below.

Table 10.18 Ward wise existing amenities

Ward No	Primary Schools	High Scho	Colleges	Hospitals	Mangal Karyalay	Bank	Veg Market	Drama Theatre	Cinema Theatre	Police	Post office	Fire Station	Garden
1	4	2	1	1		1	1						
2	3	1			2	3				1	1		
3													
4	2	1											
5	2	3	3		2						1		
6	3	2			1						1		
7	2	4											
8	1												
9	2		2	2		1							
10	1	1				1							
11		1		8	1	2	1						
12	1	1		1									
13	4	2		1			1						
14	2	1		1	1	1							
15	1									1			
16	2	1											
17						2	1						
18	3	1	1							1			
19	1			1		5	1				1		
20		1	1	2	1	8	1		1	1			
21	3	1		2		6			1				
22	1	1	1	4		2				1		1	1
23	2					1	1						
24	3	1		2			1						
25		2				1					1		
26	3	1	1	6	2	2				1	1		
27	3												
28	4	1		7		2	1				1		

Ward No	Primary Schools	High Scho	Colleges	Hospitals	Mangal Karyalaya	Bank	Veg Market	Drama Theatre	Cinema Theatre	Police	Post office	Fire Station	Garden
29	1	1		3									
30													
31	4	1	1	5					1	1	1		
32	3	3		3	1	7	1				1	1	1
33	5	4	1	4		6			1				1
34	1						1						
35	1												
36	1			8		2			1	1	1		1
37	2	2	4	28	2	3			1				
38		1	3								1		1
39	4	2		2		14					1		
40	4	2	2	4	1	3	1						
41	6	1		6		4	1		1				
42													
43	3	1		18	1	3							1
44	1			4			1						
45				1		1					1		1
46	4	1				7				1			1
47	1		1		5	3	1				1		
48	1	1		2	6	5			2				
49	8		1	4		13		1	1				1
50				2		3			1				
51	4	2	3	2	2	4				1	1	1	
52	1			1									
53	3		1	2									
54	2	1		1		5							
55	1					1							
56	2			1		5							
57	1												
58				1		1			1				1
59	3	1					1						
60	2												
61							1						
62	1						1						
63	4	3	1	1	1	3			1		1		
64	2					2							
65	1			5									
66	7	2		3		3				1		1	1
67							1						
68				4						1			
wanle swadi	1	1								1	1		
Total	138	59	28	153	29	136	19	1	13	13	17	4	28

10.8 PLANNING NORMS

In order to estimate the requirements for the future population it is imperative to formulate a design guideline of standards and norms. This would serve as a yardstick to calculate the requirements for the projected population.

A comparative statement of planning norms and standards formulated by Govt of Maharashtra, UDPFI, CIDCO and Delhi development Authority, is depicted in the tables enclosed in the following pages:

Table 10.19	EDUCATIONAL FACILITIES
Table 10.20	MEDICAL FACILITIES
Table 10.21	SOCIO-CULTURAL FACILITIES
Table 10.22	COMMERCIAL FACILITIES
Table 10.23	OTHER SOCIAL AMENITIES

Table 10.19 EDUCATIONAL FACILITIES

	CIDCO		UDPFI Norms		Govt of Maharashtra		Delhi Development Authority	
	No.	Area	No.	Area			No	Area
Primary School going population			15%					
HS School going population			7.5%					
Nursery Schools	1 per 2500 population	500 to 800 sq.m.					12 per 30000	800 sq. m.
Primary School	1 per 5000 population	5000 sq. m.	1 for 2500 Population	0.4 Ha including a playground of size 0.2 Ha.	1 school per 400 students i.e. 1 for 2670 population	For an average size of 400 – 500 pupils or less, the area required for a primary school is 0.4 Ha in congested area, 0.8 Ha in intermediate area and 1.2 Ha in outer areas.	6 per 30000	4000 sq. m.
High Schools	1 per 7500 population	16000 sqm	1 for 7500 Population	1.6 Ha including a playground of minimum size 68m X 126m.	1 school per 750 students i.e. 1 for 10000 population	For an average size of 750 – 1000 pupils or less, the area required for a High school is 0.8 Ha in congested area, 1.2 Ha in intermediate area and 2 Ha in outer areas.	4 per 30000	16000 sq. m.

	CIDCO		UDPFI Norms		Govt of Maharashtra		Delhi Development Authority	
	No.	Area	No.	Area			No	Area
Integrated Schools	1 school without hostel for 90000 population 1 school with hostel for 90000 population	2.2 Ha 2.6 Ha	1 for 1 Lakh Population	3.5 Ha including a play field area of 2.5 Ha and parking area of 0.3 Ha.				
Schools for Handicapped			1 for 45000 Population	0.5 Ha, including a play field area of 0.3 Ha.				
Colleges	1 for 90000 population.	4 Ha.	1 for 125000 Population	4 Ha, including play field area of 1.8 Ha and 0.4 Ha residential including hostel area				

Table 10.20 MEDICAL FACILITIES

	CIDCO		UDPFI Norms		Govt of Maharashtra		Delhi Development Authority	
	No.	Area	No.	Area			No	Area
General Hospitals	1 per 5,40,000 population	8 Ha.	1 for 250000 Population	6 Ha, which includes 4 Ha for hospital and 2 Ha for residential accommodation.	4 Bed per 1000 population			

	CIDCO		UDPFI Norms		Govt of Maharashtra		Delhi Development Authority	
	No.	Area	No.	Area			No	Area
Intermediate hospital (Cat-A)	1 Primary Health centre per 45000 population	6000 sq. m.	1 for 100000 Population	3.7 Ha, which includes 2.7 Ha for hospital and 1 Ha for residential accommodation.				
Intermediate hospital (Cat-B)	1 Hospital per 90000 population	26700 sq.m.	1 for 100000 Population	1Ha, which includes 0.6 Ha for hospital and 0.4 Ha for residential accommodation.				
Polyclinic	1 per 90000 population	2000 sq.m.	1 for 100000 Population	o.2 to 0.3 Ha. per clinic			1 per 30000 (senior health centre)	2000sqm
Nursing Home, child welfare and maternity center	1 per 45000 population	2000 sq. m.	1 For 45000 to 100000 population	0.20 to 0.30 Ha.	1 per 15000 (maternity centre)	0.25 Ha per 10000 population	1 per 30000	1000 sq. m.
Dispensary	1 per 15000 population	1000 sq. m.	1 for 15000 Population	0.08 to 0.12 Ha.	1 per 10000	0.25 Ha per 10000 population	4 per 30000	1000 sq. m.

Table 10.21 SOCIO-CULTURAL FACILITIES

	CIDCO		UDPFI Norms		Govt of Maharashtra		Delhi Development Authority	
	No.	Area	No.	Area			No	Area
Community hall and Library	1C-hall per 15000 population.	1000 sq.m.	1 for 15000 population	2000 sq m	One library for 20000 population	0.1 Ha in congested area and 0.2 to 0.4 Ha in outside areas	2 per 30000	2000 sq. m.

	CIDCO		UDPFI Norms		Govt of Maharashtra		Delhi Development Authority	
	No.	Area	No.	Area			No	Area
Recreational club	1 c-room per 5000 population	300 sq.m.	1 for 100000 population	10,000 sq m				
Drama theatre			1 for 100000 population	1000 sq m	One Theatre for 25000 population	0.2 to 0.3 Hectare in congested area and 0.4 Ha in outside area		
Socio Cultural Center			1 for 1000000 population	15 Ha.				
Religious building							6 per 30000	400 sq. m.

Table 10.22 COMMERCIAL FACILITIES

	CIDCO		UDPFI Norms		Govt of Maharashtra		Delhi Development Authority	
			No.	Area			No	Area
Cluster center	1 Convenience shopping per 5000 population		1 shop for 110 persons	220 sq. m. per 1000 persons	5 to 10 shops per 1000 population in a shopping centre provided on neighborhood basis	0.2 Hectare in congested area and 0.4 Hectare in outer area.	6 Convenience shopping centre per 30000	1100 sq. m. per shopping centre

Sector center	1 Local shopping per 15000 population	4600 sq m	1shop for 200 persons	300 sq. m. per 1000 persons			2 local shopping centre per 30000	4600 sq. m. shopping centre
Community center	1C centre per 90,000 population	48000 sq m.	1shop for 200 persons	500 sq. m. per 1000 persons				
District center	1 for 5, 40,000	20 Ha	1 shop for 300 persons	880 sq. m per 1000 persons				
Vegetable market					one for 25000 population	0.2 Hectare in congested area and 0.4 Ha in other area		

Table 10.23 OTHER SOCIAL AMENITIES

	CIDCO		UDPFI Norms		Govt of Maharashtra		Delhi Development Authority	
	No.	Area	No.	Area			No	Area
Police station	1 for 90000 population	1.15 ha	one for 25000 population	not less than 1.5 Ha. inclusive of essential residential accommodation				
District office	1 for 10,00,000 population	4.8 ha	one for 25000 population	4.8 Ha, which includes 4 Ha area for Battalion				
Telecommunications	1 Telephone exchange per 5,40,000 population	1.01 Ha						
Telegraph Office	1 Telegraph office per 540000	0.17Ha						

	CIDCO		UDPF Norms		Govt of Maharashtra		Delhi Development Authority	
	No.	Area	No.	Area			No	Area
Post Office	1 Head P.O with Delivery office per 270000 population 1 Head P.O (administration) per 540000 population	0.06 Ha 0.25 Ha						
Police post	1 for 45000 population	0.10 Ha		Not less than 0.16 Ha. inclusive of essential residential accommodation				
Fire station	1 fire station/ sub fire station within 1.3 km & training centre for population of 1,80,000	0.6 to 0.7 Ha	1 fire station or sub fire station within 1- 3 km to be provided for 2 Lakh population	not less than 1Ha. With essential residential accommodation				
Sub fire station			1 sub fire station within 1 - 3 km to be provided for 2 Lakh population	not less than 0.60 Ha. with essential residential accommodation				
Open Space	1 Tot lot per 15000 population	3 Ha			0.4 Ha per 1000 population			
Housing area park	1 park per 15000 population	4.5Ha					6 per 30000	5000 sq.m.

	CIDCO		UDPFI Norms		Govt of Maharashtra		Delhi Development Authority	
	No.	Area	No.	Area			No	Area
Housing area playground	1 play area per 15000 population	2.25 Ha					6 per 30000	5000 sq.m.
Neighborhood park							2 per 30000	15000 sq.m.
Neighborhood play area							2 per 30000	15000 sq.m.

10.9 ESTIMATION OF REQUIREMENTS FOR SMKMC

Estimation of requirement of amenities have been done in a two step process as follows:

Step I: The requirements have been worked on the basis of Govt. of Maharashtra planning norms (or norms of other agencies in case of unavailability of Govt of Maharashtra Norms)

Step II: A threshold analysis has been carried out to assess the requirement. This involved mapping the existing facilities and zoning the SMKMC into settlement zones. Each zone has been assessed on the basis of the facilities falling within a threshold distance from the centroid of the zone. The amenities falling short have been then estimated based on the above norms.

10.9.1 Estimation Of Requirements By Step I

Each Planning Unit is considered as a Planning Unit and thus SMKMC area is divided into 4 Planning Units. The numerical requirement of amenities is worked out in the following tables based on the Planning norms as stated above:

Table 10.24 Requirement of educational amenities based on Govt of Maharashtra norms

Requirement of educational amenities based on Govt of Maharashtra norms													
Plann ing unit	Proj populatio n 2021	primary schools			high school			school for handicapped **			college ***		
		existin g	req as per norms for 2021	add l req	existin g	req as per norms	addl req	exist ing	req as per norms	addl req	existin g	req as per norms	addl req
I	120000	42	45	3	15	12	-3		3	3	9	1	-8
II	200000	33	75	42	13	15	2		4	4	3	2	-2
III	190000	31	71	40	15	16	1	1	4	3	14	2	-12
IV	110000	32	41	9	16	11	-1	2	2	0	2	1	-1
Total	620000	138	232	74	59	62	3	3	14	11	28	5	-23
** as per UDPFI guidelines													

Table 10.25 Requirement of medical amenities based on Govt of Maharashtra norms

Requirement of medical amenities based on Govt of Maharashtra norms										
Plann ing unit	Proj populatio n 2021	Dispensary			Nursing Home, child welfare and maternity center			General Hospital		
		existin g	req as per norms for 2021	addl req	existing	req as per norms	addl req	existing	beds req as per norms	addl req
I	120000	69	12	-57	20	8	-12			
II	200000	53	20	-33	33	13	-20			
III	190000	45	19	-26	5	13	8			
IV	110000	29	11	-18	1	7	6			

Total	620000	196	62	-134	59	41	-18	1288	620	nil
** as per UDPFI guidelines										

Table 10.26 Requirement of commercial facilities based on Govt of Maharashtra norms

Requirement of commercial facilities based on Govt of Maharashtra norms									
Planning Unit	Projected population 2021	Shopping center			Vegetable market				
		Existing	Requirement as per norms for 2021	Additional requirement	Existing			Requirement as per norms	Additional requirement
					Daily	Weekly	Total		
I	120000	1518	840		1	4	5	5	0
II	200000	2404	1400		1	7	8	8	0
III	190000	1472	1330		0	4	4	8	4
IV	110000	2000	770		1	3	4	4	0
Total	620000	7394	4340	nil	3	18	21	25	4

**The figures on shops are SMKMC figures. But figures provided by retail Traders association indicate 10700 retail shops in Sangli. Apart from this there are about 7000 Khokhas too.

Table 10.27 Requirement of recreational facilities based on Govt of Maharashtra norms

Requirement of recreational amenities based on Govt of Maharashtra norms										
Planning Unit	Projected population 2021	Library			Drama Theatre			Recreation club ***UDPFI norms		
		Existing	Requirement as per norms for 2021	Additional requirement	Existing	Requirement as per norms	Additional requirement	Existing	Requirement as per norms for 2021	Additional requirement
I	120000	3	6	3	2	5	4		1	1
II	200000		10	10		8	8		2	2
III	190000	1	10	9		8	8		2	2
IV	110000		6	6		4	4		1	1
Total	620000		31	29	2	25	24		6	6

Table 10.28 Requirement of other facilities based on Govt of Maharashtra/ UDPFI norms

Requirement of other amenities based on Govt of Maharashtra/ UDPFI norms													
Proj populati on 2021	Police station **UDPFI norms				Telecommunications (Telephone exchanges ** UDPFI norms)			Fire station			Post office		
	existi ng	req as per norms for 2021	addl req		existing	req as per norms	addl req	existin g	req as per norms	addl req	existi ng	req as per norms	addl req



Total	620000	13	25	12	11	1	-10	4	3	-1	17	2	-16
--------------	---------------	----	----	-----------	----	---	------------	---	---	-----------	----	---	-----

10.9.2 Estimation Of Requirements By Step II (Threshold Analysis)

The SMKMC area has been zoned into 20 zones (zone A-ZoneT) and a threshold distance of 1 km around the center of the zone is analysed for requirement of amenities on the basis of existing amenities and projected population in the Zone. The zoning and existing amenities are depicted in the map enclosed.

The requirements have been summarized in the table on next page. Apart from the items mentioned in the table, one fire station is planned for Kupwad and school for handicapped is planned for Sangli.

Table 10.29: Requirement of amenities by threshold analysis

Zone	Ward no.	Population	Requirement										
			Primary school	High School	College	Hospitals	Mangal Karyalaya	Veg. Market	Drama Theatre	Cinema Theatre	Open space	Police station	Post office
A	15,16,17,18,19P, 48P, 47P	38400	3	-	-	1	1	1	1		NEEDED	1	
B	1P, 21P, 22P	14000	2	1		1		1			NEEDED		
C	1P, 2P, 23P, 22P	14600						1			NEEDED		
D	3P, 24P, 25P	42600	4	2		1	1	1			NEEDED	1	
E	3P, 4P, 25P	12300				1	1	1			NEEDED		
F	4P, 26P, 27P	10000		1				1					
G	5P	16000	2	1		1	1	1					
H	5P, 6P	14600	2	1		1		1					
I	7P, 32P, 33P,34P, 36P, 52P	28000											
J	9, 35P, 36P, 37P, 54, 58, 59, 60 and all possible others	26200											
K	9P, 26P	25000	2					1					
L	10, 11P, 38P	24200	1	1									
M	11P, 12,40,41, 42, 39P, 43P, 63P	72600	4	1				1					
N	13, 15, 14, 43, 45, 44P, 46P, 65	80700	8	5	1	1	2	2					
O	20, 21, 22, 43, 49, 50, 51, 52, 63, 64, 65, 66, 67, 68, 69	64200											
P	23, 2, 24P, 22P, 53	21800									NEEDED		
Q	24, 25, 38, 61	29500	3	2		1	1	1			NEEDED		
R	4, 38, 68	14230		1							NEEDED		
S	5, 6, 26, 27P, 28, 29, 30, 31, 37, 54, 55,	39400									NEEDED		
T	61, 62, 39, 40, 41, 32, 51, 53, 63P, 61, 62	31670					1	1	1				
Total			31	16	1	8	8	14	2		NEEDED	2	

10.10 COMMERCIAL FACILITIES

Commercial facilities apart from being a major land use of the city, also helps to give character to various parts of the city. It also acts, as a major employment source. Thus it is an inseparable part of city planning. It involves forecasting of shopping needs, changes likely to take place in society and planning of shopping for goods and services.

Type and number of shops in city depends on various factors; some of the important factors are as follows:

-

1. Population.
2. Household size and income.
3. Monthly consumer expenditure per-capita and household.
4. Location priority and accessibility.
5. Turn over per shop.
6. The presence of well developed shopping centres in the region, their location with respect to the shopping under study.
7. Shopping habits and other factors such as travel pattern, accessibility etc.

In SMKMC area commercial activities are more concentrated in the Gaathan areas. The retail commercial facilities in SMKMC can be classified into three categories:

1. Formal shops
2. Informal Shops (Khokhas)
3. Vegetable and Fruit Markets

10.10.1 Retail Traders

As per figures provided by SMKMC there are about 7400 shops in SMKMC, with about 1518 shops in Prabhad I, 2404 shops in Prabhad II, 1472 shops in Prabhad III and 2000 shops in Prabhad IV. There are about 400 medical shops in SMKMC area (as indicated by Drugs and Medical store Association).

According to Retail Traders Association there are approximately 10750 retail-trading shops in SMKMC.

Table 10.30 Type and number of shops in SMKMC

S.No	Type of trade	Approximate number
1	Kirana	5000
2	Stationary	1000
3	Cloth	1000
4	Readymade	800
5	Shoes	300
6	Electronics	100
7	Jewellery shops	100
8	Book stalls	150
9	Cyber café	75
10	Computer institution	25
11	STD booth	200
12	Others	2000
	Total	10750

Source: Estimates by Retail Traders Association, Sangli

10.10.2 Vasant Dada Agriculture Produce Market

This agriculture produce market located in Sangli- Miraj road in Sangli is an important work center and has about 825 shops, trading in various agriculture produce from SMKMC area and hinterland.

10.10.3 Vishnuanna Fruit Market

Located on the Kolhapur road in the outskirts of Sangli, this wholesale fruit market has about 84



shops

**10.10.4 Retail Vegetable & Fruit Market**

There are three daily markets in SMKMC, two in Sangli and one in Miraj. There are weekly markets in about 21 locations as detailed below in SMKMC.



Sangli

Table 10.31 Weekly Markets in Sangli

S.No	Market/days	Location	No. of Sellers
1	Sunday	a) Mutton market(Khanbagh)	350-400
		b) Vishrambag 100 ft. Rd.	400
2	Monday	a) Vadar colony(Near Station)	300-350
		b) Shamaraonagar	
3	Tuesday	a) Hudco colony,Gandhi colony	500
		b) Sangliwadi(Near CKPawar, corporator's house)	150
4	Wednesday	a) Sanjay nagar(100ft.Rd.)	325
		b) Ganesh nagar(Swimming Pool)	350-400
5	Thursday	Chandni chowk	650-700
6	Friday	a) Laxmi Mandir	100
		b) Panchshil nagar (Near Shantiniketan school)	175
7	Saturday	a. Jhansi chowk-Panjarpole Tanaji chowk-Maitrin shop	750
		B Govt.Colony(MSEB,V'Bag)	175

Miraj:**Table 10.32 Weekly Markets in Miraj**

S.No	Market/days	Location	No. of Sellers
1	Sunday	a) Chatre Photo to Bhanu Talim b) Guruwar peth to Agrawal Home Par Katta	100-125 200-250
2	Monday		
3	Tuesday	Shivaji Putala to Zari Masjid	800-1000
4	Wednesday	Gadawe Chowk to Kokane Galli	1800-2000
5	Thursday		
6	Friday	Tasgaon wes to Karmavir Bhaurao Patil Chowk	500-600
7	Saturday	Shastri Chowk, Koli Galli	2000-3000

10.10.5 Informal Shops

In India and in the cities of developing countries, it is found that around 50 to 55% shopping is in informal sector. This informal sector shopping falls into the 7 type of categories such as:

- I. Mobile hawkers
- II. Pathariwala or immobile hawkers
- III. Rahriwala
- IV. Immobile rahriwala
- V. Stalls
- VI. Seasonal hawkers
- VII. Weekly and daily bazaar

As in other Indian cities SMKMC settlements too have a distinct presence of informal shops called 'khokhas'. These shops though have got popularized by meeting the sundry needs of the local area population, especially the lower income groups, create problems such as encroachment of right of way of road corridors, hindrances at intersections, imparting a disorderly visual sense etc.

There are about 7000 khokhas in SMKMC area. Of these 3400 Khokhas exists in clusters of 5 or more, with about 60% of them in Sangli, 26% in Miraj and 14% in Kupwad.

While in Sangli the Khokhas are concentrated in about 94 locations with an average of 10-12 khokhas in each location, in Miraj it is in 43 locations with 15-20 shops at each location. In Kupwad they are concentrated in about 23 locations with about 17-20 shops in each location. These locations and number exclude those, which have less than 5 shops in one location.



A 24% sample survey was conducted in October 2001 to study the trading characteristics and socio economic profile of the Khokhas owners. The findings of these surveys have been reported in the 'Report on Summary Survey Findings'. Salient features are summarized below:

1. Type of business done in these khokas includes trade; service and manufacturing with about half of khoka being involved in trading. Most of the khoka for trade are pan shops (31%), Tea/snacks stall (21%) and general provisions (10%). Khokas involved in services are mostly 2/4 wheeler machines or cycle repairers.
2. Over three fourth of the sample khoka owners were in working age group and half of the total sample respondents had had education up to high school. Most of khokas belong to people who could not gain any other employment and those, which had already family members, engaged in trade, service or manufacturing in different shops and establishment (95%).
3. Unemployment and those who were engaged in trade, service, manufacturing in different shops and establishment constitute almost 95%.
4. Municipal corporation issues license to khokas for better management of the khokas in the city. Out of the total surveyed khokas 30% were illegal khokas without the municipal license.
5. Municipal Corporation has constructed few khokas in range of 25 to 30 sq ft at various places. The minimum area of sampled surveyed Khoka is 9 sq ft and the maximum area is 250 sq ft. There exists a direct link between the area of khoka and the type of activity. The smaller khokas are generally paan shops, snack shops etc where as the bigger khokas are used for the kirana shops, hosiery etc.
6. With the type of investment made to start the khoka, one third of the owners or shopkeepers (37%) has the monthly turnover in the range of Rs 5000 to 10000. The next category is in the range of Rs 2001 to 5000 with almost one fourth falling in this category.
7. Although the turnover of most of khokas is in the range of Rs 5000 to 10000, the monthly income generated is very low. The range varies between Rs 1001 to 2000 with 42% of khokas falling under this range. The next category is Rs 3001 to 5000 with 22% and 21% in the range of Rs 2001 to 3000.

Most of the khokas are along the roadside in the residential and commercial areas, catering to day-to-day requirement of an average citizen. But the very nature of the present khoka is unplanned and scattered all over the city. Hence there is a need to 'rehabilitate' these "khokas" (stalls) by providing cross incentive (extra FSI) to the adjacent buildings. Wherever such stalls do not obstruct the flow of smooth traffic, they may be retained and formalized. Such a measure would help the owners of such stalls to continue their source of living; and their regularization would bring good earnings to the municipal ex-chequer.

10.11 ESTIMATION OF REQUIREMENT OF SHOPPING FACILITIES

Existing shopping facilities:

1. Number of organized shops in various shopping areas	= 10,750
2. Number of shops in Vasant Dada Agricultural Produce Market	= 825
3. Number of shops in Vasant Dada Fruit Market	= 84
Total Number of shops in organized sector	= 11,659
4. Number of khokas	= 7,000
5. Number of Rahariwala	= 700
6. Vegetable sellers (Informal)	
Weekly markets in Sangli Miraj Kupwad	= 12,000
Out of this, few may be (say 25%) moving from one market to another, thus actual number of vegetable vendors	= 9000
Therefore total nos. of Khokhas and rahariwala	= 8,000



Number of shops under informal shopping	= 17,000
Total number of shops in formal and informal sector	= 29,000 (approximately)

The present population (2001) of SMKMC is 4,31,014 persons, Therefore at present it is around 67 shops / 1000persons. With the norms of 15 shops per thousand, number of shops needed to cater to a projected population in 2021 = 9300 shops.

- This indicates that the shopping is not only for population of SMKMC but for total hinter land and there is over provision because it is considered as a source of employment. However if we include hinterland population & economy the surplus shop can be understood.
- Additional Shopping facilities will be needed only in new development area. The additional population envisaged by 2021 is approx 1,50,000. Assuming 15 shops / thousand. We need 2250 shops out of which 60% will be informal (approx 1400).

Total number of shops in the year 2021 will be 29000 + 2250 + 2900 [10% increase] =34,150 say 35,000. Thus the norms per 1000 persons will be around 56 shops / 1000. Out of 35,000 shops, around 21,000 shops will be informal.

10.12 TO SUMMARIZE

1. SMKMC area has about 138 primary schools catering to about 50498 students. Out of these, 55% are in Sangli, 36% are in Miraj and 9% are in Kupwad & Wanleswadi. There are 60 High Schools, 22 junior colleges, 10 colleges and 15 technical institutions too.
2. There are 351 medical centers, which includes hospitals, dispensaries and clinics. Out of this, 163 are hospitals with bed. These are spread all over SMKMC except in Kupwad, Wanlesswadi and Gunthewari areas, which have very few hospitals or clinics. The sample household surveys indicated that most of the households in SMKMC area are satisfied with the medical facilities.
3. There are 18 post offices in SMKMC, fourteen cinema theatres and two drama theatres with a total seating capacity of more than 10000. There are four fire stations in SMKMC. Three fire stations are in Sangli and one in Miraj.
4. As per figures provided by SMKMC there are about 7400 shops in SMKMC, There are about 400 medical shops in SMKMC area (as indicated by Drugs and Medical store Association). According to Retail Traders Association there are approximately 10750 retail-trading shops in SMKMC.
5. There are three daily markets in SMKMC, two in Sangli and one in Miraj. There are weekly markets in about 21 locations as detailed below in SMKMC.
6. There are about 7000 khokhas in SMKMC area. Of these 3400 Khokhas exists in clusters of 5 or more, with about 60% of them in Sangli, 26% in Miraj and 14% in Kupwad. Type of business done in these khokas includes trade; service and manufacturing with about half of khoka being involved in trading. Out of the total surveyed khokas 30% were illegal khokas without the municipal license. Municipal Corporation has constructed few khokas in range of 25 to 30 sq ft at various places. The minimum area of sampled surveyed Khoka is 9 sq ft and the maximum area is 250 sq ft. Although the turnover of most of khokas is in the range of Rs 5000 to 10000, the monthly income generated is very low. The range varies between Rs 1001 to 2000 with 42% of khokas falling under this range. Although these khokas cater to day-to-day requirement of an average citizen especially that of the surrounding residential areas, the very nature of the present khoka is unplanned and encroaches the right of way of roads.
7. The existing social amenities in SMKMC are as depicted below:

Wards	Primary Schools	High Schools	Colleges	Hospitals	Mangal Karyalaya	Bank	Veg Market	Drama Theatre	Cinema Theatre	Police station	Post office	Fire Station	Garden
68 + Wanle ssyadi	138	59	28	153	29	136	19	1	13	13	17	4	18

8. Estimation of requirement of social facilities have been done in a two step process as follows:

Step I: The requirements have been worked on the basis of Govt. of Maharashtra planning norms (or norms of other agencies in case of unavailability of Govt of Maharashtra Norms)

Step II: A threshold analysis has been carried out to assess the requirement. This involved mapping the existing facilities and zoning the SMKMC into settlement zones. Each zone has been assessed on the basis of the facilities falling within a threshold distance from the centroid of the zone. The amenities falling short have been then estimated based on the above norms.

	Estimated requirement							
	Primary school	High School	College	Schools for handicapped	Hospital	Community center/ Library/ Mangal Karyalaya	Vegetable Market	Drama Theatre
Step I	74	3	Nil	11	Nil	29	4	24
Step II	31	16	1	1	8	8	14	2

	Estimated requirement by Step I				
	Police station	Post office	Fire Station	Garden	Shops
Step I	12	Nil	Nil	Needed	Nil
Step II	2	Nil	1	Needed	4 District centers 6 Janata Markets

9. There are approximately 29000 shops in SMKMC area, including informal shops. The present population (2001) of SMKMC is 4,31,014 persons, Therefore at present it is around 67 shops / 1000persons. This indicates that the shopping is not only for population of SMKMC but also for hinterland.

With the norms of 15 shops per thousand, number of shops needed to cater to a projected population in 2021 = 9300 shops. Additional Shopping facilities will be needed only in new development area. The additional population envisaged by 2021 is approx 1,50,000. Assuming 15 shops / thousand. We need 2250 shops out of which 60% will be informal (approx 1400). Total number of shops in the year 2021 will be 29000 + 2250 + 2900 [10% increase] = 34,150 say 35,000. Out of 35,000 shops, around 21,000 shops will be informal.