

**Upgrading Municipal Services
Norms and Financial Implications**
(Prepared for the Ninth Finance Commission)

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Annex-C

C(1). Levels of Water Supply in Sampled Municipal Bodies, Arranged Statewise, 1986-87

STATE/TOWN	DESIGNED CAPACITY (MLD)	ACTUAL SUPPLY (MLD)	ESTIMATED POPULATION 1987	POPULATION SERVED WATER SUPPLY	POPULATION SERVED AS PROPORTION TO TOTAL (%)	PER CAPITA SUPPLY (LPCD)	DESIGNED * ACTUAL **	WATER UTILIZATION RATIO (%)
1	2	3	4	5	6	7	8	8
ANDHRA PRADESH								
ANANTPUR	4.89	3.30	152016	113168	74.44	32.17	29.16	67.48
ADONI	15.50	9.00	126150	96300	76.34	122.87	93.46	58.06
BHIMAVARAM	6.82	5.25	134989	117990	87.41	50.52	44.50	76.98
CUDDAPAH	34.52	8.89	134551	130000	96.62	256.56	68.38	25.75
ELURU	67.50	13.24	198976	170272	85.57	339.24	77.76	19.61
GUNTUR	27.25	27.00	442566	251635	56.86	61.57	107.30	99.08
KAKINADA	21.00	20.34	274540	150000	54.64	76.49	135.60	96.86
MACHILIPATNAM	7.72	6.80	156862	104160	66.40	49.22	65.28	88.08
NELLORE	25.20	15.44	334444	250000	74.75	75.35	61.76	61.27
NIZAMABAD	42.70	41.40	241150	183000	75.89	177.07	226.23	96.96
PRODDATUR	10.70	10.70	137134	97300	70.95	78.03	109.97	100.00
RAJAHMUNDRY	32.70	24.28	229768	204800	89.13	142.32	118.55	74.25
TENALI	2.95	0.23	130266	3750	2.88	22.65	61.33	7.80
TIRUPATI	9.90	9.45	161351	101504	62.91	61.36	93.10	95.45
VISHAKHAPATNAM	84.00	84.00	750539	551620	73.50	111.92	152.28	100.00
VIJAYAWADA	81.67	81.68	564058	391267	69.37	144.79	208.76	100.01
VIZIANAGRAM	10.98	10.80	135959	76549	56.30	80.76	141.09	98.36
WARANGAL	88.20	73.00	446834	314877	70.47	197.39	231.84	82.77
TOTAL	574.20	444.80	4752153	3308192	69.61	120.83	134.45	77.46
AVERAGE	31.90	24.71	264008	183788	69.13	115.57	112.57	74.93
ASSAM								
JORHAT	0.0	1.28	274334	42000	15.31	0.0	30.48	0.0
TOTAL	0.0	1.28	274334	42000	15.31	0.0	30.48	0.0
AVERAGE	0.0	1.28	274334	42000	15.31	0.0	30.48	0.0

* Worked out with total population, 1987.

** Worked out with population served, 1987.

CONTD....

1	2	3	4	5	6	7	8	8
BIHAR								
	3.00	3.00	194008	176323	90.88	15.46	17.01	100.00
DHANEAD	5.75	4.76	153688	50000	32.53	37.41	95.20	82.78
MUNGER	22.50	12.15	148584	102250	68.82	151.43	118.83	54.00
TOTAL	31.25	19.91	496280	328573	66.21	62.97	60.60	63.71
AVERAGE	10.42	6.64	165426	109524	64.08	68.10	77.01	78.93
GUJARAT								
	120.00	72.00	369803	350000	94.64	324.50	205.71	60.00
BHAVNAGAR	0.0	9.00	122903	99330	80.82	0.0	90.61	0.0
BHARUCH	60.75	31.50	338275	325000	96.08	179.59	96.92	51.85
JAMNAGAR	29.89	22.62	135158	135000	99.88	221.15	167.56	75.68
JUNAGADH	0.0	21.20	168392	158000	93.83	0.0	134.18	0.0
NADIAD	0.0	4.50	134199	126927	94.58	0.0	35.45	0.0
NAVSARI	12.00	6.40	127782	100222	78.43	93.91	63.86	53.33
FORBANDAR	110.00	61.00	563236	550000	97.65	195.30	110.91	55.45
RAJKOT	167.50	136.55	964141	900000	93.35	173.73	151.72	81.52
VADODARA								
TOTAL	500.14	364.77	2923889	2744479	93.86	200.18	132.91	72.93
AVERAGE	83.36	40.53	324876	304942	92.14	198.03	117.44	62.97
HARYANA								
	6.30	4.14	119561	80000	66.91	52.69	51.75	65.71
AMBALA	18.00	18.67	123173	115170	93.50	146.14	162.11	103.72
BHIWANI	0.0	15.75	165333	92540	55.97	0.0	170.20	0.0
HISSAR	28.57	25.69	163304	163000	99.81	174.95	157.61	89.92
KARNAL	17.49	11.84	180636	95000	52.59	96.82	124.63	67.70
PANIPAT	9.90	5.62	198491	158490	79.85	49.88	35.46	56.77
ROHTAK	18.00	15.44	139726	86304	61.77	128.82	178.90	85.78
YAMUNANAGAR								
TOTAL	98.26	97.15	1090224	790504	72.51	106.24	122.90	98.87
AVERAGE	16.38	13.88	155746	112929	72.92	108.22	125.81	78.27
HIMACHAL PRADESH								
	29.96	11.80	81690	81690	100.00	366.75	144.45	39.39
SHIMLA								
TOTAL	29.96	11.80	81690	81690	100.00	366.75	144.45	39.39
AVERAGE	29.96	11.80	81690	81690	100.00	366.75	144.45	39.39

CONTD....

1	2	3	4	5	6	7	8	8
JAMMU & KASHMIR								
SRINAGAR	19.50	19.50	626360	596796	95.28	31.13	32.67	100.00
TOTAL	19.50	19.50	626360	596796	95.28	31.13	32.67	100.00
AVERAGE	19.50	19.50	626360	596796	95.28	31.13	32.67	100.00
KARNATAKA								
BELGAUM	54.00	24.30	339571	229283	67.52	159.02	105.98	45.00
BIJAPUR	19.80	9.00	181609	175000	96.36	109.03	51.43	45.45
DAVANGERE	0.0	20.14	262966	250000	95.07	0.0	80.56	0.0
GADAG BETGERI	0.0	6.14	132886	108866	81.92	0.0	56.40	0.0
HUBLI DHARWAD	26.10	16.67	642305	422950	65.85	40.63	39.41	63.87
MYSORE	95.34	95.34	503094	475876	94.59	189.51	200.35	100.00
MANGALORE	31.90	27.50	176643	137593	77.89	180.59	199.86	86.21
MANDYA	12.55	12.55	122208	115000	94.10	102.69	109.13	100.00
RAICHUR	18.16	18.38	163090	64550	39.58	111.35	284.74	101.21
SHIMOGA	6.71	6.71	191863	136263	71.02	34.97	49.24	100.00
TUMKUR	5.40	2.89	140912	99616	70.69	38.32	29.01	53.52
TOTAL	269.96	239.62	2857147	2214997	77.52	109.68	108.18	88.76
AVERAGE	30.00	21.78	259740	201363	77.69	107.35	109.65	77.25
KERALA								
ALLEPPEY	8.50	6.80	176088	130000	73.83	48.27	52.31	80.00
COCHIN	30.00	30.00	563646	280583	49.78	53.22	106.92	100.00
CALICUT	40.50	40.50	435863	322000	73.88	92.92	125.78	100.00
PALGHAT	25.00	22.50	121692	121692	100.00	205.44	184.89	90.00
QUILON	0.0	3.50	146902	116798	79.51	0.0	29.97	0.0
TOTAL	104.00	103.30	1444191	971073	67.24	80.17	106.38	99.33
AVERAGE	26.00	20.66	288838	194214	75.40	99.96	99.97	92.50
MADHYA PRADESH								
BURHAMPUR	113.50	54.80	168018	150000	89.28	675.52	365.33	48.28
KHANDWA	10.56	10.56	137811	52517	38.11	76.63	201.08	100.00
RAIPUR	60.75	60.75	503113	423250	84.13	120.75	143.53	100.00
RATLAM	0.0	13.50	169201	127000	75.06	0.0	106.30	0.0
TOTAL	184.81	139.61	978143	752767	76.96	228.46	185.46	75.54
AVERAGE	61.60	34.90	244535	188191	71.64	290.97	204.06	82.76

CONTD...

1	2	3	4	5	6	7	8	8
MAHARASHTRA								
AURANGABAD	49.00	42.00	417157	320000	76.71	117.46	131.25	85.71
AMRAVATI	29.00	29.00	312814	310000	99.10	92.71	93.55	100.00
AKOLA	37.96	28.00	268472	194000	72.26	141.39	144.33	73.76
AHMEDNAGAR	49.94	31.78	234121	206000	87.99	213.31	154.27	63.64
BHUSAVAL	21.00	12.33	142257	95000	66.78	147.62	129.79	58.71
BHIWANDI	22.00	22.00	144027	128690	89.35	152.75	170.95	100.00
CHANDRAPUR	12.00	11.00	150069	91000	60.64	79.96	120.88	91.67
DHULE	20.00	20.00	272759	220400	80.80	73.32	90.74	100.00
GONDIYA	12.50	6.00	116870	104675	89.57	106.96	57.32	48.00
ICHALKARANJI	36.00	23.00	172259	141613	82.21	208.99	162.41	63.89
JALGAON	20.00	20.00	174931	174000	99.47	114.33	114.94	100.00
JALNA	11.25	10.35	145894	123000	84.31	77.11	84.15	92.00
KOLHAPUR	81.90	75.08	401432	299200	74.53	204.02	250.94	91.67
LATUR	30.00	18.00	148259	134478	90.70	202.35	133.85	60.00
MALEGAON	22.50	19.50	285359	145847	51.11	78.85	133.70	86.67
NASIK	51.75	49.47	333406	144000	43.19	155.22	343.54	95.59
NANDED	32.00	32.00	245074	234000	95.48	130.57	136.75	100.00
SANGLI	52.00	26.00	180299	173329	96.13	288.41	150.00	50.00
SOLAPUR	135.00	120.43	593536	396000	66.72	227.45	304.12	89.21
THANE	0.0	113.00	443247	443247	100.00	0.0	254.94	0.0
ULHASNAGAR	75.00	60.00	366187	325060	88.77	204.81	184.58	80.00
TOTAL	800.80	768.94	5548429	4403539	79.37	156.86	174.62	96.02
AVERAGE	40.04	36.62	264210	209692	80.75	150.88	159.38	81.53
MANIPUR								
IMPHAL								
	48.12	21.00	204556	79914	39.07	235.24	262.78	43.64
TOTAL	48.12	21.00	204556	79914	39.07	235.24	262.78	43.64
AVERAGE	48.12	21.00	204556	79914	39.07	235.24	262.78	43.64
MEGHALAYA								
SHILLONG								
	4.03	4.00	124668	70000	56.15	32.33	57.14	99.26
TOTAL	4.03	4.00	124668	70000	56.15	32.33	57.14	99.26
AVERAGE	4.03	4.00	124668	70000	56.15	32.33	57.14	99.26

CONTD...

1	2	3	4	5	6	7	8	8
ORISSA								
CUTTACK	78.92	71.14	329064	272084	82.68	239.83	261.46	90.14
SAMBALPUR	11.36	11.36	151902	73000	48.06	74.79	155.62	100.00
TOTAL	90.28	82.50	480966	345084	71.75	187.71	239.07	91.38
AVERAGE	45.14	41.25	240483	172542	65.37	157.31	208.54	95.07
PUNJAB								
AMRITSAR	100.00	100.00	746253	439998	58.96	134.00	227.27	100.00
BHATINDA	23.25	7.00	206088	62755	30.45	112.82	111.54	30.11
JALANDHAR	83.00	52.00	494904	303000	61.22	167.71	171.62	62.65
LUDHIANA	0.0	7.67	782221	386042	49.35	0.0	19.87	0.0
PATIALA	68.00	66.00	248840	185675	74.62	273.27	355.46	97.06
PATHANKOT	20.00	13.74	137016	71650	52.29	145.97	191.77	68.70
TOTAL	294.25	246.41	2615322	1449120	55.41	160.52	170.04	83.74
AVERAGE	58.85	41.07	435887	241520	54.48	166.75	179.59	71.70
RAJASTHAN								
AJMER	8.50	5.50	465288	0	0.0	18.27	0.0	64.71
BHARATPUR	13.50	11.25	136795	105000	76.76	98.69	107.14	83.33
GANGANAGAR	9.00	0.0	149650	143692	96.02	60.14	0.0	0.0
JODHPUR	94.10	71.00	669848	666736	99.54	140.48	106.49	75.45
UDAIPUR	35.51	26.35	289730	288991	99.74	122.56	91.18	74.20
TOTAL	160.61	114.10	1711311	1204419	96.66	93.85	107.57	75.26
AVERAGE	32.12	38.03	342262	301104	93.01	88.03	101.60	74.42
TAMIL NADU								
CUDDALORE	5.87	5.87	146568	109952	75.02	40.05	53.39	100.00
DINDIGUL	20.44	12.12	190102	76215	40.09	107.52	159.02	59.30
ERODE	15.00	13.73	170570	118000	69.18	87.94	116.36	91.53
KANCHIPURAM	8.05	6.60	144828	122225	84.39	55.58	54.00	81.99
KUMBAKONAM	9.00	8.10	146264	144850	99.03	61.53	55.92	90.00
NAGERCOIL	71.54	14.40	192911	167320	86.73	370.84	86.06	20.13
RAJAPALAYAM	8.00	8.00	111618	77790	69.69	71.67	102.84	100.00
SALEM	0.0	45.00	397222	361177	90.93	0.0	124.59	0.0
TIRUCHIRAPALLI	50.00	45.00	399390	302650	75.78	125.19	148.69	90.00
TIRUNELVELI	20.40	12.50	142850	128850	90.20	142.81	97.01	61.27
TUTICORIN	14.00	14.00	219780	210000	95.55	63.70	66.67	100.00
TIRUPPUR	11.57	6.78	207190	158810	76.65	55.84	42.69	58.60
THANJAVUR	30.00	18.00	216307	190000	87.84	138.69	94.74	60.00
VELLORE	16.20	11.00	199481	195064	97.79	81.21	56.39	67.90
TOTAL	280.07	221.10	2885081	2362903	81.90	112.57	93.57	78.94
AVERAGE	21.54	15.79	206077	168778	81.35	107.89	89.88	75.44

CONTD...

Annex-C

C(2). Levels of Water Supply in Sampled Municipal Bodies, Arranged by Size Class of Cities, 1986-87

CITY-SIZE/TOWN	DESIGNED CAPACITY (MLD)	ACTUAL SUPPLY (MLD)	ESTIMATED POPULATION 1987	POPULATION SERVED WATER SUPPLY	POPULATION SERVED AS PROPORTION TO TOTAL (%)	PER CAPITA SUPPLY (LPCD)		WATER UTILIZATION RATIO (%)
						DESIGNED *	ACTUAL **	
CITY SIZE-I								
ANANTPUR	4.89	3.30	152016	113168	74.44	32.17	29.16	67.48
ADONI	15.50	9.00	126150	96300	76.34	122.87	93.46	58.06
BHIMAVARAM	6.82	5.25	134989	117990	87.41	50.52	44.50	76.98
CUDDAPAH	34.52	8.89	134551	130000	96.62	256.56	68.38	25.75
ELURU	67.50	13.24	198976	170272	85.57	339.24	77.76	19.61
MACHILIPATNAM	7.72	6.80	156862	104160	66.40	49.22	65.28	88.08
NIZAMABAD	42.70	41.40	241150	183000	75.89	177.07	226.23	96.96
PRODDATUR	10.70	10.70	137134	97300	70.95	78.03	109.97	100.00
TENALI	2.95	0.23	130266	3750	2.88	22.65	61.33	7.80
TIRUPATI	9.90	9.45	161351	101504	62.91	61.36	93.10	95.45
VIZIANAGRAM	10.98	10.80	135959	76549	56.30	80.76	141.09	98.36
JORHAT	0.0	1.28	274334	42000	15.31	0.0	30.48	0.0
BIHAR	3.00	3.00	194008	176323	90.88	15.46	17.01	100.00
DHANBAD	5.75	4.76	153688	50000	32.53	37.41	95.20	82.78
MUNGER	22.50	12.15	148584	102250	68.82	151.43	118.83	54.00
BHARUCH	0.0	9.00	122903	99330	80.82	0.0	90.61	0.0
JUNAGADH	29.89	22.62	135158	135000	99.88	221.15	167.56	75.68
NADIAD	0.0	21.20	168392	158000	93.83	0.0	134.18	0.0
NAVSARI	0.0	4.50	134199	126927	94.58	0.0	35.45	0.0
FORBANDAR	12.00	6.40	127782	100222	78.43	93.91	63.86	53.33
AMBALA	6.30	4.14	119561	80000	66.91	52.69	51.75	65.71
BHIWANI	18.00	18.67	123173	115170	93.50	146.14	162.11	103.72
HISSAR	0.0	15.75	165333	92540	55.97	0.0	170.20	0.0
KARNAL	28.57	25.69	163304	163000	99.81	174.95	157.61	89.92
PANIPAT	17.49	11.84	180636	95000	52.59	96.82	124.63	67.70
ROHTAK	9.90	5.62	198491	158490	79.85	49.88	35.46	56.77
YAMUNANAGAR	18.00	15.44	139726	86304	61.77	128.82	178.90	85.78
SHIMLA	29.96	11.80	81690	81690	100.00	366.75	144.45	39.39
BIJAPUR	19.80	9.00	181609	175000	96.36	109.03	51.43	45.45
DAVANGERE	0.0	20.14	262966	250000	95.07	0.0	80.56	0.0
GADAG BEIGERI	0.0	6.14	132886	108866	81.92	0.0	56.40	0.0
MANGALORE	31.90	27.50	176643	137593	77.89	180.59	199.86	86.21
MANDYA	12.55	12.55	122208	115000	94.10	102.69	109.13	100.00

* Worked out with total population, 1987.

** Worked out with population served, 1987.

CONTD...

	1	2	3	4	5	6	7	8	8
RAICHUR	18.16		18.38	163090	64550	39.58	111.35	284.74	101.21
SHIMOGA	6.71		6.71	191863	136263	71.02	34.97	49.24	100.00
TUMKUR	5.40		2.89	140912	99616	70.69	38.32	29.01	53.52
ALLEPEY	8.50		6.80	176088	130000	73.83	48.27	52.31	80.00
PALGHAT	25.00		22.50	121692	121692	100.00	205.44	184.89	90.00
QUILON	0.0		3.50	146902	116798	79.51	0.0	29.97	0.0
BURHAMPUR	113.50		54.80	168018	150000	89.28	675.52	365.33	48.28
KHANDWA	10.56		10.56	137811	52517	38.11	76.63	201.08	100.00
RATLAM	0.0		13.50	169201	127000	75.06	0.0	106.30	0.0
AHMEDNAGAR	49.94		31.78	234121	206000	87.99	213.31	154.27	63.64
BHUSAVAL	21.00		12.33	142257	95000	66.78	147.62	129.79	58.71
BHIWANDI	22.00		22.00	144027	128690	89.35	152.75	170.95	100.00
CHANDRAPUR	12.00		11.00	150069	91000	60.64	79.96	120.88	91.67
GONDIYA	12.50		6.00	116870	104675	89.57	106.96	57.32	48.00
ICHALKARANJI	36.00		23.00	172259	141613	82.21	208.99	162.41	63.89
JALGAON	20.00		20.00	174931	174000	99.47	114.33	114.94	100.00
JALNA	11.25		10.35	145894	123000	84.31	77.11	84.15	92.00
LATUR	30.00		18.00	148259	134478	90.70	202.35	133.85	60.00
NANDED	32.00		32.00	245074	234000	95.48	130.57	136.75	100.00
SANGLI	52.00		26.00	180299	173329	96.13	288.41	150.00	50.00
IMPHAL	48.12		21.00	204556	79914	39.07	235.24	262.78	43.64
SHILLONG	4.03		4.00	124668	70000	56.15	32.33	57.14	99.26
SAMBALPUR	11.36		11.36	151902	73000	48.06	74.79	155.62	100.00
BHATINDA	23.25		7.00	206088	62755	30.45	112.82	111.54	30.11
PATHANKOT	20.00		13.74	137016	71650	52.29	145.97	191.77	68.70
BHARATPUR	13.50		11.25	136795	105000	76.76	98.69	107.14	83.33
GANGANAGAR	9.00		0.0	149650	143692	96.02	60.14	0.0	0.0
CUDDALORE	5.87		5.87	146568	109952	75.02	40.05	53.39	100.00
DINDIGUL	20.44		12.12	190102	76215	40.09	107.52	159.02	59.30
ERODE	15.00		13.73	170570	118000	69.18	87.94	116.36	91.53
KANCHIPURAM	8.05		6.60	144828	122225	84.39	55.58	54.00	81.99
KUMBAKONAM	9.00		8.10	146264	144850	99.03	61.53	55.92	90.00
NAGARCOIL	71.54		14.40	192911	167320	86.73	370.84	86.06	20.13
RAJAPALAYAM	8.00		8.00	111618	77790	69.69	71.67	102.84	100.00
TIRUNELVELI	20.40		12.50	142850	128850	90.20	142.81	97.01	61.27
TUTICORIN	14.00		14.00	219780	210000	95.55	63.70	66.67	100.00
TIRUPPUR	11.57		6.78	207190	158810	76.65	55.84	42.69	58.60
THANJAVUR	30.00		18.00	216307	190000	87.84	138.69	94.74	60.00
VELLORE	16.20		11.00	199481	195064	97.79	81.21	56.39	67.90
AGARTALA	16.65		15.30	156030	61000	39.10	106.71	250.82	91.89
AMROHA	9.29		9.29	135661	112500	82.93	68.48	82.58	100.00
BULANDSHAHAR	38.04		11.53	144126	61721	42.82	263.94	186.81	30.31
FARUKHABAD	55.20		25.98	179830	119673	66.55	306.96	217.09	47.07

CONTD....

1	2	3	4	5	6	7	8	8
FAIZABAD	20.16	16.99	101300	75000	74.04	199.01	226.53	84.28
HARIDWAR	57.11	49.30	143662	135000	93.97	397.53	365.19	86.32
HAPUR	18.00	14.50	128147	100000	78.04	140.46	145.00	80.56
JAUNPUR	24.40	15.00	123192	110000	89.29	198.06	136.36	61.48
MUZAFFARNAGAR	0.0	7.87	218864	200000	91.38	0.0	39.35	0.0
MIRZAPUR-VINDYACHAL	25.40	23.00	143003	131000	91.61	177.62	175.57	90.55
SHAHJAHANPUR	60.00	20.00	223664	200000	89.42	268.26	100.00	33.33
SAMBHAL	3.38	2.03	123963	17500	14.12	27.27	116.00	60.06
BARDHAMAN	19.10	18.00	183687	161549	87.95	103.98	111.42	94.24
NABADWIP	3.15	2.56	120703	32328	26.78	26.10	79.19	81.27
TOTAL	1675.52	1171.15	13811291	10269277	74.35	139.45	115.66	70.28
AVERAGE	22.05	13.78	160596	119410	74.25	137.27	118.91	73.32
CITY SIZE-II								
KAKINADA	21.00	20.34	274540	150000	54.64	76.49	135.60	96.86
NELLORE	25.20	15.44	334444	250000	74.75	75.35	61.76	61.27
RAJAHMUNDRY	32.70	24.28	229768	204800	89.13	142.32	118.55	74.25
JAMNAGAR	60.75	31.50	338275	325000	96.08	179.59	96.92	51.85
BELGAUM	54.00	24.30	339571	229283	67.52	159.02	105.98	45.00
AURANGABAD	49.00	42.00	417157	320000	76.71	117.46	131.25	85.71
AMRAVATI	29.00	29.00	312814	310000	99.10	92.71	93.55	100.00
AKOLA	37.96	28.00	268472	194000	72.26	141.39	144.33	73.76
DHULE	20.00	20.00	272759	220400	80.80	73.32	90.74	100.00
MALGAON	22.50	19.50	285359	145847	51.11	78.85	133.70	86.67
NASIK	51.75	49.47	333406	144000	43.19	155.22	343.54	95.59
ULHASNAGAR	75.00	60.00	366187	325060	88.77	204.81	184.58	80.00
CUTTACK	78.92	71.14	329064	272084	82.68	239.83	261.46	90.14
PAITALA	68.00	66.00	248840	185675	74.62	273.27	355.46	97.06
UDALPUR	35.51	26.35	289730	288991	99.74	122.56	91.18	74.20
DEHRADUN	50.74	50.44	244366	240592	98.46	207.64	209.65	99.41
FIROZABAD	22.00	20.00	259255	207777	80.14	84.86	96.26	90.91
GHAZIABAD	49.32	49.32	446325	285200	63.90	110.50	172.93	100.00
RAMPUR	20.00	18.60	235892	83408	35.36	84.78	223.00	93.00
TOTAL	803.35	665.68	5826224	4382117	75.21	137.89	151.91	82.86
AVERAGE	42.28	35.04	306643	230637	75.21	137.89	160.55	83.98

CONTD....

1	2	3	4	5	6	7	8	
CITY SIZE-III								
GUNTUR	27.25	27.00	442566	251635	56.86	61.57	107.30	99.08
WARANGAL	88.20	73.00	446834	314877	70.47	197.39	231.84	82.77
BHAVNAGAR	120.00	72.00	369803	350000	94.64	324.50	205.71	60.00
CALICUT	40.50	40.50	435863	322000	73.88	92.92	125.78	100.00
RAIPUR	60.75	60.75	503113	423250	84.13	120.75	143.53	100.00
KOLHAPUR	81.90	75.08	401432	299200	74.53	204.02	250.94	91.67
THANE	0.0	113.00	443247	443247	100.00	0.0	254.94	0.0
AJMER	8.50	5.50	465288	0	0.0	18.27	0.0	64.71
SALEM	0.0	45.00	397222	361177	90.93	0.0	124.59	0.0
TIRUCHIRAPALLI	50.00	45.00	399390	302650	75.78	125.19	148.69	90.00
ALIGARH	0.0	3.47	370631	370000	99.83	0.0	9.38	0.0
BAREILLY	71.50	52.50	453802	429390	94.62	157.56	122.27	73.43
TOTAL	548.60	612.80	5129191	3867426	82.92	140.02	158.45	111.70
AVERAGE	60.96	55.71	427432	351584	83.24	144.68	156.81	84.63
CITY SIZE-IV								
VIJAYAWADA								
RAJKOT	81.67	81.68	564058	391267	69.37	144.79	208.76	100.01
MYSORE	110.00	61.00	563236	550000	97.65	195.30	110.91	55.45
JALANDHAR	95.34	95.34	503094	475876	94.59	189.51	200.35	100.00
MEERUT	83.00	52.00	494904	303000	61.22	167.71	171.62	62.65
	0.0	82.16	540879	231178	42.74	0.0	355.40	0.0
TOTAL	370.01	372.18	2666171	1951321	73.19	174.10	190.73	100.59
AVERAGE	92.50	74.44	533234	390264	73.11	174.33	209.41	79.53
CITY SIZE-V								
VISHAKHAPATNAM								
SRINAGAR	84.00	84.00	750539	551620	73.50	111.92	152.28	100.00
HUBLI DHARWAD	19.50	19.50	626360	596796	95.28	31.13	32.67	100.00
COCHIN	26.10	16.67	642305	422950	65.85	40.63	39.41	63.87
SOLAPUR	30.00	30.00	563646	280583	49.78	53.22	106.92	100.00
AMRITSAR	135.00	120.43	593536	396000	66.72	227.45	304.12	89.21
JODHPUR	100.00	100.00	746253	439998	58.96	134.00	227.27	100.00
	94.10	71.00	669848	666736	99.54	140.48	106.49	75.45
TOTAL	488.70	441.60	4592487	3354683	73.05	106.41	131.64	90.36
AVERAGE	69.81	63.09	656069	479240	72.80	105.55	138.45	89.79

CONTD....

1	2	3	4	5	6	7	8	8
CITY SIZE-VI								
LUDHIANA	0.0	7.67	782221	386042	49.35	0.0	19.87	0.0
AGRA	285.00	196.00	763853	595200	77.92	373.11	329.30	68.77
ALLAHABAD	232.00	179.11	706217	695865	98.53	328.51	257.39	77.20
TOTAL	517.00	382.78	2252291	1677107	74.46	351.68	228.24	74.04
AVERAGE	258.50	127.59	750763	559035	75.27	350.81	202.19	72.99
CITY SIZE-VII								
VADODARA	167.50	136.55	964141	900000	93.35	173.73	151.72	81.52
TOTAL	167.50	136.55	964141	900000	93.35	173.73	151.72	81.52
AVERAGE	167.50	136.55	964141	900000	93.35	173.73	151.72	81.52
INDIA								
AVERAGE	4531.00	3739.00	35241796	26401931	75.92	146.58	142.39	82.68
	38.40	28.54	264975	200014	75.18	141.24	134.79	77.18

C(3). Quantities of Refuse Generation and Disposal in Sampled Municipal Bodies, Arranged Statewise, 1986-87

STATE/TOWN	REFUSE GENERATION (TONNES/DAY)	REFUSE COLLECTED/ DISPOSED (TONNES/DAY)	PER CAPITA GENERATION	COLLECTED/ DISPOSED (GRAMS/DAY)	RATIO OF COLLECTION TO GENERATION (%)	TOTAL NUMBER OF SCAVENGERS	NUMBER OF SCAVENGERS PER 1000 POPULATION
1	2	3	4	5	6	7	8
ANDHRA PRADESH							
ANANTPUR	20	12	131.57	78.94	60.00	24	0.16
ADONI	34	21	269.52	166.47	61.76	103	0.82
BHIMAVARAM	36	22	266.69	162.98	61.11	56	0.41
CUDDAPAH	30	18	222.96	133.78	60.00	190	1.41
ELURU	33	20	165.85	100.51	60.61	55	0.28
GUNTUR	55	44	124.28	99.42	80.00	160	0.36
KAKINADA	90	79	327.82	287.75	87.78	228	0.83
KURNOOL	350	270	1324.77	1021.97	77.14	54	0.20
MACHILIPATNAM	50	44	318.75	280.50	88.00	131	0.84
NELLORE	40	32	119.60	95.68	80.00	119	0.36
NIZAMABAD	50	30	207.34	124.40	60.00	39	0.16
PRODDATUR	31	8	226.06	58.34	25.81	56	0.41
RAJAHMUNDRY	165	119	718.12	517.91	72.12	245	1.07
TENALI	22	13	168.89	99.80	59.09	35	0.27
TIRUPATI	120	73	743.72	452.43	60.83	76	0.47
VISHAKHAPATNAM	230	190	306.45	253.15	82.61	516	0.69
VIJAYAWADA	248	190	439.67	336.84	76.61	746	1.32
VIZIANAGRAM	28	23	205.94	169.17	82.14	87	0.64
WARANGAL	105	81	234.99	181.28	77.14	769	1.72
TOTAL	1737	1289	346.27	256.96	74.21	3689	0.74
AVERAGE	91	67	343.31	243.23	69.09	194	0.65
ASSAM							
DIBRUGARH	14	6	118.87	50.95	42.86	39	0.33
JORHAT	62	47	226.00	171.32	75.81	42	0.15
TINSUKIA	53	44	331.94	275.57	83.02	83	0.52
TOTAL	129	97	233.79	175.80	75.19	164	0.30
AVERAGE	43	32	225.60	165.95	67.23	54	0.33

CONTD.....

1	2	3	4	5	6	7	8
BIHAR							
	70	54	360.81	278.34	77.14	280	1.44
DHANBAD	52	42	338.35	273.28	80.77	42	0.27
KATI HAR	18	9	131.38	65.69	50.00	100	0.73
MUNGER	120	48	807.62	323.05	40.00	438	2.95
TOTAL	260	153	410.55	241.60	58.85	860	1.36
AVERAGE	65	38	409.54	235.09	61.98	215	1.35
GUJARAT							
	100	60	270.41	162.25	60.00	56	0.15
BHAVNAGAR	54	27	439.37	219.69	50.00	54	0.44
JAMNAGAR	110	51	325.18	150.76	46.36	672	1.99
JUNAGADH	37	24	273.75	177.57	64.86	48	0.36
NADIAD	40	34	237.54	201.91	85.00	24	0.14
NAVSARI	53	27	394.94	201.19	50.94	217	1.62
FORBANDAR	68	63	532.16	493.03	92.65	290	2.27
RAJKOT	120	70	213.05	124.28	58.33	1500	2.66
TOTAL	582	356	296.98	181.66	61.17	2861	1.46
AVERAGE	72	44	335.80	216.34	63.52	357	1.20
HARYANA							
	30	15	250.92	125.46	50.00	45	0.38
AMBALA	80	69	649.49	560.19	86.25	231	1.88
BHIWANI	42	39	254.03	235.89	92.86	40	0.24
HISSAR	42	28	257.19	171.46	66.67	36	0.22
KARNAL	65	60	359.84	332.16	92.31	367	2.03
PANIPAT	32	28	229.02	200.39	87.50	446	3.19
YAMUNANAGAR							
TOTAL	291	239	326.33	268.02	82.13	1165	1.31
AVERAGE	48	39	333.42	270.92	79.26	194	1.32
HIMACHAL PRADESH							
	79	48	967.07	587.59	60.76	338	4.14
SHIMLA							
TOTAL	79	48	967.07	587.59	60.76	338	4.14
AVERAGE	79	48	967.07	587.59	60.76	338	4.14

CONTD.....

1	2	3	4	5	6	7	8
JAMMU & KASHMIR							
JAMMU	50	34	204.69	139.19	68.00	57	0.23
SRINAGAR	400	300	638.61	478.96	75.00	103	0.16
TOTAL	450	334	516.87	383.63	74.22	160	0.18
AVERAGE	225	167	421.65	309.07	71.50	80	0.20
KARNATAKA							
BELGAUM	45	22	132.52	64.79	48.89	84	0.25
BELLARY	115	108	428.66	402.57	93.91	332	1.24
BIJAPUR	20	17	110.13	93.61	85.00	248	1.37
DAVANGERE	50	36	190.14	136.90	72.00	36	0.14
GULBARGA	0	52	0.0	182.74	0.0	0	0.0
GADAG BETGERI	20	18	150.50	135.45	90.00	8	0.06
HUBLI DHARWAD	70	48	108.98	74.73	68.57	692	1.08
MYSORE	300	204	596.31	405.49	68.00	68	0.14
MANGALORE	200	180	1132.23	1019.00	90.00	200	1.13
MANDYA	60	45	490.97	368.22	75.00	140	1.15
RAICHUR	40	30	245.26	183.95	75.00	26	0.16
SHIMOGA	35	24	182.42	125.09	68.57	520	2.71
TUMKUR	42	30	298.06	212.90	71.43	130	0.92
TOTAL	997	814	292.38	238.71	81.64	2484	0.73
AVERAGE	83	62	338.85	261.96	75.53	207	0.86
KERALA							
ALLEPPEY	15	10	85.18	56.79	66.67	49	0.28
COCHIN	150	120	266.12	212.90	80.00	960	1.70
CALICUT	70	56	160.60	128.48	80.00	639	1.47
PALGHAT	20	16	164.35	131.48	80.00	200	1.64
TRIVANDRUM	196	166	367.49	311.24	84.69	965	1.81
TOTAL	451	368	246.36	201.02	81.60	2813	1.54
AVERAGE	90	73	208.75	168.18	78.27	562	1.38

CONTD.....

1	2	3	4	5	6	7	8
MADHYA PRADESH							
BURHAMPUR	25	16	148.79	95.23	64.00	65	0.39
KHANDWA	12	7	87.08	50.79	58.33	40	0.29
RAIPUR	114	73	226.59	145.10	64.04	910	1.81
RATLAM	50	40	295.51	236.41	80.00	148	0.87
UJJAIN	100	84	297.34	249.76	84.00	75	0.22
TOTAL	301	220	228.99	167.37	73.09	1238	0.94
AVERAGE	60	44	211.06	155.46	70.07	247	0.72
MAHARASHTRA							
AURANGABAD	280	133	671.21	318.82	47.50	78	0.19
AMRAVATI	180	72	575.42	230.17	40.00	0	0.0
AKOLA	48	24	178.79	89.39	50.00	300	1.12
AHMEDNAGAR	82	60	350.25	256.28	73.17	386	1.65
BHUSAVAL	28	15	196.83	105.44	53.57	27	0.19
BHIWANDI	145	97	1006.76	673.48	66.90	904	6.28
CHANDRAPUR	50	44	333.18	293.20	88.00	52	0.35
DHULE	120	50	439.95	183.31	41.67	50	0.18
GONDIYA	40	30	342.26	256.70	75.00	150	1.28
ICHALKARANJTI	40	30	232.21	174.16	75.00	150	1.28
JALGAON	40	28	228.66	160.06	70.00	404	2.35
JALNA	47	41	322.15	281.03	87.23	0	0.0
KOLHAPUR	162	150	403.56	373.66	92.59	178	1.22
LATUR	10	6	67.45	40.47	60.00	779	1.94
MALEGAON	400	378	1401.74	1324.65	94.50	109	0.74
NASIK	106	92	317.93	275.94	86.79	295	1.03
NANDED	62	48	252.98	195.86	77.42	1190	3.57
PARBHANI	35	30	226.72	194.33	85.71	417	1.70
SANGLI	54	42	299.50	232.95	77.78	27	0.17
SOLAPUR	150	125	252.72	210.60	83.33	295	1.64
THANE	300	208	676.82	469.26	69.33	94	0.16
ULHASNAGAR	190	135	518.86	368.66	71.05	1000	2.26
TOTAL	2569	1838	450.48	322.30	71.55	6762	1.19
AVERAGE	116	83	422.54	304.93	71.21	338	1.40
MANIPUR							
IMPHAL	25	18	122.22	88.00	72.00	142	0.69
TOTAL	25	18	122.22	88.00	72.00	142	0.69
AVERAGE	25	18	122.22	88.00	72.00	142	0.69

CONTD....

1	2	3	4	5	6	7	8
MEGHALAYA							
SHILLONG	34	26	272.72	208.55	76.47	39	0.31
TOTAL	34	26	272.72	208.55	76.47	39	0.31
AVERAGE	34	26	272.72	208.55	76.47	39	0.31
NAGALAND							
KOHIMA	25	18	550.39	396.28	72.00	20	0.44
TOTAL	25	18	550.39	396.28	72.00	20	0.44
AVERAGE	25	18	550.39	396.28	72.00	20	0.44
ORISSA							
BHUBNESWAR	25	6	73.53	17.65	24.00	732	2.15
BRAHMAPUR	50	30	253.38	152.03	60.00	326	1.65
CUTTACK	190	113	577.40	343.40	59.47	685	2.08
PURI	60	45	488.05	366.04	75.00	216	1.76
SAMBALPUR	18	16	118.50	105.33	88.89	143	0.94
TOTAL	343	210	300.56	184.01	61.22	2102	1.84
AVERAGE	68	42	302.17	196.89	61.47	420	1.72
PUNJAB							
AMRITSAR	600	525	804.02	703.51	87.50	250	0.34
BHATINDA	127	102	616.24	494.93	80.31	66	0.32
JALANDHAR	150	44	303.09	88.91	29.33	320	0.65
LUDHIANA	313	186	400.14	237.78	59.42	2146	2.74
PATIALA	105	57	421.96	229.06	54.29	250	1.00
PATHANKOT	18	13	131.37	94.88	72.22	25	0.18
TOTAL	1313	927	502.04	354.45	70.60	3057	1.17
AVERAGE	218	154	446.14	308.18	63.85	509	0.87

CONTD.....

1	2	3	4	5	6	7	8
RAJASTHAN							
AJMER	205	160	440.59	343.87	78.05	72	0.15
ALWAR	75	53	411.20	290.58	70.67	290	1.59
BIKANER	470	120	1555.39	397.12	25.53	609	2.02
BHILWARA	36	28	230.87	179.56	77.78	433	2.78
BHARATPUR	95	73	694.47	533.65	76.84	200	1.46
GANGANAGAR	50	33	334.11	220.51	66.00	240	1.60
JODHPUR	300	260	447.86	388.15	86.67	1832	2.73
KOTA	181	136	369.84	277.89	75.14	2132	4.36
SIKAR	30	20	233.07	155.38	66.67	225	1.75
UDAIPUR	90	73	310.63	251.96	81.11	970	3.35
TOTAL	1532	956	515.84	321.89	62.40	7003	2.36
AVERAGE	153	95	502.80	303.87	70.44	700	2.18
TAMIL NADU							
CUDDALORE	28	16	191.04	109.16	57.14	96	0.65
DINDIGUL	95	61	499.73	320.88	64.21	408	2.15
ERODE	70	63	410.39	369.35	90.00	212	1.24
KANCHIPURAM	52	34	359.05	234.76	65.38	95	0.66
KUMBAKONAM	20	14	136.74	95.72	70.00	39	0.27
NAGERCOIL	20	12	103.67	62.20	60.00	90	0.47
RAJAPALAYAM	38	16	340.45	143.35	42.11	52	0.47
SALEM	300	244	755.25	614.27	81.33	556	1.40
TIRUCHIRAPALLI	60	51	150.23	127.69	85.00	142	0.36
TIRUNELVELI	28	23	196.01	161.01	82.14	126	0.88
TUTICORIN	15	8	68.25	36.40	53.33	15	0.07
TIRUPPUR	13	9	62.74	43.44	69.23	11	0.05
THANJAVUR	54	35	249.65	161.81	64.81	529	2.45
VELLORE	54	38	270.70	190.49	70.37	333	1.67
TOTAL	847	624	293.58	216.29	73.67	2704	0.94
AVERAGE	60	44	270.99	190.75	68.22	193	0.91
TRIPURA							
AGARTALA	92	52	589.63	333.27	56.52	181	1.16
TOTAL	92	52	589.63	333.27	56.52	181	1.16
AVERAGE	92	52	589.63	333.27	56.52	181	1.16

CONTD.....

1	2	3	4	5	6	7	8
UTTAR PRADESH							
AGRA	0	2	0.0	2.62	0.0	0	0.0
ALLAHABAD	350	270	495.60	382.32	77.14	479	0.68
ALIGARH	60	32	161.89	86.34	53.33	64	0.17
AMROHA	80	60	589.71	442.28	75.00	130	0.96
BAREILLY	400	328	881.44	722.78	82.00	208	0.46
BULANDSHAHR	50	30	346.92	208.15	60.00	200	1.39
DEHRADUN	140	99	572.91	405.13	70.71	44	0.18
FIROZABAD	200	161	771.44	621.01	80.50	300	1.16
FARRUKHABAD	44	33	244.68	183.51	75.00	55	0.31
FAIZABAD	45	32	444.23	315.89	71.11	90	0.89
GORAKHPUR	215	190	643.76	568.90	88.37	760	2.28
HAZIABAD	42	35	94.10	78.42	83.33	1201	2.69
HARIDWAR	48	42	334.12	292.35	87.50	70	0.49
HAPUR	60	45	468.21	351.16	75.00	125	0.98
JHANSI	55	44	180.99	144.79	80.00	524	1.72
MEERUT	534	460	987.28	850.47	86.14	674	1.25
MUZAFFARNAGAR	40	21	182.76	95.95	52.50	58	0.27
MATHURA	65	38	412.36	241.07	58.46	150	0.95
MIRZAPUR-VINDYACHAL	65	60	454.54	419.57	92.31	220	1.54
RAMPUR	160	80	678.28	339.14	50.00	0	0.0
SHAJJAHANPUR	25	20	111.77	89.42	80.00	90	0.40
SAMBHAL	113	88	911.56	709.89	77.88	0	0.0
TOTAL	2791	2170	438.91	341.25	77.75	5442	0.86
AVERAGE	132	98	474.69	343.23	74.11	286	0.99

CONTD.....

1	2	3	4	5	6	7	8
WEST BENGAL							
	45	33	244.98	179.65	73.33	687	3.74
BARDHAMAN							
BALURGHAT	25	18	182.97	131.74	72.00	72	0.53
KHARAGPUR	31	20	120.76	77.91	64.52	242	0.94
NABADWIP	27	24	223.69	198.84	88.89	178	1.47
SILIGURI	35	26	105.11	78.08	74.29	163	0.49
TOTAL	163	121	158.14	117.39	74.23	1342	1.30
AVERAGE	32	24	175.50	133.24	74.60	268	1.43
GOA DAMAN & DIU							
PANAJI	40	30	816.48	612.36	75.00	300	6.12
TOTAL	40	30	816.48	612.36	75.00	300	6.12
AVERAGE	40	30	816.48	612.36	75.00	300	6.12
INDIA	15051	10908	377.75	273.77	72.47	44866	1.13
AVERAGE	98	70	372.57	262.92	70.56	301	1.16

Annex-C

C(4). Quantities of Refuse Generation and Disposal in Sampled Municipal Bodies, Arranged by Size Class of Cities, 1986-87

CITY SIZE/TOWN	REFUSE GENERATION (TONNES/DAY)		PER CAPITA (GRAMS/DAY)		RATIO OF COLLECTION TO GENERATION (%)	TOTAL NUMBER OF SCAVENGERS	NUMBER OF SCAVENGERS PER 1000 POPULATION
	2	3	4	5			
1					6	7	8
CITY SIZE-I							
ANANTPUR	20	12	131.57	78.94	60.00	24	0.16
ADONI	34	21	269.52	166.47	61.76	103	0.82
BHIMAVARAM	36	22	266.69	162.98	61.11	56	0.41
CUDDAPAH	30	18	222.96	133.78	60.00	190	1.41
ELURU	33	20	165.85	100.51	60.61	55	0.28
MACHILIPATNAM	50	44	318.75	280.50	88.00	131	0.84
NIZAMABAD	50	30	207.34	124.40	60.00	39	0.16
PRODDATUR	31	8	226.06	58.34	25.81	56	0.41
TENALI	22	13	168.89	99.80	59.09	35	0.27
TILUPATI	120	73	743.72	452.43	60.83	76	0.47
VIZIANAGRAM	28	23	205.94	169.17	82.14	87	0.64
DIBRUGARH	14	6	118.87	50.95	42.86	39	0.33
JORHAT	62	47	226.00	171.32	75.81	42	0.15
TINSUKIA	53	44	331.94	275.57	83.02	83	0.52
BIHAR	70	54	360.81	278.34	77.14	280	1.44
DHANBAD	52	42	338.35	273.28	80.77	42	0.27
KATI HAR	18	9	131.38	65.69	50.00	100	0.73
MUNGER	120	48	807.62	323.05	40.00	438	2.95
BHARUCH	54	27	439.37	219.69	50.00	54	0.44
JUNAGADH	37	24	273.75	177.57	64.86	48	0.36
NADIAD	40	34	237.54	201.91	85.00	24	0.14
NAVSARI	53	27	394.94	201.19	50.94	217	1.62
FORBANDAR	68	63	532.16	493.03	92.65	290	2.27
AMBALA	30	15	250.92	125.46	50.00	45	0.38
BHIWANI	80	69	649.49	560.19	86.25	231	1.88
HISSAR	42	39	254.03	235.89	92.86	40	0.24
KARNAL	42	28	257.19	171.46	66.67	36	0.22
PANIPAT	65	60	359.84	332.16	92.31	367	2.03
YAMUNANAGAR	32	28	229.02	200.39	87.50	446	3.19
SHIMLA	79	48	967.07	587.59	60.76	338	4.14

CONTD.....

1	2	3	4	5	6	7	8
BIJAPUR	20	17	110.13	93.61	85.00	248	1.37
DAVANGERE	50	36	190.14	136.90	72.00	36	0.14
GADAG BETGERI	20	18	150.50	135.45	90.00	8	0.06
MANGALORE	200	180	1132.23	1019.00	90.00	200	1.13
MANDYA	60	45	490.97	368.22	75.00	140	1.15
RAICHUR	40	30	245.26	183.95	75.00	26	0.16
SHIMOGA	35	24	182.42	125.09	68.57	520	2.71
TUMKUR	42	30	298.06	212.90	71.43	130	0.92
ALLEPPEY	15	10	85.18	56.79	66.67	49	0.28
PALGHAT	20	16	164.35	131.48	80.00	200	1.64
BURHAMPUR	25	16	148.79	95.23	64.00	65	0.39
KHANDWA	12	7	87.08	50.79	58.33	40	0.29
RAYLAM	50	40	295.51	236.41	80.00	148	0.87
AHMEDNAGAR	82	60	350.25	256.28	73.17	386	1.65
BHUSAVAL	28	15	196.83	105.44	53.57	27	0.19
BHIWANDI	145	97	1006.76	673.48	66.90	904	6.28
CHANDRAPUR	50	44	333.18	293.20	88.00	52	0.35
GONDIYA	40	30	342.26	256.70	75.00	150	1.28
ICHALKARANJJI	40	30	232.21	174.16	75.00	404	2.35
JALGAON	40	28	228.66	160.06	70.00	0	0.0
JALNA	47	41	322.15	281.03	87.23	178	1.22
LATUR	10	6	67.45	40.47	60.00	109	0.74
NANDED	62	48	252.98	195.86	77.42	417	1.70
PARBHANI	35	30	226.72	194.33	85.71	27	0.17
SANGLI	54	42	299.50	232.95	77.78	295	1.64
IMPHAL	25	18	122.22	88.00	72.00	142	0.69
SHILLONG	34	26	272.72	208.55	76.47	39	0.31
KOHIMA	25	18	550.39	396.28	72.00	20	0.44
BRAHMAPUR	50	30	253.38	152.03	60.00	326	1.65
PURI	60	45	488.05	366.04	75.00	216	1.76
SAMBALPUR	18	16	118.50	105.33	88.89	143	0.94
BHATINDA	127	102	616.24	494.93	80.31	66	0.32
PATHANKOT	18	13	131.37	94.88	72.22	25	0.18
ALWAR	75	53	411.20	290.58	70.67	290	1.59
BHILWARA	36	28	230.87	179.56	77.78	433	2.78
BHARATPUR	95	73	694.47	533.65	76.84	200	1.46
GANGANAGAR	50	33	334.11	220.51	66.00	240	1.60
SIKAR	30	20	233.07	155.38	66.67	225	1.75
CUDDALORE	28	16	191.04	109.16	57.14	96	0.65
DINDIGUL	95	61	499.73	320.88	64.21	408	2.15
ERODE	70	63	410.39	369.35	90.00	212	1.24
KANCHIPURAM	52	34	359.05	234.76	65.38	95	0.66
KUMBAKONAM	20	14	136.74	95.72	70.00	39	0.27

1	2	3	4	5	6	7	8
NAGERCOIL	20	12	103.67	62.20	60.00	90	0.47
RAJAPALAYAM	38	16	340.45	143.35	42.11	52	0.47
TIRUNELVELI	28	23	196.01	161.01	82.14	126	0.88
TUTICORIN	15	8	68.25	36.40	53.33	15	0.07
TIRUPPUR	13	9	62.74	43.44	69.23	11	0.05
THANJAVUR	54	35	249.65	161.81	64.81	529	2.45
VELLORE	54	38	270.70	190.49	70.37	333	1.67
AGARTALA	92	52	589.63	333.27	56.52	181	1.16
AMROHA	80	60	589.71	442.28	75.00	130	0.96
BULANDSHAHAR	50	30	346.92	208.15	60.00	200	1.39
FARRUKHABAD	44	33	244.68	183.51	75.00	55	0.31
FAIZABAD	45	32	444.23	315.89	71.11	90	0.89
HARIDWAR	48	42	334.12	292.35	87.50	70	0.49
HAPUR	60	45	468.21	351.16	75.00	125	0.98
MUZAFFARNAGAR	40	21	182.76	95.95	52.50	58	0.27
MATHURA	65	38	412.36	241.07	58.46	150	0.95
MIRZAPUR-VINDYACHAL	65	60	454.54	419.57	92.31	220	1.54
SHAHJAHANPUR	25	20	111.77	89.42	80.00	90	0.40
SAMBHAL	113	88	911.56	709.89	77.88	0	0.0
BARDHAMAN	45	33	244.98	179.65	73.33	687	3.74
BALURGHAT	25	18	182.97	131.74	72.00	72	0.53
KEHRAGPUR	31	20	120.76	77.91	64.52	242	0.94
NABADWIP	27	24	223.69	198.84	88.89	178	1.47
SILIGURI	35	26	105.11	78.08	74.29	163	0.49
PANAJI	40	30	816.48	612.36	75.00	300	6.12
TOTAL	4747	3412	302.80	217.64	71.88	16153	1.03
AVERAGE	48	34	323.03	231.20	70.69	168	1.11
CITY SIZE-II							
KAKINADA	90	79	327.82	287.75	87.78	228	0.83
KURNOOL	350	270	1324.77	1021.97	77.14	54	0.20
NELLORE	40	32	119.60	95.68	80.00	119	0.36
RAJAHMUNDRY	165	119	718.12	517.91	72.12	245	1.07
JAMNAGAR	110	51	325.18	150.76	46.36	672	1.99
JAMMU	50	34	204.69	139.19	68.00	57	0.23
BELGAUM	45	22	132.52	64.79	48.89	84	0.25
BELLARY	115	108	428.66	402.57	93.91	332	1.24
GULBARGA	0	52	0.0	182.74	0.0	0	0.0
UJJAIN	100	84	297.34	249.76	84.00	75	0.22
AURANGABAD	280	133	671.21	318.82	47.50	78	0.19
AMRAVATI	180	72	575.42	230.17	40.00	0	0.0

CONTD.....

1	2	3	4	5	6	7	8
AKOLA	48	24	178.79	89.39	50.00	300	1.12
DHULE	120	50	439.95	183.31	41.67	50	0.18
MALEGAON	400	378	1401.74	1324.65	94.50	295	1.03
NASIK	106	92	317.93	275.94	86.79	1190	3.57
ULHASNAGAR	190	135	518.86	368.66	71.05	27	0.07
BHUBNESWAR	25	6	73.53	17.65	24.00	732	2.15
CUTTACK	190	113	577.40	343.40	59.47	685	2.08
PATIALA	105	57	421.96	229.06	54.29	250	1.00
BIKANER	470	120	1555.39	397.12	25.53	609	2.02
UDALPUR	90	73	310.63	251.96	81.11	970	3.35
DEHRADUN	140	99	572.91	405.13	70.71	44	0.18
FIROZABAD	200	161	771.44	621.01	80.50	300	1.16
GORAKHPUR	215	190	643.76	568.90	88.37	760	2.28
GHAZIABAD	42	35	94.10	78.42	83.33	1201	2.69
JHANSI	55	44	180.99	144.79	80.00	524	1.72
RAMPUR	160	80	678.28	339.14	50.00	0	0.0
TOTAL	4081	2713	479.90	319.03	66.48	9881	1.16
AVERAGE	151	96	513.44	332.17	66.19	395	1.25
CITY SIZE-III							
GUNTUR	55	44	124.28	99.42	80.00	160	0.36
WARANGAL	105	81	234.99	181.28	77.14	769	1.72
BHAVNAGAR	100	60	270.41	162.25	60.00	56	0.15
CALICUT	70	56	160.60	128.48	80.00	639	1.47
RAIPUR	114	73	226.59	145.10	64.04	910	1.81
KOLHAPUR	162	150	403.56	373.66	92.59	779	1.94
THANE	300	208	676.82	469.26	69.33	1000	2.26
AJMER	205	160	440.59	343.87	78.05	72	0.15
KOTA	181	136	369.84	277.89	75.14	2132	4.36
SALEM	300	244	755.25	614.27	81.33	556	1.40
TIRUCHIRAPALLI	60	51	150.23	127.69	85.00	142	0.36
ALIGARH	60	32	161.89	86.34	53.33	64	0.17
BAREILLY	400	328	881.44	722.78	82.00	208	0.46
TOTAL	2112	1623	375.90	288.86	76.85	7487	1.33
AVERAGE	162	124	373.58	287.10	75.23	575	1.28
CITY SIZE-IV							
VIJAYAWADA	248	190	439.67	336.84	76.61	746	1.32

CONTD.....

	1	2	3	4	5	6	7	8
RAJKOT	120	70	213.05	124.28	58.33	1500	2.66	
MYSORE	300	204	596.31	405.49	68.00	68	0.14	
TRIVANDRUM	196	166	367.49	311.24	84.69	965	1.81	
JALANDHAR	150	44	303.09	88.91	29.33	320	0.65	
MEERUT	534	460	987.28	850.47	86.14	674	1.25	
TOTAL	1548	1134	483.82	354.43	73.26	4273	1.34	
AVERAGE	258	189	484.48	352.87	67.19	712	1.30	
CITY SIZE-V								
VISHAKHAPATNAM	230	190	306.45	253.15	82.61	516	0.69	
SRINAGAR	400	300	638.61	478.96	75.00	103	0.16	
HUBLI DHARWAD	70	48	108.98	74.73	68.57	692	1.08	
COCHIN	150	120	266.12	212.90	80.00	960	1.70	
SOLAPUR	150	125	252.72	210.60	83.33	94	0.16	
AMRITSAR	600	525	804.02	703.51	87.50	250	0.34	
JODHPUR	300	260	447.86	388.15	86.67	1832	2.73	
TOTAL	1900	1568	413.72	341.43	82.53	4447	0.97	
AVERAGE	271	224	403.54	331.71	80.53	635	0.98	
CITY SIZE-VI								
LUDHIANA	313	186	400.14	237.78	59.42	2146	2.74	
AGRA	0	2	0.0	2.62	0.0	0	0.0	
ALLAHABAD	350	270	495.60	382.32	77.14	479	0.68	
TOTAL	663	458	294.37	203.35	69.08	2625	1.17	
AVERAGE	331	152	447.87	207.57	68.28	1312	1.71	
CITY SIZE-VII								
TOTAL	0	0	0.0	0.0	0.0	0	0.0	
AVERAGE	0	0	0.0	0.0	0.0	0	0.0	
INDIA	15051	10908	377.75	273.77	72.47	44866	1.13	
AVERAGE	98	70	372.57	262.92	70.56	301	1.16	

Annex-C

C(5). Population Served by Sewerage System in Sampled Municipal Bodies, Arranged Statewise, 1986-87

STATE/TOWN	ESTIMATED POPULATION 1987	POPULATION SERVED BY SEWERAGE SYSTEM	SERVED POPULATION AS PROPOR- TION TO TOTAL
1	2	3	4
ANDHRA PRADESH			
GUNTUR	442566	165962	37.50
RAJAHMUNDRY	229768	50641	22.04
TENALI	130266	43418	33.33
VISHAKHAPATNAM	750539	75054	10.00
VIJAYAWADA	564058	150434	26.67
VIZIANAGRAM	135959	96531	71.00
TOTAL	2253156	582040	25.83
AVERAGE	375526	97006	33.42
GUJARAT			
NAVSARI	134199	111009	82.72
VADODARA	964141	723105	75.00
TOTAL	1098340	834114	75.94
AVERAGE	549170	417057	78.86
HARYANA			
AMBALA	119561	10760	9.00
BHIWANI	123173	86221	70.00
HISSAR	165333	116626	70.54
KARNAL	163304	97982	60.00
PANIPAT	180636	46062	25.50
YAMUNANAGAR	139726	34932	25.00
TOTAL	891733	392583	44.02
AVERAGE	148622	65430	43.34

CONTD...

1	2	3	4
HIMACHAL PRADESH			
SHIMLA	81690	53098	65.00
TOTAL	81690	53098	65.00
AVERAGE	81690	53098	65.00
KARNATAKA			
BELGAUM	339571	271657	80.00
DAVANGERE	262966	46019	17.50
HUBLI DHARWAD	642305	513844	80.00
MYSORE	503094	452785	90.00
MANGALORE	176643	132482	75.00
TOTAL	1924579	1416787	73.62
AVERAGE	384915	283357	68.50
MADHYA PRADESH			
KHANDWA	137811	6684	4.85
TOTAL	137811	6684	4.85
AVERAGE	137811	6684	4.85
MAHARASHTRA			
AURANGABAD	417157	26072	6.25
AHMEDNAGAR	234121	180741	77.20
BHIWANDI	144027	5761	4.00
KOLHAPUR	401432	220788	55.00
NANDED	245074	124988	51.00
SOLAPUR	593536	508067	85.60
ULHASNAGAR	366187	153982	42.05
TOTAL	2401534	1220399	50.82
AVERAGE	343076	174342	45.87

CONTD...

1	2	3	4
PUNJAB			
AMRITSAR	746253	447752	60.00
BHATINDA	206088	92740	45.00
JALANDHAR	494904	346433	70.00
LUDHIANA	782221	391111	50.00
PATIALA	248840	124420	50.00
PATHANKOT	137016	27403	20.00
TOTAL	2615322	1429859	54.67
AVERAGE	435887	238309	49.17
RAJASTHAN			
BIKANER	302175	102740	34.00
JODHPUR	669848	435401	65.00
UDAIPUR	289730	500	0.17
TOTAL	1261753	538641	42.69
AVERAGE	420584	179547	33.06
TAMIL NADU			
ERODE	170570	42642	25.00
KUMBAKONAM	146264	46804	32.00
TOTAL	316834	89446	28.23
AVERAGE	158417	44723	28.50
UTTAR PRADESH			
AGRA	763853	190913	24.99
ALLAHABAD	706217	459041	65.00
ALIGARH	370631	37063	10.00
BAREILLY	453802	113451	25.00
DEHRADUN	244366	122183	50.00
FAIZABAD	101300	709	0.70
GORAKHPUR	333977	125000	37.43
GHAZIABAD	446325	100000	22.41
HAPUR	128147	15531	12.12
MATHURA	157628	67465	42.80
MIRZAPUR-VINDYACHAL	143003	4290	3.00
TOTAL	3849249	1235646	32.10
AVERAGE	349931	112331	26.68
INDIA	16832001	7799297	46.34
AVERAGE	336640	155985	41.93

Annex-C

C(6). Population Served by Sewerage System in Sampled Municipal Bodies, Arranged by Size Class of Cities, 1986-87

CITY SIZE/TOWN	ESTIMATED POPULATION 1987	POPULATION SERVED BY SEWERAGE SYSTEM	SERVED POPULATION AS PROPOR- TION TO TOTAL
1	2	3	4
CITY SIZE-I			
TENALI	130266	43418	33.33
VIZIANAGRAM	135959	96531	71.00
NAVSARI	134199	111009	82.72
AMBALA	119561	10760	9.00
BHIWANI	123173	86221	70.00
HISSAR	165333	116626	70.54
KARNAL	163304	97982	60.00
PANIPAT	180636	46062	25.50
YAMUNANAGAR	139726	34932	25.00
SHIMLA	81690	53098	65.00
DAVANGERE	262966	46019	17.50
MANGALORE	176643	132482	75.00
KHANDWA	137811	6684	4.85
AHMEDNAGAR	234121	180741	77.20
BHIWANDI	144027	5761	4.00
NANDED	245074	124988	51.00
BHATINDA	206088	92740	45.00
PATHANKOT	137016	27403	20.00
ERODE	170570	42642	25.00
KUMBAKONAM	146264	46804	32.00
FAIZABAD	101300	709	0.70
HAPUR	128147	15531	12.12
MATHURA	157628	67465	42.80
MIRZAPUR-VINDYACHAL	143003	4290	3.00
TOTAL	3764505	1490898	39.60
AVERAGE	156854	62120	38.43

CONTD...

1	2	3	4
CITY SIZE-II			
RAJAHMUNDRY	229768	50641	22.04
BELGAUM	339571	271657	80.00
AURANGABAD	417157	26072	6.25
ULHASNAGAR	366187	153982	42.05
PATIALA	248840	124420	50.00
BIKANER	302175	102740	34.00
UDAIPUR	289730	500	0.17
DEHRADUN	244366	122183	50.00
GORAKHPUR	333977	125000	37.43
GHAZIABAD	446325	100000	22.41
TOTAL	3218096	1077195	33.47
AVERAGE	321809	107719	34.43
CITY SIZE-III			
GUNTUR	442566	165962	37.50
KOLHAPUR	401432	220788	55.00
ALIGARH	370631	37063	10.00
BAREILLY	453802	113451	25.00
TOTAL	1668431	537264	32.20
AVERAGE	417107	134316	31.88
CITY SIZE-IV			
VIJAYAWADA	564058	150434	26.67
MYSORE	503094	452785	90.00
JALANDHAR	494904	346433	70.00
TOTAL	1562056	949652	60.80
AVERAGE	520685	316550	62.22
CITY SIZE-V			
VISHAKHAPATNAM	750539	75054	10.00
HUBLI DHARWAD	642305	513844	80.00
SOLAPUR	593536	508067	85.60
AMRITSAR	746253	447752	60.00
JODHPUR	669848	435401	65.00
TOTAL	3402481	1980118	58.20
AVERAGE	680496	396023	60.12

CONTD...

1	2	3	4
CITY SIZE-VI			
LUDHIANA	782221	391111	50.00
AGRA	763853	190913	24.99
ALLAHABAD	706217	459041	65.00
TOTAL	2252291	1041065	46.22
AVERAGE	750763	347021	46.66
CITY SIZE-VII			
VADODARA	964141	723105	75.00
TOTAL	964141	723105	75.00
AVERAGE	964141	723105	75.00
INDIA	16832001	7799297	46.34
AVERAGE	336640	155985	41.93

Annex-C

C(7). Population Served by Open Drainage System in
Sampled Municipal Bodies, Arranged Statewise, 1986-87

STATE/TOWN	ESTIMATED POPULATION 1987	POPULATION SERVED BY DRAINAGE SYSTEM	SERVED POPULATION AS PROPOR- TION TO TOTAL
1	2	3	4
ANDHRA PRADESH			
ANANTPUR	152016	114012	75.00
ADONI	126150	7120	5.64
BHIMAVARAM	134989	74244	55.00
CUDDAPAH	134551	67276	50.00
ELURU	198976	188749	94.86
GUNTUR	442566	331925	75.00
KURNOOL	264196	237776	90.00
MACHILIPATNAM	156862	15686	10.00
NI ZAMABAD	241150	171699	71.20
PRODDATUR	137134	37026	27.00
RAJAHMUNDRY	229768	140319	61.07
TENALI	130266	32567	25.00
TIRUPATI	161351	129081	80.00
VISHAKHAPATNAM	750539	562904	75.00
VIJAYAWADA	564058	300812	53.33
VIZIANAGRAM	135959	85654	63.00
WARANGAL	446834	357467	80.00
TOTAL	4407365	2854317	64.76
AVERAGE	259256	167901	58.30
ASSAM			
DIBRUGARH	117773	105996	90.00
JORHAT	274334	274339	100.00
TINSUKIA	159668	70254	44.00
TOTAL	551775	450589	81.66
AVERAGE	183925	150196	78.00

CONTD...

1	2	3	4
BIHAR			
BIHAR	194008	194008	100.00
DHANBAD	153688	96055	62.50
KATI HAR	137010	82206	60.00
MUNGER	148584	111438	75.00
TOTAL	633290	483707	76.38
AVERAGE	158322	120926	74.38
GUJARAT			
BHAVNAGAR	369803	269956	73.00
BHARUCH	122903	122903	100.00
JAMNAGAR	338275	105711	31.25
JUNAGADH	135158	108126	80.00
NADIAD	168392	101035	60.00
PORBANDAR	127782	72836	57.00
RAJKOT	563236	394265	70.00
TOTAL	1825549	1174832	64.35
AVERAGE	260792	167833	67.32
HARYANA			
AMBALA	119561	93258	78.00
HISSAR	165333	136086	82.31
KARNAL	163304	65322	40.00
PANI PAT	180636	90318	50.00
YAMUNANAGAR	139726	86630	62.00
TOTAL	768560	471614	61.36
AVERAGE	153712	94322	62.46
HIMACHAL PRADESH			
SHIMLA	81690	65352	80.00
TOTAL	81690	65352	80.00
AVERAGE	81690	65352	80.00

CONTD...

1	2	3	4
JAMMU & KASHMIR			
JAMMU	244273	87000	35.62
TOTAL	244273	87000	35.62
AVERAGE	244273	87000	35.62
KARNATAKA			
BELGAUM	339571	203743	60.00
BIJAPUR	181609	127126	70.00
DAVANGERE	262966	95983	36.50
GADAG BETGERI	132886	132886	100.00
HUBLI DHARWAD	642305	642305	100.00
MYSORE	503094	427630	85.00
MANGALORE	176643	123650	70.00
MANDYA	122208	24442	20.00
SHIMOGA	191863	15490	8.07
TUMKUR	140912	84547	60.00
TOTAL	2694057	1877802	69.70
AVERAGE	269405	187780	60.96
KERALA			
CALICUT	435863	217932	50.00
PALGHAT	121692	60846	50.00
TOTAL	557555	278778	50.00
AVERAGE	278777	139389	50.00
MADHYA PRADESH			
BURHAMPUR	168018	117646	70.02
KHANDWA	137811	76802	55.73
RAIPUR	503113	452802	90.00
RATLAM	169201	118441	70.00
UJJAIN	336318	232082	69.01
TOTAL	1314461	997773	75.91
AVERAGE	262892	199554	70.95

CONFID...

1	2	3	4
MAHARASHTRA			
AURANGABAD	417157	370227	88.75
AMRAVATI	312814	218970	70.00
AKOLA	268472	165083	61.49
AHMEDNAGAR	234121	170440	72.80
BHUSAVAL	142257	135144	95.00
BHIWANDI	144027	93618	65.00
CHANDRAPUR	150069	120055	80.00
DHULE	272759	81827	30.00
GONDIYA	116870	46748	40.00
ICHALKARANJI	172259	122304	71.00
JALGAON	174931	148691	85.00
JALNA	145894	90950	62.34
KOLHAPUR	401432	401432	100.00
LATUR	148259	90438	61.00
MALEGAON	285359	191191	67.00
NASIK	333406	136696	41.00
NANDED	245074	159298	65.00
PARBHANI	154375	61719	39.98
SANGLI	180299	180299	100.00
SOLAPUR	593536	85469	14.40
THANE	443247	385625	87.00
ULHASNAGAR	366187	212205	57.95
TOTAL	5702804	3668429	64.33
AVERAGE	259218	166746	66.12
MANIPUR			
IMPHAL	204556	108415	53.00
TOTAL	204556	108415	53.00
AVERAGE	204556	108415	53.00
ORISSA			
BHUBNESWAR	339977	186987	55.00
BRAHMAPUR	197331	128265	65.00
CUTTACK	329064	286286	87.00
SAMBALPUR	151902	121522	80.00
TOTAL	1018274	723060	71.01
AVERAGE	254568	180765	71.75

CONTD...

1	2	3	4
PUNJAB			
AMRITSAR	746253	634315	85.00
BHATINDA	206088	117759	57.14
JALANDHAR	494904	222707	45.00
LUDHIANA	782221	234666	30.00
PATIALA	248840	94559	38.00
PATHANKOT	137016	123314	90.00
TOTAL	2615322	1427320	54.58
AVERAGE	435887	237886	57.52
RAJASTHAN			
AJMER	465288	302437	65.00
ALWAR	182391	109435	60.00
BIKANER	302175	129935	43.00
BHILWARA	155935	102855	65.96
JODHPUR	669848	388512	58.00
KOTA	489399	358240	73.20
SIKAR	128715	117002	90.90
UDAIPUR	289730	202811	70.00
TOTAL	2683481	1711227	63.77
AVERAGE	335435	213903	65.76
TAMIL NADU			
CUDDALORE	146568	51299	35.00
DINDIGUL	190102	115943	60.99
ERODE	170570	82285	48.24
KANCHIPURAM	144828	100395	69.32
KUMBAKONAM	146264	99460	68.00
RAJAPALAYAM	111618	81716	73.21
SALEM	397222	397222	100.00
TIRUNELVELI	142850	118566	83.00
TUTICORIN	219780	219780	100.00
TIRUPPUR	207190	134674	65.00
THANJAVUR	216307	189052	87.40
VELLORE	199481	177538	89.00
TOTAL	2292780	1767930	77.11
AVERAGE	191065	147327	73.26

CONTD...

1	2	3	4
<u>TRIPURA</u>			
AGARTALA	156030	150000	96.14
TOTAL	156030	150000	96.14
AVERAGE	156030	150000	96.14
<u>UTTAR PRADESH</u>			
ALLAHABAD	706217	635595	90.00
ALIGARH	370631	247063	66.66
AMROHA	135661	108529	80.00
BAREILLY	453802	408422	90.00
DEHRADUN	244366	130809	53.53
FIROZABAD	259255	194441	75.00
FARRUKHABAD	179830	179830	100.00
FAIZABAD	101300	60070	59.30
GORAKHPUR	333977	125208	37.49
GHAZIABAD	446325	25000	5.60
HAPUR	128147	85423	66.66
JHANSI	303888	188411	62.00
JAUNPUR	123192	86234	70.00
MATHURA	157628	135087	85.70
MIRZAPUR-VINDYACHAL	143003	138712	97.00
RAMPUR	235892	188714	80.00
SHAHJAHANPUR	223664	178931	80.00
SAMBHAL	123963	86774	70.00
TOTAL	4670741	3203253	68.58
AVERAGE	259485	177958	70.50
INDIA	32422563	21501398	66.32
AVERAGE	255295	169302	66.11

Annex-C

C(8). Population Served by Open Drainage System in Sampled Municipal Bodies, Arranged by Size Class of Cities, 1986-87

STATE/TOWN	ESTIMATED POPULATION 1987	POPULATION SERVED BY DRAINAGE SYSTEM	SERVED POPULATION AS PROPOR- TION TO TOTAL
1	2	3	4
CITY SIZE-I			
ANANTPUR	152016	114012	75.00
ADONI	126150	7120	5.64
BHIMAVARAM	134989	74244	55.00
CUDDAPAH	134551	67276	50.00
ELURU	198976	188749	94.86
MACHILIPATNAM	156862	15686	10.00
NIZAMABAD	241150	171699	71.20
PRODDATUR	137134	37026	27.00
TENALI	130266	32567	25.00
TIRUPATI	161351	129081	80.00
VIZIANAGRAM	135959	85654	63.00
DIBRUGARH	117773	105996	90.00
JORHAT	274334	274339	100.00
TINSUKIA	159668	70254	44.00
BIHAR	194008	194008	100.00
DHANBAD	153688	96055	62.50
KATI HAR	137010	82206	60.00
MUNGER	148584	111438	75.00
BHARUCH	122903	122903	100.00
JUNAGADH	135158	108126	80.00
NADIAD	168392	101035	60.00
PORBANDAR	127782	72836	57.00
AMBALA	119561	93258	78.00
HISSAR	165333	136086	82.31
KARNAL	163304	65322	40.00
PANIPAT	180636	90318	50.00
YAMUNANAGAR	139726	86630	62.00
SHIMLA	81690	65352	80.00

CONTD...

1	2	3	4
BIJAPUR	181609	127126	70.00
DAVANGERE	262966	95983	36.50
GADAG BETGERI	132886	132886	100.00
MANGALORE	176643	123650	70.00
MANDYA	122208	24442	20.00
SHIMOGA	191863	15490	8.07
TUMKUR	140912	84547	60.00
PALGHAT	121692	60846	50.00
BURHAMPUR	168018	117646	70.02
KHANDWA	137811	76802	55.73
RATLAM	169201	118441	70.00
AHMEDNAGAR	234121	170440	72.80
BHUSAVAL	142257	135144	95.00
BHIWANDI	144027	93618	65.00
CHANDRAPUR	150069	120055	80.00
GONDIYA	116870	46748	40.00
ICHALKARANJI	172259	122304	71.00
JALGAON	174931	148691	85.00
JALNA	145894	90950	62.34
LATUR	148259	90438	61.00
NANDED	245074	159298	65.00
PARBHANI	154375	61719	39.98
SANGLI	180299	180299	100.00
IMPHAL	204556	108415	53.00
BRAHMAPUR	197331	128265	65.00
SAMBALPUR	151902	121522	80.00
BHATINDA	206088	117759	57.14
PATHANKOT	137016	123314	90.00
ALWAR	182391	109435	60.00
BHILWARA	155935	102855	65.96
SIKAR	128715	117002	90.90
CUDDALORE	146568	51299	35.00
DINDIGUL	190102	115943	60.99
ERODE	170570	82285	48.24
KANCHIPURAM	144828	100395	69.32
KUMBAKONAM	146264	99460	68.00
RAJAPALAYAM	111618	81716	73.21
TIRUNELVELI	142850	118566	83.00
TUTICORIN	219780	219780	100.00
TIRUPPUR	207190	134674	65.00
THANJAVUR	216307	189052	87.40
VELLORE	199481	177538	89.00
AGARTALA	156030	150000	96.14

CONTID...

1	2	3	4
AMROHA	135661	108529	80.00
FARRUKHABAD	179830	179830	100.00
FAIZABAD	101300	60070	59.30
HAPUR	128147	85423	66.66
JAUNPUR	123192	86234	70.00
MATHURA	157628	135087	85.70
MIRZAPUR-VINDYACHAL	143003	138712	97.00
SHAHJAHANPUR	223664	178931	80.00
SAMBHAL	123963	86774	70.00
TOTAL	12845108	8705704	67.77
AVERAGE	160563	108821	67.14
<u>CITY SIZE-II</u>			
KURNOOL	264196	237776	90.00
RAJAHMUNDRY	229768	140319	61.07
JAMNAGAR	338275	105711	31.25
JAMMU	244273	87000	35.62
BELGAUM	339571	203743	60.00
UJJAIN	336318	232082	69.01
AURANGABAD	417157	370227	88.75
AMRAVATI	312814	218970	70.00
AKOIA	268472	165083	61.49
DHULE	272759	81827	30.00
MALEGACH	285359	191191	67.00
NASIK	333406	136696	41.00
ULHASNAGAR	366187	212205	57.95
BHUBNESWAR	339977	186987	55.00
CUTTACK	329064	286286	87.00
PATIALA	248840	94559	38.00
BIKANER	302175	129935	43.00
UDAIPUR	289730	202811	70.00
DEHRADUN	244366	130809	53.53
FIROZABAD	259255	194441	75.00
GORAKHPUR	333977	125208	37.49
GHAZIABAD	446325	25000	5.60
JHANSI	303888	188411	62.00
RAMPUR	235892	188714	80.00
TOTAL	7342044	4135991	56.33
AVERAGE	305918	172332	57.07

CONTD...

1	2	3	4
<u>CITY SIZE-III</u>			
GUNTUR	442566	331925	75.00
WARANGAL	446834	357467	80.00
BHAVNAGAR	369803	269956	73.00
CALICUT	435863	217932	50.00
RAIPUR	503113	452802	90.00
KOLHAPUR	401432	401432	100.00
THANE	443247	385625	87.00
AJMER	465288	302437	65.00
KOTA	489399	358240	73.20
SALEM	397222	397222	100.00
ALIGARH	370631	247063	66.66
BAREILLY	453802	408422	90.00
TOTAL	5219200	4130523	79.14
AVERAGE	434933	344210	79.16
<u>CITY SIZE-IV</u>			
VIJAYAWADA	564058	300812	53.33
RAJKOT	563236	394265	70.00
MYSORE	503094	427630	85.00
JALANDHAR	494904	222707	45.00
TOTAL	2125292	1345414	63.30
AVERAGE	531323	336353	63.33
<u>CITY SIZE-V</u>			
VISHAKHAPATNAM	750539	562904	75.00
HUBLI DHARWAD	642305	642305	100.00
SOLAPUR	593536	85469	14.40
AMRITSAR	746253	634315	85.00
JODHPUR	669848	388512	58.00
TOTAL	3402481	2313505	67.99
AVERAGE	680496	462701	66.48
<u>CITY SIZE-VI</u>			
LUDHIANA	782221	234666	30.00
ALLAHABAD	706217	635595	90.00
TOTAL	1488438	870261	58.47
AVERAGE	744219	435130	60.00

CONTD...

C : 41

1	2	3	4
<u>CITY SIZE-VII</u>			
TOTAL	0	0	0.0
AVERAGE	0	0	0.0
INDIA	32422563	21501398	66.32
AVERAGE	255295	169302	66.11

Annex-C

C(9). Medical and Health Cover in Sampled Municipal Bodies,
Arranged Statewise, 1986-87

STATE/TOWN	POPULATION 1987	NUMBER OF MUNICIPAL PHC/DISP.	MUNICIPAL PHC/DISP. PER 20000 POP.
1	2	3	4
ANDHRA PRADESH			
ADONI	126150	1	0.16
BHIMAVARAM	134989	33	4.89
CUDDAPAH	134551	2	0.30
GUNTUR	442566	7	0.32
KAKINADA	274540	5	0.36
KURNOOL	264196	4	0.30
NELLORE	334444	4	0.24
NIZAMABAD	241150	1	0.08
PRODDATUR	137134	1	0.15
RAJAHMUNDRY	229768	13	1.13
TENALI	130266	9	1.38
TIRUPATI	161351	6	0.74
VISHAKHAPATNAM	750539	6	0.16
VIJAYAWADA	564058	14	0.50
VIZIANAGRAM	135959	2	0.29
TOTAL	4061661	108	0.53
AVERAGE	270777	7	0.73
ASSAM			
DIBRUGARH	117773	1	0.17
JORHAT	274334	1	0.07
TOTAL	392107	2	0.10
AVERAGE	196053	1	0.12

CONTD.....

1	2	3	4
BIHAR			
BIHAR	194008	3	0.31
DHANBAD	153688	51	6.64
KATIHAR	137010	1	0.15
MUNGER	148584	3	0.40
TOTAL	633290	58	1.83
AVERAGE	158322	14	1.87
GUJARAT			
BHARUCH	122903	8	1.30
JAMNAGAR	338275	3	0.18
JUNAGADH	135158	10	1.48
NADIAD	168392	1	0.12
NAVSARI	134199	5	0.75
PORBANDAR	127782	39	6.10
RAJKOT	563236	4	0.14
VADODARA	964141	15	0.31
TOTAL	2554086	85	0.67
AVERAGE	319260	10	1.30
HARYANA			
AMBALA	119561	2	0.33
HISSAR	165333	6	0.73
KARNAL	163304	4	0.49
ROHTAK	198491	3	0.30
YAMUNANAGAR	139726	5	0.72
TOTAL	786415	20	0.51
AVERAGE	157283	4	0.51
HIMACHAL PRADESH			
SHIMLA	81690	22	5.39
TOTAL	81690	22	5.39
AVERAGE	81690	22	5.39

CONTD....

1	2	3	4
JAMMU & KASHMIR			
JAMMU	244273	5	0.41
SRINAGAR	626360	16	0.51
TOTAL	870633	21	0.48
AVERAGE	435316	10	0.46
KARNATAKA			
BELGAUM	339571	14	0.82
BELLARY	268278	9	0.67
BLJAPUR	181609	2	0.22
DAVANGERE	262966	6	0.46
GULBARGA	284559	5	0.35
HUBLI DHARWAD	642305	9	0.28
MYSORE	503094	18	0.72
MANGALORE	176643	7	0.79
MANDYA	122208	3	0.49
RAICHUR	163090	4	0.49
TUMKUR	140912	2	0.28
TOTAL	3085235	79	0.51
AVERAGE	280475	7	0.51
KERALA			
COCHIN	563646	16	0.57
CALICUT	435863	6	0.28
PALGHAT	121692	1	0.16
QUILON	146902	74	10.07
TRIVANDRUM	533342	7	0.26
TOTAL	1801445	104	1.15
AVERAGE	360289	20	2.27
MADHYA PRADESH			
BURHAMPUR	168018	10	1.19
KHANDWA	137811	1	0.15
RAIPUR	503113	4	0.16
RATLAM	169201	3	0.35
UJJAIN	336318	7	0.42
TOTAL	1314461	25	0.38
AVERAGE	262892	5	0.45

CONTD.....

1	2	3	4
MAHARASHTRA			
AURANGABAD	417157	7	0.34
AMRAVATI	312814	15	0.96
AKOLA	268472	3	0.22
AHMEDNAGAR	234121	3	0.26
BHUSAVAL	142257	1	0.14
BHIWANDI	144027	1	0.14
DHULE	272759	8	0.59
GONDIYA	116870	50	8.56
ICHALKARANJI	172259	4	0.46
JALGAON	174931	2	0.23
JALNA	145894	40	5.48
KOLHAPUR	401432	23	1.15
LATUR	148259	3	0.40
NASIK	333406	17	1.02
NANDED	245074	5	0.41
PARBHANI	154375	59	7.64
SANGLI	180299	5	0.55
SOLAPUR	593536	21	0.71
THANE	443247	9	0.41
ULHASNAGAR	366187	5	0.27
TOTAL	5267376	281	1.07
AVERAGE	263368	14	1.50
MANIPUR			
TOTAL	0	0	0.0
AVERAGE	0	0	0.0
MEGHALAYA			
SHILLONG	124668	7	1.12
TOTAL	124668	7	1.12
AVERAGE	124668	7	1.12
NAGALAND			
KOHIMA	45422	2	0.88
TOTAL	45422	2	0.88
AVERAGE	45422	2	0.88

CONTD....

1	2	3	4
ORISSA			
BHUBNESWAR	339977	8	0.47
BRAHMAPUR	197331	1	0.10
CUTTACK	329064	6	0.36
PURI	122938	4	0.65
SAMBALPUR	151902	3	0.39
TOTAL	1141212	22	0.39
AVERAGE	228242	4	0.40
PUNJAB			
AMRITSAR	746253	11	0.29
BHATINDA	206088	7	0.68
JALANDHAR	494904	14	0.57
LUDHIANA	782221	3	0.08
PATIALA	248840	21	1.69
PATHANKOT	137016	6	0.88
TOTAL	2615322	62	0.47
AVERAGE	435887	10	0.70
RAJASTHAN			
AJMER	465288	18	0.77
ALWAR	182391	5	0.55
BIKANER	302175	22	1.46
BHILWARA	155935	15	1.92
BHARATPUR	136795	4	0.58
GANGANAGAR	149650	10	1.34
JODHPUR	669848	12	0.36
KOTA	489399	17	0.69
SIKAR	128715	6	0.93
TOTAL	2680196	109	0.81
AVERAGE	297799	12	0.96

CONTD....

1	2	3	4
TAMIL NADU			
CUDDALORE	146568	3	0.41
DINDIGUL	190102	4	0.42
KANCHIPURAM	144828	3	0.41
KUMBAKONAM	146264	3	0.41
NAGERCOIL	192911	1	0.10
RAJAPALAYAM	111618	2	0.36
SALEM	397222	8	0.40
TIRUNELVELI	142850	5	0.70
TUTICORIN	219780	1	0.09
TIRUPPUR	207190	1	0.10
THANJAVUR	216307	5	0.46
TOTAL	2115640	36	0.34
AVERAGE	192330	3	0.35
TRIPURA			
AGARTALA	156030	5	0.64
TOTAL	156030	5	0.64
AVERAGE	156030	5	0.64

CONTD.....

1	2	3	4
UTTAR PRADESH			
AGRA	763853	10	
ALLAHABAD	706217	15	0.26
ALIGARH	370631	6	0.42
AMROHA	135661	3	0.32
BAREILLY	453802	4	0.44
DEHRADUN	244366	11	0.18
FIROZABAD	259255	8	0.90
FAIZABAD	101300	1	0.62
GORAKHPUR	333977	2	0.20
GHAZIABAD	446325	2	0.12
HARIDWAR	143662	6	0.09
HAPUR	128147	3	0.84
JHANSI	303888	2	0.47
JAUNPUR	123192	1	0.13
MEERUT	540879	1	0.16
MUZAFFARNAGAR	218864	3	0.04
MATHURA	157628	1	0.27
MIRZAPUR-VINDYACHAL	143003	4	0.13
RAMPUR	235892	6	0.56
SHAHJAHANPUR	223664	2	0.51
SAMBHAL	123963	3	0.18
TOTAL	6158169	94	0.48
AVERAGE	293246	4	0.31
WEST BENGAL			
BARDHAMAN	183687	1	
BALURGHAT	136637	3	0.11
KHARAGPUR	256697	3	0.44
NABADWIP	120703	13	0.23
SILIGURI	332986	1	2.15
TOTAL	1030710	21	0.06
AVERAGE	206142	4	0.41
GOA			
PANAJI	48991	6	2.45
TOTAL	48991	6	2.45
AVERAGE	48991	6	2.45
INDIA	36964759	1169	0.63
AVERAGE	265933	8	0.87

Annex-C

C(10). Medical and Health Cover in Sampled Municipal Bodies,
Arranged by Size Class of Cities, 1986-87

CITY SIZE/TOWN	POPULATION 1987	NUMBER OF MUNICIPAL PHC/DISP.	MUNICIPAL PHC/DISP. PER 20000 POP.
1	2	3	4
CITY SIZE-I			
ADONI	126150	1	0.16
BHIMAVARAM	134989	33	4.89
CUDDAPAH	134551	2	0.30
NI ZAMABAD	241150	1	0.08
PRODDATUR	137134	1	0.15
TENALI	130266	9	1.38
TIRUPATI	161351	6	0.74
VIZIANAGRAM	135959	2	0.29
DIBRUGARH	117773	1	0.17
JORHAT	274334	1	0.07
BIHAR	194008	3	0.31
DHANBAD	153688	51	6.64
KATI HAR	137010	1	0.15
MUNGER	148584	3	0.40
BHARUCH	122903	8	1.30
JUNAGADH	135158	10	1.48
NADIAD	168392	1	0.12
NAVSARI	134199	5	0.75
FORBANDAR	127782	39	6.10
AMBALA	119561	2	0.33
HISSAR	165333	6	0.73
KARNAL	163304	4	0.49
ROHTAK	198491	3	0.30
YAMUNANAGAR	139726	5	0.72
SHIMLA	81690	22	5.39
BIJAPUR	181609	2	0.22
DAVANGERE	262966	6	0.46
MANGALORE	176643	7	0.79
MANDYA	122208	3	0.49
RAICHUR	163090	4	0.49
TUMKUR	140912	2	0.28

CONTD....

1	2	3	4
PALGHAT	121692	1	0.16
QUILON	146902	74	10.07
BURHAMPUR	168018	10	1.19
KHANDWA	137811	1	0.15
RATLAM	169201	3	0.35
AHMEDNAGAR	234121	3	0.26
BHUSAVAL	142257	1	0.14
BHIWANDI	144027	1	0.14
GONDIYA	116870	50	8.56
ICHALKARANJI	172259	4	0.46
JALGAON	174931	2	0.23
JALNA	145894	40	5.48
LATUR	148259	3	0.40
NANDED	245074	5	0.41
PARBHANI	154375	59	7.64
SANGLI	180299	5	0.55
SHILLONG	124668	7	1.12
KOHIMA	45422	2	0.88
BRAHMAPUR	197331	1	0.10
PURI	122938	4	0.65
SAMBALPUR	151902	3	0.39
BHATINDA	206088	7	0.68
PATHANKOT	137016	6	0.88
ALWAR	182391	5	0.55
BHILWARA	155935	15	1.92
BHARATPUR	136795	4	0.58
GANGANAGAR	149650	10	1.34
SIKAR	128715	6	0.93
CUDDALORE	146568	3	0.41
DINDIGUL	190102	4	0.42
KANCHIPURAM	144828	3	0.41
KUMBAKONAM	146264	3	0.41
NAGERCOIL	192911	1	0.10
RAJAPALAYAM	111618	2	0.36
TIRUNELVELI	142850	5	0.70
TUTICORIN	219780	1	0.09
TIRUPPUR	207190	1	0.10
THANJAVUR	216307	5	0.46
AGARTALA	156030	5	0.64
AMROHA	135661	3	0.44
FAIZABAD	101300	1	0.20
HARIDWAR	143662	6	0.84
HAPUR	128147	3	0.47

CONTD.....

1	2	3	4
JAUNPUR	123192	1	0.16
MUZAFFARNAGAR	218864	3	0.27
MATHURA	157628	1	0.13
MIRZAPUR-VINDYACHAL	143003	4	0.56
SHAHJAHANPUR	223664	2	0.18
SAMBHAL	123963	3	0.48
BARDHAMAN	183687	1	0.11
BALURGHAT	136637	3	0.44
KHARAGPUR	256697	3	0.23
NABADWIP	120703	13	2.15
SILIGURI	332986	1	0.06
PANAJI	48991	6	2.45
TOTAL	13624988	663	0.97
AVERAGE	158430	7	1.11
CITY SIZE-II			
KAKINADA	274540	5	0.36
KURNOOL	264196	4	0.30
NELLORE	334444	4	0.24
RAJAHMUNDRY	229768	13	1.13
JAMNAGAR	338275	3	0.18
JAMMU	244273	5	0.41
BELGAUM	339571	14	0.82
BELLARY	268278	9	0.67
GULBARGA	284559	5	0.35
UJJAIN	336318	7	0.42
AURANGABAD	417157	7	0.34
AMRAVATI	312814	15	0.96
AKOLA	268472	3	0.22
DHULE	272759	8	0.59
NASIK	333406	17	1.02
ULHASNAGAR	366187	5	0.27
BHUBNESWAR	339977	8	0.47
CUTTACK	329064	6	0.36
PATIALA	248840	21	1.69
BIKANER	302175	22	1.46
DEHRADUN	244366	11	0.90

CONTD.....

1	2	3	4
FIROZABAD	259255	8	0.62
GORAKHPUR	333977	2	0.12
GHAZIABAD	446325	2	0.09
RAMPUR	235892	6	0.51
TOTAL	8503865	212	0.50
AVERAGE	304952	8	0.56
CITY SIZE-III			
GUNTUR	442566	7	0.32
CALICUT	435863	6	0.28
RAIPUR	503113	4	0.16
KOLHAPUR	401432	23	1.15
THANE	443247	9	0.41
AJMER	465288	18	0.77
KOTA	489399	17	0.69
SALEM	397222	8	0.40
ALIGARH	370631	6	0.32
BAREILLY	453802	4	0.18
TOTAL	4402563	102	0.46
AVERAGE	440256	10	0.47
CITY SIZE-IV			
VIJAYAWADA	564058	14	0.50
RAJKOT	563236	4	0.14
MYSORE	503094	18	0.72
TRIVANDRUM	533342	7	0.26
JALANDHAR	494904	14	0.57
MEERUT	540879	1	0.04
TOTAL	3199513	58	0.36
AVERAGE	533252	9	0.37

CONTD....

1	2	3	4
CITY SIZE-V			
VISHAKHAPATNAM	750539	6	0.16
SRINAGAR	626360	16	0.51
HUBLI DHARWAD	642305	9	0.28
COCHIN	563646	16	0.57
SOLAPUR	593536	21	0.71
AMRITSAR	746253	11	0.29
JODHPUR	669848	12	0.36
TOTAL	4592487	91	0.40
AVERAGE	656069	13	0.41
CITY SIZE-VI			
LUDHIANA	782221	3	0.08
AGRA	763853	10	0.26
ALLAHABAD	706217	15	0.42
TOTAL	2252291	28	0.25
AVERAGE	750763	9	0.25
CITY SIZE-VII			
VADODARA	964141	15	0.31
TOTAL	964141	15	0.31
AVERAGE	964141	15	0.31
INDIA	36964759	1169	0.63
AVERAGE	265933	8	0.87

Annex-C

C(11). Provision of Street Lighting in Sampled Municipal Bodies, Arranged Statewise, 1986-87

STATE/TOWN	1	2	3	4	5	6
	TOTAL ROAD LENGTH (KMS.)	LIGHTED ROAD LENGTH (KMS.)	NO. OF LAMP POST	% OF LIGHTED ROAD LENGTH TO TOTAL	NO. OF LAMP POST PER KM. OF TOTAL ROAD LENGTH	
ANDHRA PRADESH						
ANANTPUR	160.85	160.85	3031	100.00	18	
ADONI	41.25	41.25	3480	100.00	84	
BHIMAVARAM	72.99	61.80	2062	84.67	28	
CUDDAPAH	184.34	68.92	1723	37.39	9	
ELURU	157.80	157.80	3421	100.00	21	
GUNTUR	777.04	285.24	9538	36.71	12	
KAKINADA	321.50	321.50	5946	100.00	18	
KURNOOL	158.35	14.31	3950	9.04	24	
MACHILIPATNAM	206.40	206.40	5546	100.00	26	
NELLORE	430.70	430.70	11564	100.00	26	
NIZAMABAD	71.80	71.80	3997	100.00	55	
PRODDATUR	76.72	76.72	2022	100.00	26	
RAJAHMUNDRY	175.86	175.86	4909	100.00	27	
TENALI	145.25	133.25	2700	91.74	18	
TIRUPATI	86.45	16.07	2860	18.59	33	
VISHAKHAPATNAM	658.38	285.00	9447	43.29	14	
VIJAYAWADA	507.41	402.30	13668	79.28	26	
VIZIANAGRAM	121.74	121.74	2575	100.00	21	
WARANGAL	379.08	379.08	9242	100.00	24	
TOTAL	4733.91	3410.59	101681	72.05	21	
AVERAGE	249.15	179.50	5351	78.98	26	
ASSAM						
DIBRUGARH	150.00	6.00	1072	4.00	7	
JORHAT	91.71	8.00	616	8.72	6	
TINSUKIA	48.41	41.00	4630	84.69	95	
TOTAL	290.12	55.00	6318	18.96	21	
AVERAGE	96.71	18.33	2106	32.47	36	

CONTD..

1	2	3	4	5	6
BIHAR					
BIHAR	51.90	35.00	1028	67.44	19
DHANBAD	53.00	53.00	13	100.00	0
KATI HAR	63.00	63.00	1200	100.00	19
MUNGER	162.20	64.20	1258	39.58	7
TOTAL	330.10	215.20	3499	65.19	10
AVERAGE	82.53	53.80	874	76.75	15
GUJARAT					
BHAVNAGAR					
BHARUCH	230.01	230.01	8318	100.00	36
JAMNAGAR	64.61	64.61	4483	100.00	69
JUNAGADH	284.49	104.00	10600	36.56	37
NADIAD	79.41	79.41	3431	100.00	43
NAVSARI	346.54	131.00	5439	37.80	15
FORBANDAR	175.00	175.00	3869	100.00	22
RAJKOT	107.93	107.93	3350	100.00	31
VADODARA	567.00	460.00	13800	81.13	24
TOTAL	1323.74	1022.70	23325	77.26	17
AVERAGE	3178.73	2374.66	76615	74.70	24
	353.19	263.85	8512	81.42	32
HARYANA					
AMBALA					
BHIWANI	106.50	106.50	2640	100.00	24
HISSAR	38.50	38.50	3136	100.00	81
KARNAL	59.00	59.00	2389	100.00	40
PANIPAT	86.93	83.60	4092	96.17	47
ROHTAK	52.00	18.00	2703	34.62	51
YAMUNANAGAR	84.00	84.00	3862	100.00	45
TOTAL	278.00	98.55	2057	35.45	7
AVERAGE	704.93	488.15	20879	69.25	29
	100.70	69.74	2982	80.89	42

CONTD..

1	2	3	4	5	6
HIMACHAL PRADESH					
SHIMLA	131.72	70.00	2758	53.14	20
TOTAL	131.72	70.00	2758	53.14	20
AVERAGE	131.72	70.00	2758	53.14	20
JAMMU & KASHMIR					
JAMMU	75.00	45.00	55628	60.00	741
TOTAL	75.00	45.00	55628	60.00	741
AVERAGE	75.00	45.00	55628	60.00	741
KARNATAKA					
BELGAUM	457.30	457.30	11554	100.00	25
BELLARY	325.00	325.00	7641	100.00	23
DAVANGERE	227.58	227.58	8762	100.00	38
GULBARGA	288.00	165.00	6931	57.29	24
GADAG BEITGERI	86.05	86.05	3470	100.00	40
HUBLI DHARWAD	365.23	35.00	12238	9.58	33
MYSORE	451.78	451.78	17300	100.00	38
MANDYA	122.30	122.30	3304	100.00	27
RAICHUR	263.85	263.85	2285	100.00	8
SHIMOGA	94.08	94.08	3284	100.00	34
TUMKUR	177.24	177.24	2348	100.00	13
TOTAL	2858.41	2405.18	79117	84.14	27
AVERAGE	259.86	218.65	7192	87.90	27
KERALA					
ALLEPPEY	85.68	85.68	4658	100.00	54
COCHIN	727.43	727.43	10200	100.00	14
CALICUT	331.19	313.00	11975	94.51	36
PALGHAT	137.45	137.45	3199	100.00	23
QUILON	147.29	146.29	4889	99.32	33
TRIVANDRUM	326.00	326.00	23150	100.00	71
TOTAL	1755.04	1735.85	58071	98.91	33
AVERAGE	292.51	289.31	9678	98.97	38

CONTD..

1	2	3	4	5	6
MADHYA PRADESH					
BURHAMPUR	43.33	43.33	3467	100.00	80
KHANDWA	86.78	25.00	2578	28.81	29
RAIPUR	186.49	186.49	8318	100.00	44
RATLAM	123.50	123.50	6182	100.00	50
UJJAIN	282.13	209.00	6360	74.08	22
TOTAL	722.23	587.32	26905	81.32	37
AVERAGE	144.45	117.46	5381	80.58	45
MAHARASHTRA					
AURANGABAD	576.05	156.00	6155	27.08	10
AMRAVATI	437.61	388.50	9708	88.78	22
AKOLA	387.67	291.84	9730	75.28	25
AHMEDNAGAR	141.00	141.00	8372	100.00	59
BHUSAVAL	81.59	81.59	2779	100.00	34
BHIWANDI	174.51	174.51	5524	100.00	31
CHANDRAPUR	124.90	124.90	4019	100.00	32
DRULE	204.57	162.00	4909	79.19	23
GONDIYA	149.70	135.00	3332	90.18	22
ICHALKARANJI	234.98	132.50	4678	56.39	19
JALGAON	112.05	112.05	3970	100.00	35
JALNA	97.80	97.80	6843	100.00	69
KOLHAPUR	264.00	264.00	14870	100.00	56
LATUR	71.17	71.17	3621	100.00	50
MALEGAON	219.46	184.75	5279	84.18	24
NASIK	565.91	565.91	14807	100.00	26
NANDED	207.25	207.25	6125	100.00	29
PARBHANI	118.39	23.45	3612	19.81	30
SANGLI	230.37	230.00	3296	99.84	14
SOLAPUR	244.97	236.40	7810	96.50	31
THANE	73.50	68.37	3889	93.02	52
ULHASNAGAR	96.88	28.00	8800	28.90	90
TOTAL	4814.33	3876.99	142128	80.53	29
AVERAGE	218.83	176.23	6460	83.60	35

CONTD..

1	2	3	4	5	6
MEGHALAYA					
SHILLONG	28.98	28.98	2102	100.00	72
TOTAL	28.98	28.98	2102	100.00	72
AVERAGE	28.98	28.98	2102	100.00	72
NAGALAND					
KOHIMA	102.00	50.40	1120	49.41	10
TOTAL	102.00	50.40	1120	49.41	10
AVERAGE	102.00	50.40	1120	49.41	10
ORISSA					
BHUBNESWAR	451.00	451.00	10796	100.00	23
BRAHMAPUR	152.42	152.42	3495	100.00	22
CUTTACK	273.79	273.79	7308	100.00	26
PURI	195.87	195.87	1968	100.00	10
SAMBALPUR	165.67	165.67	2421	100.00	14
TOTAL	1238.75	1238.75	25988	100.00	20
AVERAGE	247.75	247.75	5197	100.00	19
FUNJAB					
AMRITSAR	630.95	611.00	17926	96.84	28
BHATINDA	139.00	139.00	2860	100.00	20
JALANDHAR	373.84	197.00	8423	52.70	22
LUDHIANA	563.00	563.00	17419	100.00	30
PATIALA	495.00	495.00	10765	100.00	21
PATHANKOT	31.12	33.12	2300	106.43	73
TOTAL	2232.91	2038.12	59693	91.28	26
AVERAGE	372.15	339.69	9948	92.66	32

CONTD..

1	2	3	4	5	6
RAJASTHAN					
AJMER	282.50	186.80	9113	66.12	32
ALWAR	120.00	120.00	6078	100.00	50
BIKANER	173.40	173.40	7749	100.00	44
BHILWARA	114.36	114.36	8000	100.00	69
BHARATPUR	158.00	158.00	4208	100.00	26
GANGANAGAR	112.50	112.50	26	100.00	0
JODHPUR	415.36	415.36	20374	100.00	49
KOTA	413.80	413.80	13297	100.00	32
SIKAR	57.50	57.50	4480	100.00	77
UDALPUR	192.00	192.00	10007	100.00	52
TOTAL	2039.42	1943.72	83332	95.31	40
AVERAGE	203.94	194.37	8333	96.61	47
TAMIL NADU					
CUDDALORE	109.65	109.65	2886	100.00	26
DINDIGUL	103.17	103.17	3453	100.00	33
ERODE	74.16	74.16	2501	100.00	33
KANCHIPURAM	73.86	73.86	2427	100.00	32
KUMBAKONAM	83.98	82.74	2758	98.52	32
NAGERCOIL	141.81	141.81	4303	100.00	30
RAJAPALAYAM	90.46	90.46	2165	100.00	23
SALEM	225.30	255.30	7175	113.32	31
TIRUCHIRAPALLI	199.70	199.70	8944	100.00	44
TIRUNELVELI	86.02	86.02	3166	100.00	36
TUTICORIN	132.47	132.47	4206	100.00	31
TIRUPPUR	101.31	101.31	3086	100.00	30
VELLORE	94.20	94.20	3350	100.00	35
TOTAL	1516.09	1544.85	50420	101.90	33
AVERAGE	116.62	118.83	3878	100.91	32
TRIPURA					
AGARTALA	172.90	172.93	10730	100.02	62
TOTAL	172.90	172.93	10730	100.02	62
AVERAGE	172.90	172.93	10730	100.02	62

CONTD..

1	2	3	4	5	6
UTTAR PRADESH					
AGRA	1058.45	1058.45	20300	100.00	19
ALLAHABAD	418.19	418.19	15000	100.00	35
ALIGARH	504.60	230.00	5774	45.58	11
AMROHA	82.95	65.00	2005	78.36	24
BAREILLY	879.99	360.00	8598	40.91	9
BULANDSHAHR	209.41	70.00	3407	33.43	16
DEHRADUN	232.13	232.13	11000	100.00	47
FIROZABAD	156.56	85.06	2059	54.33	13
FARUKHABAD	84.75	12.00	2596	14.16	30
FAIZABAD	127.49	127.00	3568	99.62	27
GORAKHPUR	789.12	245.00	7750	31.05	9
GHAZIABAD	940.96	333.45	15339	35.44	16
HARIDWAR	143.29	130.00	3425	90.73	23
HAPUR	154.63	62.00	1404	40.10	9
JHANSI	171.60	98.00	2800	57.11	16
JAUNPUR	113.54	67.80	1937	59.71	17
MEERUT	730.10	210.00	6179	28.76	8
MUZAFFARNAGAR	513.97	500.00	6660	97.28	12
MATHURA	51.17	51.17	3537	100.00	69
MIRZAPUR-VINDYACHAL	162.83	162.83	2785	100.00	17
RAMPUR	305.13	77.56	3347	25.42	10
SHAHJAHANPUR	202.51	202.50	3961	100.00	19
SAMBHAL	87.79	13.65	1912	15.55	21
TOTAL	8121.16	4811.79	135343	59.25	16
AVERAGE	353.09	209.21	5884	62.94	20
WEST BENGAL					
BARHAMAN	87.35	80.00	4192	91.59	47
BALURGHAT	84.00	75.00	2500	89.29	29
KHARAGPUR	234.00	150.00	1530	64.10	6
NABADWIP	200.17	100.00	788	49.96	3
SILIGURI	149.54	120.00	3021	80.25	20
TOTAL	755.06	525.00	12031	69.53	15
AVERAGE	151.01	105.00	2406	75.04	21
INDIA					
AVERAGE	35735.00	27570.00	954358	77.15	26
	233.56	180.20	6237	81.87	35

Annex-C

C(12). Provision of Street Lighting in Sampled Municipal Bodies, Arranged by Size Class of Cities, 1986-87

CITY SIZE/TOWN	TOTAL		LIGHTED ROAD LENGTH (KMS.)	NO. OF LAMP POST	% OF LIGHTED ROAD LENGTH TO TOTAL	NO. OF LAMP POST PER KM. OF TOTAL ROAD LENGTH
	ROAD LENGTH (KMS.)	ROAD LENGTH				
1	2	3	4	5	6	6
CITY SIZE-I						
ANANTPUR	160.85	160.85	3031	100.00	18	
ADONI	41.25	41.25	3480	100.00	84	
BHIMAVARAM	72.99	61.80	2062	84.67	28	
CUDDAPAH	184.34	68.92	1723	37.39	9	
ELURU	157.80	157.80	3421	100.00	21	
MACHILIPATNAM	206.40	206.40	5546	100.00	26	
NIZAMABAD	71.80	71.80	3997	100.00	55	
PRODDATUR	76.72	76.72	2022	100.00	26	
TENALI	145.25	133.25	2700	91.74	18	
TIRUPATI	86.45	16.07	2860	18.59	33	
VIZIANAGRAM	121.74	121.74	2575	100.00	21	
DIBRUGARH	150.00	6.00	1072	4.00	7	
JORHAT	91.71	8.00	616	8.72	6	
TINSUKIA	48.41	41.00	4630	84.69	95	
BIHAR	51.90	35.00	1028	67.44	19	
DHANEAD	53.00	53.00	13	100.00	0	
KATI HAR	63.00	63.00	1200	100.00	19	
MUNGER	162.20	64.20	1258	39.58	7	
BHARUCH	64.61	64.61	4483	100.00	69	
JUNAGADH	79.41	79.41	3431	100.00	43	
NADIAD	346.54	131.00	5439	37.80	15	
NAVSARI	175.00	175.00	3869	100.00	22	
PORBANDAR	107.93	107.93	3350	100.00	31	
AMBALA	106.50	106.50	2640	100.00	24	
BHIWANI	38.50	38.50	3136	100.00	81	
HISSAR	59.00	59.00	2389	100.00	40	
KARNAL	86.93	83.60	4092	96.17	47	
PANIPAT	52.00	18.00	2703	34.62	51	
ROHTAK	84.00	84.00	3862	100.00	45	
YAMUNANAGAR	278.00	98.55	2057	35.45	7	

CONTD....

1	2	3	4	5	6
SHIMLA	131.72	70.00	2758	53.14	20
DAVANGERE	227.58	227.58	8762	100.00	38
GADAG BETIGERI	86.05	86.05	3470	100.00	40
MANDYA	122.30	122.30	3304	100.00	27
RAICHUR	263.85	263.85	2285	100.00	8
SHIMOGA	94.08	94.08	3284	100.00	34
TUMKUR	177.24	177.24	2348	100.00	13
ALLEPPEY	85.68	85.68	4658	100.00	54
PALGHAT	137.45	137.45	3199	100.00	23
QUILON	147.29	146.29	4889	99.32	33
BURHAMPUR	43.33	43.33	3467	100.00	80
KHANDWA	86.78	25.00	2578	28.81	29
RAITLAM	123.50	123.50	6182	100.00	50
AHMEDNAGAR	141.00	141.00	8372	100.00	59
BHUSAVAL	81.59	81.59	2779	100.00	34
BHIWADI	174.51	174.51	5524	100.00	31
CHANDRAPUR	124.90	124.90	4019	100.00	32
GONDIYA	149.70	135.00	3332	90.18	22
ICHALKARANJTI	234.98	132.50	4678	56.39	19
JALGAON	112.05	112.05	3970	100.00	35
JALNA	97.80	97.80	6843	100.00	69
LATUR	71.17	71.17	3621	100.00	50
NANDED	207.25	207.25	6125	100.00	29
PARBHANI	118.39	23.45	3612	19.81	30
SANGLI	230.37	230.00	3296	99.84	14
SHILLONG	28.98	28.98	2102	100.00	72
KOHIMA	102.00	50.40	1120	49.41	10
BRAHMAPUR	152.42	152.42	3495	100.00	22
PURI	195.87	195.87	1968	100.00	10
SAMBALPUR	165.67	165.67	2421	100.00	14
BHATINDA	139.00	139.00	2860	100.00	20
PATHANKOT	31.12	33.12	2300	106.43	73
ALWAR	120.00	120.00	6078	100.00	50
BHILWARA	114.36	114.36	8000	100.00	69
BHARATPUR	158.00	158.00	4208	100.00	26
GANGANAGAR	112.50	112.50	26	100.00	0
SIKAR	57.50	57.50	4480	100.00	77
CUDDALORE	109.65	109.65	2886	100.00	26
DINDIGUL	103.17	103.17	3453	100.00	33
ERODE	74.16	74.16	2501	100.00	33
KANCHIPURAM	73.86	73.86	2427	100.00	32
KUMBAKONAM	83.98	82.74	2758	98.52	32
NAGERCOIL	141.81	141.81	4303	100.00	30

1	2	3	4	5	6
RAJAPALAYAM	90.46	90.46	2165	100.00	23
TIRUNELVELLI	86.02	86.02	3166	100.00	36
TUTICORIN	132.47	132.47	4206	100.00	31
TIRUPPUR	101.31	101.31	3086	100.00	30
VELLORE	94.20	94.20	3350	100.00	35
AGARTALA	172.90	172.93	10730	100.02	62
AMROHA	82.95	65.00	2005	78.36	24
BULANDSHAHR	209.41	70.00	3407	33.43	16
FARRUKHABAD	84.75	12.00	2596	14.16	30
FAIZABAD	127.49	127.00	3568	99.62	27
HARIDWAR	143.29	130.00	3425	90.73	23
HAPUR	154.63	62.00	1404	40.10	9
JAUNPUR	113.54	67.80	1937	59.71	17
MUZAFFARNAGAR	513.97	500.00	6660	97.28	12
MATHURA	51.17	51.17	3537	100.00	17
MIRZAPUR-VINDYACHAL	162.83	162.83	2785	100.00	69
SHAHJAHANPUR	202.51	202.50	3961	100.00	17
SAMBHAL	87.79	13.65	1912	100.00	19
BARDHAMAN	87.35	80.00	4192	15.55	21
BALURGHAT	84.00	75.00	2500	91.59	47
KHARAGPUR	234.00	150.00	1530	89.29	29
NABADWIP	200.17	100.00	788	64.10	6
SILIGURI	149.54	120.00	3021	49.96	3
TOTAL	12225.59	10146.02	325357	82.99	26
AVERAGE	127.35	105.69	3389	84.86	32
CITY SIZE-II					
KAKINADA	321.50	321.50	5946	100.00	18
KURNOOL	158.35	14.31	3950	9.04	24
NELLORE	430.70	430.70	11564	100.00	26
RAJAHMUNDRY	175.86	175.86	4909	100.00	27
JAMNAGAR	284.49	104.00	10600	36.56	37
JAMMU	75.00	45.00	55628	60.00	741
BELGAUM	457.30	457.30	11554	100.00	25
BELLARY	325.00	325.00	7641	100.00	23
GULBARGA	288.00	165.00	6931	57.29	24
UJJAIN	282.13	209.00	6360	74.08	22
AURANGABAD	576.05	156.00	6155	27.08	10

CONTD...

1	2	3	4	5	6
AMRAVATI	437.61	388.50	9708	88.78	22
AKOLA	387.67	291.84	9730	75.28	25
DHULE	204.57	162.00	4909	79.19	23
MALEGAON	219.46	184.75	5279	84.18	24
NASIK	565.91	565.91	14807	100.00	26
ULHASNAGAR	96.88	28.00	8800	28.90	90
BHUBNESWAR	451.00	451.00	10796	100.00	23
CUTTACK	273.79	273.79	7308	100.00	26
PATIALA	495.00	495.00	10765	100.00	21
BIKANER	173.40	173.40	7749	100.00	44
UDAIPUR	192.00	192.00	10007	100.00	52
DEHRADUN	232.13	232.13	11000	100.00	47
FIROZABAD	156.56	85.06	2059	54.33	13
GORAKHPUR	789.12	245.00	7750	31.05	9
GHAZIABAD	940.96	333.45	15339	35.44	16
JHANSI	171.60	98.00	2800	57.11	16
RAMPUR	305.13	77.56	3347	25.42	10
TOTAL	9467.17	6681.06	273391	70.57	28
AVERAGE	338.11	238.61	9763	72.28	52
CITY SIZE-III					
GUNTUR	777.04	285.24	9538	36.71	12
WARANGAL	379.08	379.08	9242	100.00	24
BHAVNAGAR	230.01	230.01	8318	100.00	36
CALICUT	331.19	313.00	11975	94.51	36
RAIPUR	186.49	186.49	8318	100.00	44
KOLHAPUR	264.00	264.00	14870	100.00	56
THANE	73.50	68.37	3889	93.02	52
AJMER	282.50	186.80	9113	66.12	32
KOTA	413.80	413.80	13297	100.00	32
SALEM	225.30	255.30	7175	113.32	31
TIRUCHIRAPALLI	199.70	199.70	8944	100.00	44
ALIGARH	504.60	230.00	5774	45.58	11
BAREILLY	879.99	360.00	8598	40.91	9
TOTAL	4747.20	3371.79	119051	71.03	25
AVERAGE	365.17	259.37	9157	83.86	32

CONTD...

1	2	3	4	5	6
CITY SIZE-IV					
VIJAYAWADA	507.41	402.30	13668	79.28	26
RAJKOT	567.00	460.00	13800	81.13	24
MYSORE	451.78	451.78	17300	100.00	38
TRIVANDRUM	326.00	326.00	23150	100.00	71
JALANDHAR	373.84	197.00	8423	52.70	22
MEERUT	730.10	210.00	6179	28.76	8
TOTAL	2956.13	2047.08	82520	69.25	27
AVERAGE	492.69	341.18	13753	73.65	31
CITY SIZE-V					
VISHAKHAPATNAM	658.38	285.00	9447	43.29	14
HUBLI DHARWAD	365.23	35.00	12238	9.58	33
COCHIN	727.43	727.43	10200	100.00	14
SOLAPUR	244.97	236.40	7810	96.50	31
AMRITSAR	630.95	611.00	17926	96.84	28
JODHPUR	415.36	415.36	20374	100.00	49
TOTAL	3042.32	2310.19	77995	75.94	25
AVERAGE	507.05	385.03	12999	74.37	28
CITY SIZE-VI					
LUDHIANA	563.00	563.00	17419	100.00	30
AGRA	1058.45	1058.45	20300	100.00	19
ALLAHABAD	418.19	418.19	15000	100.00	35
TOTAL	2039.64	2039.64	52719	100.00	25
AVERAGE	679.88	679.88	17573	100.00	28
CITY SIZE-VII					
VADODARA	1323.74	1022.70	23325	77.26	17
TOTAL	1323.74	1022.70	23325	77.26	17
AVERAGE	1323.74	1022.70	23325	77.26	17
INDIA	35735.00	27570.00	954358	77.15	26
AVERAGE	233.56	180.20	6237	81.87	35

Annex-C

C(13). Surfaced Roads and Density of Municipal Road Network in Sampled Municipal Bodies, Arranged Statewise, 1986-87

STATE/TOWN	ROAD LENGTH (KMS.)		AREA (SQ. KMS.)	PROJ. POPULA- TION 1987	ROAD * DENSITY (KM/SQKM) OF AREA	SURFACED ROADS PER 1000 POPULATION
	2	3				
ANDHRA PRADESH						
ANANTPUR	140.23	20.62	15.98	152016	8.78	0.92
ADONI	40.23	1.02	29.68	126150	1.36	0.32
BHIMAVARAM	72.99	0.0	25.64	134989	2.85	0.54
CUDDAPAH	184.34	0.0	7.50	134551	24.58	1.37
ELURU	157.36	0.44	12.02	198976	13.09	0.79
GUNTUR	612.52	164.52	30.02	442566	20.40	1.38
KAKINADA	290.94	30.56	30.15	274540	9.65	1.06
KURNOOL	140.13	18.22	15.02	264196	9.33	0.53
MACHILIPATNAM	185.00	21.40	24.88	156862	7.44	1.18
NELLORE	398.30	32.40	48.36	334444	8.24	1.19
NIZAMABAD	59.80	12.00	29.00	241150	2.06	0.25
PRODDATUR	20.58	56.14	7.12	137134	2.89	0.15
RAJAHMUNDRY	155.15	20.71	12.82	229768	12.10	0.68
TENALI	99.95	45.30	7.98	130266	12.53	0.77
TIRUPATI	77.02	9.43	16.07	161351	4.79	0.48
VISHAKHAPATNAM	616.40	41.98	78.33	750539	7.87	0.82
VIJAYAWADA	426.64	80.77	29.40	564058	14.51	0.76
VIZIANAGRAM	121.74	0.0	8.95	135959	13.60	0.90
WARANGAL	223.00	156.08	55.00	446834	4.05	0.50
TOTAL	4022.32	711.59	483.92	5016349	8.31	0.80
AVERAGE	211.70	44.47	25.47	264018	9.48	0.77
ASSAM						
DIBRUGARH	130.00	20.00	15.54	117773	8.37	1.10
JORHAT	29.30	62.41	9.20	274334	3.18	0.11
TINSUKIA	21.24	27.17	12.00	159668	1.77	0.13
TOTAL	180.54	109.58	36.74	551775	4.91	0.33
AVERAGE	60.18	36.53	12.25	183925	4.44	0.45

* For Surfaced Roads

CONTD...

1	2	3	4	5	6	7
BIHAR						
BIHAR	35.00	16.90	19.42	194008	1.80	0.18
DHANBAD	53.00	0.0	20.00	153688	2.65	0.34
KATHIHAR	38.00	25.00	24.54	137010	1.55	0.28
MUNGER	146.20	16.00	17.50	148584	8.35	0.98
TOTAL	272.20	57.90	81.46	633290	3.34	0.43
AVERAGE	68.05	19.30	20.37	158322	3.59	0.45
GUJARAT						
BHAVNAGAR	189.25	40.76	53.30	369803	3.55	0.51
BHARUCH	52.37	12.24	8.02	122903	6.53	0.43
JAMNAGAR	268.49	16.00	26.10	338275	10.29	0.79
JUNAGADH	55.79	23.62	13.60	135158	4.10	0.41
NADIAD	122.14	224.40	28.49	168392	4.29	0.73
NAVSARI	131.00	44.00	8.52	134199	15.38	0.98
FORBANDAR	62.78	45.15	12.30	127782	5.10	0.49
RAJKOT	357.00	210.00	69.00	563236	5.17	0.63
VADODARA	1118.15	205.59	110.38	964141	10.13	1.16
TOTAL	2356.97	821.76	329.71	2923889	7.15	0.81
AVERAGE	261.89	91.31	36.63	324876	7.17	0.68
HARYANA						
AMBALA	96.50	10.00	16.91	119561	5.71	0.81
BHIWANI	33.50	5.00	32.00	123173	1.05	0.27
HISSAR	35.00	24.00	37.50	165333	0.93	0.21
KARNAL	84.80	2.13	0.0	163304	0.0	0.52
PANIPAT	42.00	10.00	20.82	180636	2.02	0.23
ROHTAK	64.00	20.00	10.96	198491	5.84	0.32
YAMUNANAGAR	230.00	48.00	15.23	139726	15.10	1.65
TOTAL	585.80	119.13	133.42	1090224	3.76	0.54
AVERAGE	83.69	17.02	22.24	155746	5.11	0.57

CONTD...

1	2	3	4	5	6	7
HIMACHAL PRADESH						
SHIMLA	112.00	19.72	19.55	81690	5.73	1.37
TOTAL	112.00	19.72	19.55	81690	5.73	1.37
AVERAGE	112.00	19.72	19.55	81690	5.73	1.37
JAMMU & KASHMIR						
JAMMU	20.00	55.00	32.00	244273	0.63	0.08
SRINAGAR	275.59	0.0	0.0	626360	0.0	0.44
TOTAL	295.59	55.00	32.00	870633	0.63	0.34
AVERAGE	147.8	55.00	32.00	435316	0.63	0.26
KARNATAKA						
BELGAUM	397.30	60.00	83.93	339571	4.73	1.17
BELLARY	301.00	24.00	65.90	268278	4.57	1.12
BIJAPUR	234.72	0.0	14.80	181609	15.86	1.29
DAVANGERE	140.54	87.04	18.60	262966	7.56	0.53
GULBARGA	204.00	84.00	28.70	284559	7.11	0.72
GADAG BEINGERI	75.98	10.07	17.10	132886	4.44	0.57
HUBLI DHARWAD	325.83	39.40	190.94	642305	1.71	0.51
MYSORE	451.78	0.0	48.50	503094	9.32	0.90
MANDYA	89.50	32.80	17.00	122208	5.26	0.73
RAICHUR	234.85	29.00	28.43	163090	8.26	1.44
SHIMOGA	83.78	10.30	16.26	191863	5.15	0.44
TUMKUR	129.24	48.00	19.56	140912	6.61	0.92
TOTAL	2668.52	424.61	549.72	3233341	4.85	0.83
AVERAGE	222.38	42.46	45.81	269445	6.71	0.86
KERALA						
ALLEPPEY	75.39	10.29	46.77	176088	1.61	0.43
COCHIN	727.43	0.0	87.34	563646	8.33	1.29
CALICUT	242.87	88.32	84.23	435863	2.88	0.56
PALGHAT	129.20	8.25	26.60	121692	4.86	1.06
QUILON	147.29	0.0	18.48	146902	7.97	1.00
TRIVANDRUM	226.00	100.00	74.93	533342	3.02	0.42
TOTAL	1548.18	206.86	338.35	1977533	4.58	0.78
AVERAGE	258.03	51.72	56.39	329588	4.78	0.79

CONTD...

1	2	3	4	5	6	7
MADHYA PRADESH						
BURHAMPUR	40.52	2.81	12.67	168018	3.20	0.24
KHANDWA	86.37	0.41	22.57	137811	3.83	0.63
RAIPUR	186.49	0.0	55.03	503113	3.39	0.37
RAJLAM	98.57	24.93	39.19	169201	2.52	0.58
UJJAIN	282.13	0.0	71.32	336318	3.96	0.84
TOTAL	694.08	28.15	200.78	1314461	3.46	0.53
AVERAGE	138.82	9.38	40.16	262892	3.38	0.53
MAHARASHTRA						
AURANGABAD						
AMRAVATI	576.05	0.0	54.40	417157	10.59	1.38
AKOLA	320.31	117.30	36.34	312814	8.81	1.02
AHMEDNAGAR	387.67	0.0	23.44	268472	16.54	1.44
BHUSAVAL	141.00	0.0	18.29	234121	7.71	0.60
BHIWANDI	74.91	6.68	18.38	142257	4.08	0.53
CHANDRAPUR	154.51	20.00	24.00	144027	6.44	1.07
DHULE	58.90	66.00	22.54	150069	2.61	0.39
GONDIYA	181.97	22.60	46.00	272759	3.96	0.67
ICHALKARANJI	88.82	60.88	18.08	116870	4.91	0.76
JALGAON	131.90	103.08	29.89	172259	4.41	0.77
JALNA	100.96	11.09	12.44	174931	8.12	0.58
KOLHAPUR	97.80	0.0	25.90	145894	3.78	0.67
LATUR	248.00	16.00	66.82	401432	3.71	0.62
MALEGAON	68.60	2.57	7.08	148259	9.69	0.46
NASIK	218.46	1.00	13.00	285359	16.80	0.77
NANDED	533.85	32.06	59.00	333406	9.05	1.60
PARBHANI	195.80	11.45	16.83	245074	11.63	0.80
SANGLI	106.36	12.03	46.57	154375	2.28	0.69
SOLAPUR	141.98	88.39	40.97	180299	3.47	0.79
THANE	244.97	0.0	25.33	593536	9.67	0.41
ULHASNAGAR	68.37	5.13	147.80	443247	0.46	0.15
ULHASNAGAR	87.80	9.08	22.00	366187	3.99	0.24
TOTAL	4228.99	585.34	775.10	5702804	5.46	0.74
AVERAGE	192.23	34.43	35.23	259218	6.94	0.75

CONTD...

1	2	3	4	5	6	7
MANIPUR						
IMPHAL	68.00	54.00	29.59	204556	2.30	0.33
TOTAL	68.00	54.00	29.59	204556	2.30	0.33
AVERAGE	68.00	54.00	29.59	204556	2.30	0.33
MEGHALAYA						
SHILLONG	26.36	2.62	10.36	124668	2.54	0.21
TOTAL	26.36	2.62	10.36	124668	2.54	0.21
AVERAGE	26.36	2.62	10.36	124668	2.54	0.21
NAGALAND						
KOHIMA	88.00	14.00	23.00	45422	3.83	1.94
TOTAL	88.00	14.00	23.00	45422	3.83	1.94
AVERAGE	88.00	14.00	23.00	45422	3.83	1.94
ORISSA						
BHUBNESWAR	359.00	92.00	92.91	339977	3.86	1.06
BRAHMAPUR	152.42	0.0	29.29	197331	5.20	0.77
CUTTACK	262.63	11.16	59.57	329064	4.41	0.80
PURI	161.74	34.13	16.84	122938	9.60	1.32
SAMBALPUR	131.62	34.05	46.48	151902	2.83	0.87
TOTAL	1067.41	171.34	245.09	1141212	4.36	0.94
AVERAGE	213.48	42.84	49.02	228242	5.18	0.96
PUNJAB						
AMRITSAR	521.10	109.85	114.95	746253	4.53	0.70
BHATINDA	72.00	67.00	97.00	206088	0.74	0.35
JALANDHAR	331.19	42.65	80.41	494904	4.12	0.67
LUDHIANA	420.00	143.00	110.00	782221	3.82	0.54
PATIALA	210.00	285.00	60.00	248840	3.50	0.84
PATHANKOT	31.12	0.0	22.10	137016	1.41	0.23
TOTAL	1585.41	647.50	484.46	2615322	3.27	0.61
AVERAGE	264.24	129.50	80.74	435887	3.02	0.55

CONTD....

1	2	3	4	5	6	7
RAJASTHAN						
AJMER	214.00	68.50	241.58	465288	0.89	0.46
ALWAR	86.00	34.00	48.40	182391	1.78	0.47
BIKANER	169.40	4.00	73.79	302175	2.30	0.56
BHILWARA	84.71	29.65	69.93	155935	1.21	0.54
BHARATPUR	90.00	68.00	34.00	136795	2.65	0.66
GANGANAGAR	112.50	0.0	20.87	149650	5.39	0.75
JODHPUR	403.36	12.00	188.80	669848	2.14	0.60
KOTA	213.80	200.00	221.36	489399	0.97	0.44
SIKAR	54.00	3.50	45.00	128715	1.20	0.42
UDAIPIUR	176.50	15.50	63.36	289730	2.79	0.61
TOTAL	1604.27	435.15	1007.09	2969926	1.59	0.54
AVERAGE	160.43	48.35	100.71	296992	2.13	0.55
TAMIL NADU						
CUDDALORE	108.65	1.00	27.69	146568	3.92	0.74
DINDIGUL	97.78	5.39	14.01	190102	6.98	0.51
ERODE	73.49	0.67	8.44	170570	8.71	0.43
KANCHIPURAM	72.39	1.47	11.60	144828	6.24	0.50
KUMBAKONAM	76.18	7.80	12.58	146264	6.06	0.52
NAGEROOIL	141.79	0.02	24.27	192911	5.84	0.74
RAJAPALAYAM	84.61	5.85	11.36	111618	7.45	0.76
SALEM	220.27	5.03	19.93	397222	11.05	0.55
TIRUCHIRAPALLI	199.70	0.0	23.26	399390	8.59	0.50
TIRUNELVELI	84.34	1.68	15.15	142850	5.57	0.59
TUTICORIN	99.77	32.70	13.47	219780	7.41	0.45
TIRUPPUR	101.31	0.0	27.20	207190	3.72	0.49
VELLORE	88.45	5.75	11.65	199481	7.59	0.44
TOTAL	1448.73	67.36	220.61	2668774	6.57	0.54
AVERAGE	111.44	6.12	16.97	205290	6.86	0.56
TRIPURA						
AGARTALA	152.41	20.49	15.81	156030	9.64	0.98
TOTAL	152.41	20.49	15.81	156030	9.64	0.98
AVERAGE	152.41	20.49	15.81	156030	9.64	0.98

CONTD...

1	2	3	4	5	6	7
UTTAR PRADESH						
AGRA	1014.79	43.66	61.80	763853	16.42	1.33
ALLAHABAD	317.25	100.94	62.94	706217	5.04	0.45
ALIGARH	502.18	2.42	39.02	370631	12.87	1.35
AMROHA	67.50	15.45	6.32	135661	10.68	0.50
BAREILLY	389.73	490.26	23.98	453802	16.25	0.86
BULANDSHAHAR	124.84	84.57	12.32	144126	10.13	0.87
DEHRADUN	203.00	29.13	31.08	244366	6.53	0.83
FIROZABAD	115.56	41.00	9.99	259255	11.57	0.45
FARUKHABAD	62.80	21.95	16.80	179830	3.74	0.35
FAIZABAD	116.31	11.18	16.60	101300	7.01	1.15
GORAKHPUR	500.37	288.75	38.85	333977	12.88	1.50
GHAZIABAD	871.73	69.23	63.70	446325	13.68	1.95
HARIDWAR	130.68	12.61	11.91	143662	10.97	0.91
HAPUR	128.70	25.93	5.83	128147	22.08	1.00
JHANSI	92.80	78.80	46.32	303888	2.00	0.31
JAUNPUR	105.67	7.87	25.75	123192	4.10	0.86
MEERUT	671.14	58.96	141.94	540879	4.73	1.24
MUZAFFARNAGAR	324.66	189.31	12.40	218864	26.18	1.48
MATHURA	36.79	14.38	9.37	157628	3.93	0.23
MIRZAPUR-VINDYACHAL	157.45	5.38	38.85	143003	4.05	1.10
RAMPUR	273.60	31.53	36.53	235892	7.49	1.16
SHAHJAHANPUR	174.10	28.41	12.41	223664	14.03	0.78
SAMBHAL	83.29	4.50	10.65	123963	7.82	0.67
TOTAL	6464.94	1656.22	735.36	6482125	8.79	1.00
AVERAGE	281.08	72.01	31.97	281831	10.18	0.93
WEST BENGAL						
ARDHAMAN	85.10	2.25	22.68	183687	3.75	0.46
BALURGHAT	63.00	21.00	6.36	136637	9.91	0.46
KHARAGPUR	225.00	9.00	90.65	256697	2.48	0.88
NABADWIP	151.66	48.51	13.46	120703	11.27	1.26
SILIGURI	123.55	25.99	15.54	332986	7.95	0.37
TOTAL	648.31	106.75	148.69	1030710	4.36	0.63
AVERAGE	129.66	21.35	29.74	206142	7.07	0.69

CONTD...

1	2	3	4	5	6	7
GOA						
PANAJI	40.00	0.0	7.46	48991	5.36	0.82
TOTAL	40.00	0.0	7.46	48991	5.36	0.82
AVERAGE	40.00	0.0	7.46	48991	5.36	0.82
INDIA	30159.03	6315.07	5908.27	40883725	5.04	0.74
AVERAGE	192.10	46.78	38.12	260405	6.68	0.72

C(14). Surfaced Roads and Density of Municipal Road Network in Sampled Municipal Bodies, Arranged by Size Class of Cities, 1986-87

CITY-SIZE/TOWN	ROAD LENGTH (KMS.)		AREA (SQ. KMS.)	PROJ. POPULA- TION 1987	ROAD * DENSITY (KM/SQKM) OF AREA	SURFACED ROADS PER 1000 POPULATION	
	1	2					3
CITY SIZE-I							
ANANTPUR		140.23	20.62	15.98	152016	8.78	0.92
ADONI		40.23	1.02	29.68	126150	1.36	0.32
BHIMAVARAM		72.99	0.0	25.64	134989	2.85	0.54
CUDDAPAH		184.34	0.0	7.50	134551	24.58	1.37
ELURU		157.36	0.44	12.02	198976	13.09	0.79
MACHILIPATNAM		185.00	21.40	24.88	156862	7.44	1.18
NIZAMABAD		59.80	12.00	29.00	241150	2.06	0.25
PRODDATUR		20.58	56.14	7.12	137134	2.89	0.15
TENALI		99.95	45.30	7.98	130266	12.53	0.77
TIRUPATI		77.02	9.43	16.07	161351	4.79	0.48
VIZIANAGRAM		121.74	0.0	8.95	135959	13.60	0.90
DIBRUGARH		130.00	20.00	15.54	117773	8.37	1.10
JORHAT		29.30	62.41	9.20	274334	3.18	0.11
TINSUKIA		21.24	27.17	12.00	159668	1.77	0.13
BIHAR		35.00	16.90	19.42	194008	1.80	0.18
DHANBAD		53.00	0.0	20.00	153688	2.65	0.34
KATI HAR		38.00	25.00	24.54	137010	1.55	0.28
MUNGER		146.20	16.00	17.50	148584	8.35	0.98
BHARUCH		52.37	12.24	8.02	122903	6.53	0.43
JUNAGADH		55.79	23.62	13.60	135158	4.10	0.41
NADIAD		122.14	224.40	28.49	168392	4.29	0.73
NAVSARI		131.00	44.00	8.52	134199	15.38	0.98
FORBANDAR		62.78	45.15	12.30	127782	5.10	0.49
AMBALA		96.50	10.00	16.91	119561	5.71	0.81
BHIWANI		33.50	5.00	32.00	123173	1.05	0.27
HISSAR		35.00	24.00	37.50	165333	0.93	0.21
KARNAL		84.80	2.13	0.0	163304	0.0	0.52
PANIPAT		42.00	10.00	20.82	180636	2.02	0.23
ROHTAK		64.00	20.00	10.96	198491	5.84	0.32

* For Surfaced Roads

CONTD....

1	2	3	4	5	6	7
YAMUNANAGAR	230.00	48.00	15.23	139726	15.10	1.65
SHIMLA	112.00	19.72	19.55	81690	5.73	1.37
BLJAPUR	234.72	0.0	14.80	181609	15.86	1.29
DAVANGERE	140.54	87.04	18.60	262966	7.56	0.53
GADAG BETGERI	75.98	10.07	17.10	132886	4.44	0.57
MANDYA	89.50	32.80	17.00	122208	5.26	0.73
RAICHUR	234.85	29.00	28.43	163090	8.26	1.44
SHIMOGA	83.78	10.30	16.26	191863	5.15	0.44
TUMKUR	129.24	48.00	19.56	140912	6.61	0.92
ALLEPPEY	75.39	10.29	46.77	176088	1.61	0.43
PALGHAT	129.20	8.25	26.60	121692	4.86	1.06
QUILON	147.29	0.0	18.48	146902	7.97	1.00
BURHAMPUR	40.52	2.81	12.67	168018	3.20	0.24
KHANDWA	86.37	0.41	22.57	137811	3.83	0.63
RATLAM	98.57	24.93	39.19	169201	2.52	0.58
AHMEDNAGAR	141.00	0.0	18.29	234121	7.71	0.60
BHUSAVAL	74.91	6.68	18.38	142257	4.08	0.53
BHIWANDI	154.51	20.00	24.00	144027	6.44	1.07
CHANDRAPUR	58.90	66.00	22.54	150069	2.61	0.39
GONDIYA	88.82	60.88	18.08	116870	4.91	0.76
ICHALKARANJTI	131.90	103.08	29.89	172259	4.41	0.77
JALGAON	100.96	11.09	12.44	174931	8.12	0.58
JALNA	97.80	0.0	25.90	145894	3.78	0.67
LATUR	68.60	2.57	7.08	148259	9.69	0.46
NANDED	195.80	11.45	16.83	245074	11.63	0.80
PARBHANI	106.36	12.03	46.57	154375	2.28	0.69
SANGLI	141.98	88.39	40.97	180299	3.47	0.79
IMPHAL	68.00	54.00	29.59	204556	2.30	0.33
SHILLONG	26.36	2.62	10.36	124668	2.54	0.21
KOHIMA	88.00	14.00	23.00	45422	3.83	1.94
BRAHMAPUR	152.42	0.0	29.29	197331	5.20	0.77
FURI	161.74	34.13	16.84	122938	9.60	1.32
SAMBALPUR	131.62	34.05	46.48	151902	2.83	0.87
BHATINDA	72.00	67.00	97.00	206088	0.74	0.35
PAITHANKOT	31.12	0.0	22.10	137016	1.41	0.23
ALWAR	86.00	34.00	48.40	182391	1.78	0.47
BHILWARA	84.71	29.65	69.93	155935	1.21	0.54
BHARATPUR	90.00	68.00	34.00	136795	2.65	0.66
GANGANAGAR	112.50	0.0	20.87	149650	5.39	0.75
SIKAR	54.00	3.50	45.00	128715	1.20	0.42
CUDDALORE	108.65	1.00	27.69	146568	3.92	0.74

CONTD...

1	2	3	4	5	6	7
DINDIGUL	97.78	5.39	14.01	190102	6.98	0.51
ERODE	73.49	0.67	8.44	170570	8.71	0.43
KANCHIPURAM	72.39	1.47	11.60	144828	6.24	0.50
KUMBAKONAM	76.18	7.80	12.58	146264	6.06	0.52
NAGERCOIL	141.79	0.02	24.27	192911	5.84	0.74
RAJAPALAYAM	84.61	5.85	11.36	111618	7.45	0.76
TIJUNELVELI	84.34	1.68	15.15	142850	5.57	0.59
TUTICORIN	99.77	32.70	13.47	219780	7.41	0.45
TIRUPPUR	101.31	0.0	27.20	207190	3.72	0.49
VELLORE	88.45	5.75	11.65	199481	7.59	0.44
AGARTALA	152.41	20.49	15.81	156030	9.64	0.98
AMROHA	67.50	15.45	6.32	135661	10.68	0.50
BULANDSHAHAR	124.84	84.57	12.32	144126	10.13	0.87
FARRUKHABAD	62.80	21.95	16.80	179830	3.74	0.35
FAIZABAD	116.31	11.18	16.60	101300	7.01	1.15
HARIDWAR	130.68	12.61	11.91	143662	10.97	0.91
HAPUR	128.70	25.93	5.83	128147	22.08	1.00
JAUNPUR	105.67	7.87	25.75	123192	4.10	0.86
MUZAFFARNAGAR	324.66	189.31	12.40	218864	26.18	1.48
MATHURA	36.79	14.38	9.37	157628	3.93	0.23
MIRZAPUR-VINDYACHAL	157.45	5.38	38.85	143003	4.05	1.10
SHAHJAHANPUR	174.10	28.41	12.41	223664	14.03	0.78
SAMBHAL	83.29	4.50	10.65	123963	7.82	0.67
BARDHAMAN	85.10	2.25	22.68	183687	3.75	0.46
BALURGHAT	63.00	21.00	6.36	136637	9.91	0.46
KHARAGPUR	225.00	9.00	90.65	256697	2.48	0.88
NABADWIP	151.66	48.51	13.46	120703	11.27	1.26
SILIGURI	123.55	25.99	15.54	332986	7.95	0.37
PANAJI	40.00	0.0	7.46	48991	5.36	0.82
TOTAL	10202.09	2420.22	2127.37	15752838	4.76	0.65
AVERAGE	103.05	28.14	21.71	159119	6.38	0.68

CONTD...

1	2	3	4	5	6	7
CITY SIZE-II						
KAKINADA	290.94	30.56	30.15	274540	9.65	1.06
KURNOOL	140.13	18.22	15.02	264196	9.33	0.53
NELLORE	398.30	32.40	48.36	334444	8.24	1.19
RAJAHMUNDRY	155.15	20.71	12.82	229768	12.10	0.68
JAMNAGAR	268.49	16.00	26.10	338275	10.29	0.79
JAMMU	20.00	55.00	32.00	244273	0.63	0.08
BELGAUM	397.30	60.00	83.93	339571	4.73	1.17
BELLARY	301.00	24.00	65.90	268278	4.57	1.12
GULBARGA	204.00	84.00	28.70	284559	7.11	0.72
UJJAIN	282.13	0.0	71.32	336318	3.96	0.84
AURANGABAD	576.05	0.0	54.40	417157	10.59	1.38
AMRAVATI	320.31	117.30	36.34	312814	8.81	1.02
AKOLA	387.67	0.0	23.44	268472	16.54	1.44
DHULE	181.97	22.60	46.00	272759	3.96	0.67
MALEGAON	218.46	1.00	13.00	285359	16.80	0.77
NASIK	533.85	32.06	59.00	333406	9.05	1.60
ULHASNAGAR	87.80	9.08	22.00	366187	3.99	0.24
BHURNESWAR	359.00	92.00	92.91	339977	3.86	1.06
CUTTACK	262.63	11.16	59.57	329064	4.41	0.80
PATIALA	210.00	285.00	60.00	248840	3.50	0.84
BIKANER	169.40	4.00	73.79	302175	2.30	0.56
UDALPUR	176.50	15.50	63.36	289730	2.79	0.61
DEHRADUN	203.00	29.13	31.08	244366	6.53	0.83
FIROZABAD	115.56	41.00	9.99	259255	11.57	0.45
GORAKHPUR	500.37	288.75	38.85	333977	12.88	1.50
GHAZIABAD	871.73	69.23	63.70	446325	13.68	1.95
JHANSI	92.80	78.80	46.32	303888	2.00	0.31
RAMPUR	273.60	31.53	36.53	235892	7.49	1.16
TOTAL	7998.14	1469.03	1244.58	8503865	6.43	0.94
AVERAGE	285.65	58.76	44.45	303709	7.55	0.91

CONTD....

1	2	3	4	5	6	7
CITY SIZE-III						
GUNTUR	612.52	164.52	30.02	442566	20.40	1.38
WARANGAL	223.00	156.08	55.00	446834	4.05	0.50
BHAVNAGAR	189.25	40.76	53.30	369803	3.55	0.51
CALICUT	242.87	88.32	84.23	435863	2.88	0.56
RAIPUR	186.49	0.0	55.03	503113	3.39	0.37
KOLHAPUR	248.00	16.00	66.82	401432	3.71	0.62
THANE	68.37	5.13	147.80	443247	0.46	0.15
AJMER	214.00	68.50	241.58	465288	0.89	0.46
KOTA	213.80	200.00	221.36	489399	0.97	0.44
SALEM	220.27	5.03	19.93	397222	11.05	0.55
TIRUCHIRAPALLI	199.70	0.0	23.26	399390	8.59	0.50
ALIGARH	502.18	2.42	39.02	370631	12.87	1.35
BAREILLY	389.73	490.26	23.98	453802	16.25	0.86
TOTAL	3510.18	1237.02	1061.33	5618590	3.31	0.62
AVERAGE	270.01	112.46	81.64	432199	6.85	0.64
CITY SIZE-IV						
VILJAYAWADA	426.64	80.77	29.40	564058	14.51	0.76
RAJKOT	357.00	210.00	69.00	563236	5.17	0.63
MYSORE	451.78	0.0	48.50	503094	9.32	0.90
TRIVANDRUM	226.00	100.00	74.93	533342	3.02	0.42
JALANDHAR	331.19	42.65	80.41	494904	4.12	0.67
MEERUT	671.14	58.96	141.94	540879	4.73	1.24
TOTAL	2463.75	492.38	444.18	3199513	5.55	0.77
AVERAGE	410.63	98.48	74.03	533252	6.81	0.77
CITY SIZE-V						
VISHAKHAPATNAM	616.40	41.98	78.33	750539	7.87	0.82
SRINAGAR	275.59	0.0	0.0	626360	0.0	0.44
HUBLI DHARWAD	325.83	39.40	190.94	642305	1.71	0.51
COCHIN	727.43	0.0	87.34	563646	8.33	1.29
SOLAPUR	244.97	0.0	25.33	593536	9.67	0.41
AMRITSAR	521.10	109.85	114.95	746253	4.53	0.70
JODHPUR	403.36	12.00	188.80	669848	2.14	0.60
TOTAL	3114.68	203.23	685.69	4592487	4.14	0.68
AVERAGE	444.95	50.81	114.28	656069	5.71	0.68

CONTD...

1	2	3	4	5	6	7
CITY SIZE-VI						
LUDHIANA	420.00	143.00	110.00	782221	3.82	0.54
AGRA	1014.79	43.66	61.80	763853	16.42	1.33
ALLAHABAD	317.25	100.94	62.94	706217	5.04	0.45
TOTAL	1752.04	287.60	234.74	2252291	7.46	0.78
AVERAGE	584.01	95.87	78.25	750763	8.43	0.77
CITY SIZE-VII						
VADODARA	1118.15	205.59	110.38	964141	10.13	1.16
TOTAL	1118.15	205.59	110.38	964141	10.13	1.16
AVERAGE	1118.15	205.59	110.38	964141	10.13	1.16
INDIA	30159.03	6315.07	5908.27	40883725	5.04	0.74
AVERAGE	192.10	46.78	38.12	260405	6.68	0.72

Annex-D

Performance Indicators for Assessing the Levels of Municipal Services

Services	Performance Indicators	Formulas Used
1.	2.	3.
I. <u>WATER SUPPLY</u>		
a.	Percentage of Population Served by Water Supply.	$\frac{\text{Population Served by Water Supply}}{\text{Total Population of Reference Year}} \times 100$
b.	(i) Per Capita Water Supply - Actual (LPCD)* (ii) Per Capita Water Supply - Designed (LPCD)	$\frac{\text{Population Served by Water Supply in Reference Year}}{\text{Total Population of Reference Year}}$
c.	Supply of Water as a Proportion of Demand for Water	$\frac{\text{Actual Supply of water}}{\text{Projected Demand of Water in Reference Year}} \times 100$
d.	Ratio of Water Utilisation	$\frac{\text{Actual Supply of Water}}{\text{Systems Designed Capacity in Reference Year}} \times 100$
e.	Per Capita Revenue Expenditure on Water Supply (Rs.)	$\frac{\text{Annual Revenue Expenditure on Water Supply}}{\text{Total Population of Reference Year}}$

* LPCD - Litres Per Capita per Day ; MLD - Million Litres per Day.
 ** Reference Year - 1986-87.

Contd....

1. -----
 2. -----
 3. -----

f. Percent Expenditure on Establishment and Operation & Maintenance of Water Supply System

f. (i) Annual Revenue Expenditure on Establishment and Staff with regard to Water Supply ----- X 100
 Total Annual Revenue Expenditure on Water Supply in Reference Year***

(ii) Annual Revenue Expenditure on Operation & Maintenance of Water Supply ----- X 100
 Total Annual Revenue Expenditure on Water Supply in Reference Year

II. ENVIRONMENTAL SANITATION

(i) Sewerage

a. Percentage of Urban Centres having Sewerage System
 b. Percentage of Population Served by Sewerage System
 c. Per Capita Revenue Expenditure on Sewerage System (Rs.)

a. No. of Reported Urban Centres Served with Sewerage ----- X 100
 Total No. of Responding Cases
 b. Population Served by Sewerage ----- X 100
 Total Population of Reference Year
 c. Total Revenue Expenditure on Sewerage -----
 Total Population of Reference Year

*** Total Revenue Expenditure = Expenditure on Establishment & Staff + operations & maintenance of service concerned.

Contd.....

1.

2.

3.

d. Percent Expenditure on Establishment and Operation & Maintenance of Sewerage System

d. (i) Annual Revenue Expenditure on Establishment and Staff with regard to Sewerage
----- X 100
Total Annual Revenue Expenditure on Sewerage in Reference Year

(ii) Annual Revenue Expenditure on Operation & Maintenance of Sewerage
----- X 100
Total Annual Revenue Expenditure on Sewerage in Reference Year

(ii) Open Drainage

a. Percentage of Population Served by Drainage System

a. Population Served by Drainage
----- X 100
Total Population of Reference Year

b. Per Capita Revenue Expenditure on Drainage System (Rs.)

b. Annual Revenue Expenditure on Drainage

Total Population of Reference Year

c. Percent Expenditure on Establishment and Operation & Maintenance of Drainage System

c. (i) Annual Revenue Expenditure on Establishment and Staff with regard to Drainage
----- X 100
Total Annual Revenue Expenditure on Drainage in Reference Year

1. -----
 2. -----
 3. -----

(ii) Annual Revenue Expenditure on Operation and Maintenance of Drainage ----- X 100
 Total Annual Revenue Expenditure on Drainage in Reference Year ----- X 100

(iii) Refuse Collection & Disposal

- a. Refuse Disposal Level (Extent of Disposal as a Proportion to Generation)
- b. Number of Scavengers per 1000 Persons
- c. Per Capita Revenue Expenditure on Refuse Collection/Disposal Function (Rs.)
- d. Percent Expenditure on Establishment and Operation & Maintenance of Refuse Collection/Disposal Function

a. Quantities of Refuse Disposal ----- X 100
 Quantities of Refuse Generation in Reference Year ----- X 100

b. Total No. of Scavengers ----- X 1000
 Total Population of Reference Year ----- X 1000

c. Annual Revenue Expenditure on Refuse Collection/Disposal -----
 Total Population of Reference Year -----

d. (i) Annual Revenue Expenditure on Establishment and Staff with regard to Refuse Collection/Disposal ----- X 100
 Total Annual Revenue Expenditure on Refuse Collection/Disposal in Reference Year ----- X 100

(ii) Annual Revenue Expenditure on Operation & Maintenance of Refuse Collection/Disposal ----- X 100
 Total Annual Revenue Expenditure on Refuse Collection/Disposal in Reference Year ----- X 100

Contd....

1. -----
 2. -----
 3. -----

III. MEDICAL RELIEF

- a. Number of Municipal Health Centres & Dispensaries per 20000 persons
- b. Per Capita Revenue Expenditure on Municipal Health Services (Rs.)
- c. Percent Expenditure on Establishment and Operation & Maintenance of Municipal Health Services
- a. Total No. of Municipal Health Centres/Dispensaries
- Total Population of Reference Year X 20000
- b. Annual Revenue Expenditure on Municipal Health Services
- Total Population of Reference Year
- c. (i) Annual Revenue Expenditure on Establishment and Staff with regard to Health Services
- Total Annual Revenue Expenditure on Health Services in Reference Year X 100
- (ii) Annual Revenue Expenditure on Operation & Maintenance of Health Services
- Total Annual Revenue Expenditure on Health Services in Reference Year X 100

IV. MUNICIPAL ROADS & STREETS

- a. Percent Surfaced Roads as a Proportion to Total Road Network
- b. (i) Road Density (Surfaced Roads) (KM/SQ. KM. of Municipal Area)
- a. Length of Surfaced Roads
- Total Length of Roads (Surfaced and Unsurfaced) in Reference Year X 100
- b. (i) Length of Surfaced Roads
- Municipal Area as per 1981 Census

Contd....

1.	2.	3.
	(ii) Road Density (Total Road Network) (KM/SQ.KM. of Municipal Area)	(ii) Total Length of Roads (Surfaced and Unsurfaced) Municipal Area as per 1981 Census
	c. Per Capita Revenue Expenditure on Roads (Rs.)	c. Annual Revenue Expenditure on Roads Total Population of Reference Year
	d. Percent Expenditure on Establishment and Operation & Maintenance of Road Network	(i) Annual Revenue Expenditure on Establishment and Staff with regard to Municipal Roads Total Annual Revenue Expenditure on Municipal Roads in Reference Year X 100
		(ii) Annual Revenue Expenditure on Operation & Maintenance of Municipal Roads Total Annual Revenue Expenditure on Municipal Roads in Reference Year X 100
	a. Percentage of Lighted Road Length as a Proportion to Total Road Network	a. Length of Lighted Roads Total Length of Roads (Surfaced and Unsurfaced) in Reference Year X 100
	b. Number of Lamp Posts Per Kilometer Road Length	b. Total No. of Lamp Posts Total Length of Roads (Surfaced and Unsurfaced) in Reference Year

V. STREET LIGHTING

Contd.....

1.

2.

3.

c. Per Capita Revenue Expenditure
on Street Lighting (Rs.)

c. Annual Revenue Expenditure on Street
Lighting

Total Population of Reference Year

d. Percent Expenditure on
Establishment and Operation &
Maintenance of Street
Lighting

d. (i) Annual Revenue Expenditure on Establishment
and Staff with regard to Street
Lighting

----- X 100
Total Annual Revenue Expenditure on Street
Lighting in Reference Year

(ii) Annual Revenue Expenditure on Operation
& Maintenance of Street Lighting

----- X 100
Total Annual Revenue Expenditure on Street
Lighting in Reference Year

E : 1

Annex-E

Size Class of Cities*

Size Class	Population Range as per Census, 1981
I	100,000 - 200,000
II	200,000 - 300,000
III	300,000 - 400,000
IV	400,000 - 500,000
V	500,000 - 600,000
VI	600,000 - 700,000
VII	700,000 - 750,000

* Municipal Corporations and Municipal Councils.