

Status of Water Supply, Sanitation and Solid Waste Management in Urban India

Statistical Volume II

**Wastewater Management
&
Low Cost Sanitation– 1999**

National Institute of Urban Affairs

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List of Abbreviations

Civic Status

CMC	City Municipal Council
CT	Census Town
M	Municipality
M.Corp.	Municipal Corporation
MB	Municipal Board
MC	Municipal Committee, Municipal Corporation
MCI	Municipal Council
NM	Non-municipal
NMCT	Non-municipal Census Town
NTAC	Notified Town Area Committee
TC	Town Committee

Others

ltrs.	litres
kl.	kilolitre (1000 litres)
lpcd	litres per capita per day
mld	million litres daily
mld	metre
km.	kilometre
sq.km.	square kilometre
n.a.	not available
n.r.	not reliable
lakh	100,000
crore	10,000,000

List of Sampled Cities and Towns

Metropolitan Cities

	Towns	State
1	Ahmedabad M.Corp.	Gujarat
2	Bangalore M.Corp.	Karnataka
3	Bhopal M.Corp.	Madhya Pradesh
4	Calcutta M.Corp.	Calcutta
5	Chennai M.Corp.	Tamil Nadu
6	Coimbatore M.Corp.	Tamil Nadu
7	Delhi M.Corp.	Delhi
8	Greater Mumbai M.Corp.	Maharashtra
9	Hyderabad M.Corp.	Andhra Pradesh
10	Indore M.Corp.	Madhya Pradesh
11	Jaipur M.Corp.	Rajasthan
12	Kanpur M.Corp.	Uttar Pradesh
13	Kochi M.Corp.	Kerala
14	Lucknow M.Corp.	Uttar Pradesh
15	Ludhiana M.Corp.	Punjab
16	Madurai M.Corp.	Tamil Nadu
17	Nagpur M.Corp.	Maharashtra
18	Pune M.Corp.	Maharashtra
19	Surat M.Corp.	Gujarat
20	Vadodara M.Corp.	Gujarat
21	Varanasi M.Corp.	Uttar Pradesh
22	Visakhapatnam M.Corp.	Andhra Pradesh

Andhra Pradesh

Class I		Class II	
1	Anantapur MCI	1	Anakapalle M
2	Chittoor M	2	Dharmavaram M
3	Cuddapah MCI	3	Gudur MCI
4	Eluru M	4	Kapra M
5	Guntur MCI	5	Kavali MCI
6	Hindupur M	6	Madanapalle M
7	Kakinada M	7	Narasaraopet M
8	Kurnool MCI	8	Rajendra nagar MCI
9	Machilipatnam M	9	Sangareddy MCI
10	Nandyal MCI	10	Srikakulam MCI
11	Nellore MCI	11	Srikalahasti M
12	Nizamabad M	12	Suryapet MCI
13	Ongole MCI		
14	Qutubullapur M		
15	Rajahmundry M.Corp.		
16	Tenali M		
17	Tirupati MCI		
18	Vijaywada M.Corp.		
19	Warangal M.Corp.		

Bihar

Class I		Class II	
1	Bihar Sharif M	7	Buxar M
2	Chhapra M	8	Deoghar M
3	Gaya M.Corp.	9	Hajipur M
4	Katihar M	10	Hazaribagh M
5	Munger M	11	Jehanabad M
6	Ranchi M.Corp.	12	Madhubani M
		13	Mokama M

Gujarat

Class I		Class II	
1	Anand M	12	Amreli M
2	Bharuch M	13	Ankleswar M
3	Bhavnagar M.Corp.	14	Dabhoi M
4	Bhuj M	15	Dohad M
5	Jamnagar M.Corp.	16	Gondal M
6	Junagadh M	17	Jetpur M
7	Nadiad M	18	Mahesana M
8	Navsari M	19	Palanpur M
9	Porbandar M		
10	Rajkot M.Corp.		
11	Surendranagar M		

Haryana

Class I		Class II	
1	Ambala MCI	7	Jind MCI
2	Faridabad M.Corp.	8	Kaithal MCI
3	Gurgaon MCI	9	Rewari MCI
4	Hisar MCI	10	Thanesar MCI
5	Karnal MCI		
6	Rohtak MCI		

Jammu & Kashmir

Class I	
1	Jammu M.Corp.
2	Srinagar M.Corp.

Karnataka

Class I		Class II	
1	Belgaum M.Corp.	12	Bagalkot CMC
2	Bellary CMC	13	Chikmagalur CMC
3	Davangere MCI	14	Gokak CMC
4	Gadag-Betigeri CMC	15	Hospet CMC
5	Gulbarga M.Corp.	16	Kolar CMC
6	Hubli-Dharwar M.Corp.	17	Rabkavi-Banhatti CMC
7	Mandya M	18	Ramanagaram CMC
8	Mangalore M.Corp.		
9	Mysore M.Corp.		
10	Shimoga CMC		
11	Tumkur M		

Kerala

Class I		Class II	
55	Alappuzha MC	39	Changanessary MC
56	Kollam MC	40	Payyanur M
57	Kozhikode M.Corp.	41	Taliparamba M
58	Thalaserry M	42	Thrissur MC
59	Thiruvananthapuram M.Corp.		

Madhya Pradesh

Class I		Class II	
1	Bhind M	14	Hoshangabad M
2	Burhanpur M.Corp.	15	Itarsi M
3	Dewas M.Corp.	16	Khargone M
4	Guna M	17	Mandsaur M
5	Gwalior M.Corp.	18	Nagda M
6	Jabalpur M.Corp.	19	Neemuch M
7	Khandwa M	20	Sehore M
8	Morena M	21	Shahdol M
9	Murwara (Katni) M.Corp.	22	Vidisha M
10	Ratlam M.Corp.		
11	Rewa M.Corp.		
12	Satna M.Corp.		
13	Shivpuri M		

Maharashtra

Class I		Class II	
1	Amravati M.Corp.	15	Amalner MCI
2	Aurangabad M.Corp.	16	Ballapur MCI
3	Bhusawal MCI	17	Bhandara M
4	Chandrapur MCI	18	Kamptee MCI
5	Dhule MCI	19	Manmad MCI
6	Ichalkaranji MCI	20	Ratnagiri MCI
7	Jalgaon MCI	21	Satara MCI
8	Kolhapur M.Corp.	22	Virar MCI
9	Nanded Waghala M.Corp.		
10	Nashik M.Corp.		
11	Parbhani MCI		
12	Solapur M.Corp.		
13	Wardha M		
14	Yavatmal MCI		

Orissa

Class I		Class II	
1	Bhubaneswar M.Corp.	6	Balangir M
2	Cuttack M.Corp.	7	Bhadrak M
3	Puri M		
4	Rourkela M		
5	Sambalpur M		

Punjab

Class I		Class II	
1	Amritsar M.Corp.	8	Firozpur MCI
2	Bathinda MCI	9	Kapurthala M
3	Hoshiarpur MCI	10	Mansa MCI
4	Jalandhar M.Corp.	11	Phagwara MCI
5	Moga MCI	12	Sangrur MCI
6	Pathankot MCI		
7	Patiala M.Corp.		

Rajasthan

Class I		Class II	
1	Ajmer MCI	9	Banswara M
2	Alwar M	10	Barmer M
3	Beawar M	11	Bundi M
4	Bhilwara M	12	Churu M
5	Bikaner M	13	Hanumangarh M
6	Jodhpur M.Corp.	14	Sawai Madhopur M
7	Kota M.Corp.		
8	Sriganganagar M		

Tamil Nadu

Class I		Class II	
1	Cuddalore M	16	Ambur M
2	Dindigul M	17	Arakkonam M
3	Erode M	18	Attur M
4	Kanchipuram M	19	Cumbum M
5	Kumbakonam M	20	Dharmapuri M
6	Nagercoil M	21	Guduvattam M
7	Rajapalayam M	22	Nagapattinam M
8	Salem M.Corp.	23	Pudukkottai M
9	Thanjavur M	24	Sivakasi M
10	Tiruchirapalli M.Corp.	25	Srivilliputtur M
11	Tirunelveli M.Corp.	26	Tindivanam MC
12	Tiruvannamalai M	27	Udhagamandalam M
13	Tiruppur M		
14	Tuticorin M		
15	Vellore M		

Uttar Pradesh

Class I		Class II	
1	Agra M.Corp.	24	Auraiya MB
2	Aligarh M.Corp.	25	Balrampur MB
3	Allahabad M.Corp.	26	Basti MB
4	Bareilly M.Corp.	27	Bhadohi MB
5	Etawah MB	28	Chandpur MB
6	Faizabad MB	29	Etah MB
7	Firozabad MB	30	Ghazipur MB
8	Ghaziabad M.Corp.	31	Gonda MB
9	Gorakhpur M.Corp.	32	Lakhimpur MB
10	Haldwani-cum-Kathgodam MB	33	Lalitpur MB
11	Hapur MB	34	Mughalsarai MB
12	Hardwar MB	35	Nawabganj-Barabanki MB
13	Jhansi MB	36	Orai MB
14	Mathura MB	37	Roorkee MB
15	Meerut M.Corp.		
16	Mirzapur MB		
17	Moradabad M.Corp.		
18	Muzaffarnagar MB		
19	Rae Bareli MB		
20	Rampur MB		
21	Saharanpur MB		
22	Sitapur MB		
23	Unnao MB		

West Bengal

Class I		Class II	
1	Asansol M.Corp.	13	Bishnupur M
2	Baharampur M	14	Chakdaha M
3	Balurghat M	15	Contai M
4	Bankura M	16	Cooch Behar M
5	Barasat M	17	Darjeeling M
6	Burdwan M	18	Jalpaiguri M
7	Halisahar M	19	Jangipur M
8	Krishnagar M	20	Katwa M
9	Midnapore M	21	Raniganj M
10	North Barrackpore M		
11	Santipur M		
12	Silliguri M.Corp.		

Small States and Union Territories

Class I		Class II	
Assam		Himachal Pradesh	
1	Guwahati M.Corp.	1	Shimla M.Corp.
2	Jorhat MB	Nagaland	
Manipur		1	Kohima TC
1	Imphal MCI	Union Territories	
Meghalaya		1	Port Blair MCI
1	Shillong MB		
Mizoram			
1	Aizwal NM		
Tripura			
1	Agartala MCI		
Union Territories			
Chandigarh			
1	Chandigarh M.Corp.		
Pondicherry			
2	Pondicherry M		
Other Classes			
States			
Arunachal Pradesh			
1	Itanagar CT	Union Territories	
		Daman and Diu	
		1	Daman MCI
		Lakshadweep Islands	
1	Panaji MCI	1	Kavarathi NMCT
Sikkim			
1	Gangtok	Dadra and Nagar Haveli	
		1	Silvassa

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Waste Water Collection, Treatment and Disposal

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STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-1: Population and Area covered by Sewerage System - 1999

Sl. No.	City/town	Population '000		% population covered by service	Area (sq.km.)		% area covered by service
		1999	covered by service		1999	covered by service	
	1	2	3	4	5	6	7
Metropolitan Cities							
1	Ahmedabad M.Corp.	3,500	2,800	80	190.84	125.00	65
2	Bangalore M.Corp.	5,000	3,900	78	482.00	270.00	56
3	Bhopal M.Corp.	1,500	200	13	256.00	116.10	45
4	Calcutta M.Corp.	4,870	2,200	45	187.33	93.00	50
5	Chennai M.Corp.	4,363	4,100	94	172.00	165.00	96
6	Coimbatore M.Corp.	971	270	28	105.60	23.10	22
7	Delhi M.Corp.	12,000	8,500	71	1485.00	357.60	24
8	Greater Mumbai M.Corp.	11,100	8,400	76	437.71	247.41	57
9	Hyderabad M.Corp.	4,163	2,350	56	172.00	107.00	62
10	Indore M.Corp.	1,600	640	40	137.17	54.46	40
11	Jaipur M.Corp.	2,000	1,000	50	200.40	112.00	56
12	Kanpur M.Corp.	2,500	1,500	60	227.67	115.00	51
13	Kochi M.Corp.	680	20	3	94.88	2.89	3
14	Lucknow M.Corp.	2,500	800	32	310.00	114.00	37
15	Ludhiana M.Corp.	2,000	1,200	60	165.00	99.00	60
16	Madurai M.Corp.	1,020	350	34	51.96	17.32	33
17	Nagpur M.Corp.	2,100	1,260	60	217.56	84.00	39
18	Pune M.Corp.	2,300	1,732	75	416.00	120.00	29
19	Surat M.Corp.	2,300	1,200	52	112.28	41.54	37
20	Vadodara M.Corp.	1,400	875	63	108.26	75.00	69
21	Varanasi M.Corp.	1,150	700	61	73.89	49.64	67
22	Visakhapatnam M.Corp.	1,280	90	7	107.00	1.14	1
	Total - Metropolitan Cities	70,297	44,087	63	5,711	2,390	42

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-1: Population and Area covered by Sewerage System - 1999

Sl. No.	City/town	Population '000		% population covered by service	Area (sq.km.)		% area covered by service
		1999	covered by service		1999	covered by service	
	1	2	3	4	5	6	7
Class I							
Andhra Pradesh							
1	Eluru M	247	100	40	14.55	7.28	50
2	Guntur MCI	557	100	18	45.79	11.75	26
3	Vijaywada M.Corp.	837	293	35	58.00	20.30	35
Gujarat							
4	Anand M	175	105	60	23.14	10.00	43
5	Bhavnagar M.Corp.	550	300	55	53.40	27.00	51
6	Bhuj M	118	106	90	9.49	9.00	95
7	Nadiad M	300	140	47	36.87	24.00	65
8	Navsari M	139	118	85	8.55	7.69	90
9	Rajkot M.Corp.	1,000	550	55	104.86	67.50	64
Haryana							
10	Ambala MCI	141	18	13	16.94	1.28	8
11	Faridabad M.Corp.	1,150	633	55	208.00	112.27	54
12	Gurgaon MCI	175	109	62	16.57	10.00	60
13	Hissar MCI	250	130	52	45.42	27.00	59
14	Rohtak MCI	243	183	75	28.38	15.75	55
Karnataka							
15	Bellary CMC	297	129	43	81.95	30.00	37
16	Mangalore M.Corp.	410	250	61	116.77	58.00	50
17	Mysore M.Corp.	1,050	400	38	100.00	40.00	40
18	Shimoga CMC	222	81	36	50.00	20.00	40
Madhya Pradesh							
19	Gwalior M.Corp.	900	516	57	166.83	108.50	65
20	Morena M	125	16	13	12.00	1.00	8
21	Shivpuri M	140	5	4	81.10	10.00	12
Maharashtra							
22	Aurangabad M.Corp.	868	684	79	138.00	60.00	43
23	Dhule MCI	330	150	45	46.46	22.00	47
24	Ichalkaranji MCI	250	198	79	29.91	15.00	50
25	Kolhapur M.Corp.	502	200	40	66.00	20.00	30
26	Nanded Waghala M.Corp.	410	250	61	46.00	30.00	65
27	Nashik M.Corp.	839	500	60	259.13	10.00	4
28	Solapur M.Corp.	900	810	90	233.00	30.00	13
Orissa							
29	Bhubaneswar M.Corp.	654	200	31	231.24	66.00	29

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-1: Population and Area covered by Sewerage System - 1999

Sl. No.	City/town	Population '000		% population covered by service	Area (sq.km.)		% area covered by service
		1999	covered by service		1999	covered by service	
	1	2	3	4	5	6	7
	Punjab						
30	Amritsar M.Corp.	843	506	60	133.00	36.60	28
31	Bathinda MCI	174	69	40	99.00	39.00	39
32	Hoshiarpur MCI	145	87	60	35.00	15.50	44
33	Jalandhar M. Corp.	738	440	60	110.00	35.00	32
34	Moga MCI	148	100	67	18.50	10.91	59
35	Pathankot MCI	195	80	41	22.10	10.00	45
36	Patiala M.Corp.	328	200	61	41.00	19.00	46
	Rajasthan						
37	Ajmer MCI	550	58	11	220.00	22.00	10
38	Bikaner M	600	126	21	175.76	35.00	20
39	Jodhpur M.Corp.	1,000	327	33	78.57	25.00	32
	Tamil Nadu						
40	Kanchipuram M	157	116	74	11.60	9.00	78
41	Kumbakonam M	147	38	26	12.58	4.19	33
42	Tiruchirapalli M.Corp.	800	80	10	146.90	23.26	16
43	Tirunelveli M.Corp.	414	70	17	108.65	7.00	6
44	Tuticorin M	217	40	18	13.47	5.39	40
	Uttar Pradesh						
45	Aligarh M.Corp.	600	120	20	62.00	12.00	19
46	Allahabad M.Corp.	1,015	600	59	70.05	22.50	32
47	Bareilly M.Corp.	750	300	40	106.43	32.80	31
48	Ghaziabad M.Corp.	887	762	86	200.00	89.00	45
49	Gorakhpur M.Corp.	600	300	50	143.00	28.00	20
50	Hapur MB	200	75	38	14.20	6.00	42
51	Hardwar MB	300	184	61	4.70	n.a.	n.a.
52	Mathura MB	400	50	13	25.23	n.a.	n.a.
53	Meerut M.Corp.	1,250	315	25	141.94	40.00	28
54	Mirzapur MB	210	153	73	30.59	23.00	75
	West Bengal						
55	Asansol M.Corp.	315	36	11	127.24	6.00	5
	Union Territories						
56	Chandigarh M.Corp.	850	850	100	114.00	114.00	100
57	Pondicherry M	290	83	29	20.00	5.00	25
	Total - Class I Cities	27,900	13,437	48	4,614	1,546	34

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-1: Population and Area covered by Sewerage System - 1999

Sl. No.	City/town	Population '000		% population covered by service	Area (sq.km.)		% area covered by service
		1999	covered by service		1999	covered by service	
	1	2	3	4	5	6	7
Class II							
Gujarat							
1	Ankleswar M	60	40	67	11.05	9.00	81
2	Dabhoi M	65	7	11	23.82	2.00	8
3	Mahesana M	138	100	72	12.87	10.00	78
Haryana							
4	Jind MCI	114	72	63	21.00	9.30	44
5	Kaithal MCI	95	51	54	5.05	n.a.	n.a.
6	Rewari MCI	105	65	62	18.43	12.90	70
7	Thanesar MCI	100	65	65	32.25	14.00	43
Karnataka							
8	Chikmagalur CMC	100	60	60	27.50	10.00	36
9	Kolar CMC	112	8	7	21.47	3.00	14
Punjab							
10	Ferozepur MCI	93	67	72	11.33	7.93	70
11	Kapurthala M	85	53	63	16.00	9.00	56
12	Mansa MCI	67	33	50	23.47	12.00	51
13	Phagwara MCI	108	49	45	16.00	6.50	41
14	Sangrur MCI	70	49	70	18.00	10.00	56
Tamil Nadu							
15	Nagapattinam M	112	28	25	14.90	5.00	34
16	Udhagamandalam M	100	51	51	30.67	12.95	42
Uttar Pradesh							
17	Etah MB	135	40	30	27.00	8.00	30
18	Roorkee MB	100	60	60	8.12	4.00	49
West Bengal							
19	Darjeeling M	93	30	32	10.60	5.80	55
Small States							
Himachal Pradesh							
20	Shimla M.Corp.	111	72	65	28.53	20.00	70
Others (Smaller than Class II towns)							
Small States							
Goa							
21	Panaji MCI	57	30	52	3.70	1.50	41
Total - Class II Towns		2,020	1,029	51	382	173	45
Grand Total		100,217	58,553	58	10,706	4,110	38

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-2: Waste Water Generation, Collection, Treatment and Disposal, 1999

Sl. No.	City/town	Type of system	Length of sewers (km)	Volume of Waste Water (mld)				% collected to generated	% treated to generated	% treated to collected	Volume (mld) discharged on/in		
				Generated	Collected	Treated	Not treated				Land	Water bodies	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13
Metropolitan Cities													
1	Ahmedabad M.Corp.	Separate	1200	460	360	360	100	78	78	100	360	100	460
2	Bangalore M.Corp.	Separate	n.a.	564	403	403	161	71	71	100	0	564	564
3	Bhopal M.Corp.	Combined	175	216	60	60	156	28	28	100	0	216	216
4	Calcutta M.Corp.	Separate	1839	1350	870	870	480	64	64	100	480	870	1350
5	Chennai M.Corp.	Separate	1968	369	245	162	207	66	44	66	98	271	369
6	Coimbatore M.Corp.	Separate	119	84	36	36	48	43	43	100	84	0	84
7	Delhi M.Corp.	Separate	4500	2096	1290	915	1181	62	44	71	0	2096	2096
8	Greater Mumbai M.Corp.	Separate	1339	2382	1460	735	1647	61	31	50	0	2382	2382
9	Hyderabad M.Corp.	Combined	1650	546	338	133	413	62	24	39	546	0	546
10	Indore M.Corp.	Combined	600	190	95	0	190	50	0	0	190	0	190
11	Jaipur M.Corp.	Separate	n.a.	270	180	90	180	67	33	50	0	270	270
12	Kanpur M.Corp.	Separate	700	360	160	160	200	44	44	100	160	200	360
13	Kochi M.Corp.	Separate	27	67	4	4	63	6	6	100	0	67	67
14	Lucknow M.Corp.	Combined	480	328	151	n.a.	n.a.	46	n.a.	n.a.	n.a.	n.a.	n.a.
15	Ludhiana M.Corp.	Combined	840	310	140	0	310	45	0	0	0	310	310
16	Madurai M.Corp.	Separate	206	72	57	30	42	79	42	53	63	9	72
17	Nagpur M.Corp.	Combined	482	300	180	0	300	60	0	0	20	280	300
18	Pune M.Corp.	Separate	790	520	390	95	425	75	18	24	130	390	520
19	Surat M.Corp.	Separate	342	260	185	185	75	71	71	100	0	260	260
20	Vadodara M.Corp.	Separate	525	195	122	54	141	63	28	44	0	195	195
21	Varanasi M.Corp.	Separate	25	188	122	122	66	65	65	100	46	142	188
22	Visakhapatnam M.Corp.	Separate	n.a.	107	10	10	97	9	9	100	0	107	107

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-2: Waste Water Generation, Collection, Treatment and Disposal, 1999

Sl. No.	City/town	Type of system	Length of sewers (km)	Volume of Waste Water (mld)				% collected to generated	% treated to generated	% treated to collected	Volume (mld) discharged on/in		
				Generated	Collected	Treated	Not treated				Land	Water bodies	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13
Class I													
Andhra Pradesh													
1	Eluru M	Separate	25	19	6	6	13	32	32	100	0	19	19
2	Guntur MCI	Combined	95	60	11	4	56	18	7	37	30	30	60
3	Vijaywada M.Corp.	Combined	80	117	26	21	96	22	18	79	117	0	117
Gujarat													
4	Anand M	Combined	750	16	9	9	6	60	60	100	0	16	16
5	Bhavnagar M.Corp.	Separate	83	56	31	0	56	55	0	0	0	19	19
6	Bhuj M	Separate	12	15	13	13	2	90	90	100	15	0	15
7	Nadiad M	Combined	10	17	8	0	17	47	0	0	12	5	17
8	Navsari M	Combined	1200	13	11	0	13	85	0	0	0	13	13
9	Rajkot M.Corp.	Separate	600	85	47	25	60	55	29	53	30	55	85
Haryana													
10	Ambala MCI	Combined	11	13	11	0	13	88	0	0	2	11	13
11	Faridabad M.Corp.	Separate	618	147	112	80	67	76	54	72	0	147	147
12	Gurgaon MCI	Separate	102	17	11	11	6	62	62	100	15	2	17
13	Hissar MCI	Separate	203	22	13	0	22	59	0	0	22	0	22
14	Rohtak MCI	Separate	120	26	19	0	26	75	0	0	26	0	26
Karnataka													
15	Bellary CMC	Separate	110	24	11	5	19	43	21	48	15	10	24
16	Mangalore M.Corp.	Combined	235	68	41	18	50	61	27	44	0	68	68
17	Mysore M.Corp.	Separate	41	111	25	4	107	23	3	14	0	111	111
18	Shimoga CMC	Separate	220	27	7	0	27	25	0	0	0	27	27
Madhya Pradesh													
19	Gwalior M.Corp.	Separate	120	120	62	16	104	52	13	26	3	117	120
20	Morena M	Separate	5	7	1	0	7	14	0	0	0	7	7
21	Shivpuri M	Combined	17	10	3	0	10	30	0	0	10	0	10
Maharashtra													
22	Aurangabad M.Corp.	Separate	500	134	106	106	28	79	79	100	134	0	134
23	Dhule MCI	Combined	10	25	12	0	25	48	0	0	0	25	25
24	Ichalkaranji MCI	Combined	71	26	20	20	6	78	78	100	0	26	26
25	Kolhapur M.Corp.	Combined	40	80	32	29	51	40	36	91	15	65	80
26	Nanded Waghala M.Corp.	Combined	160	31	2	0	31	6	0	0	0	31	31
27	Nashik M.Corp.	Combined	n.a.	126	75	19	108	60	15	25	0	126	126
28	Solapur M.Corp.	Combined	215	100	80	54	46	80	54	68	68	33	100
Orissa													
29	Bhubaneswar M.Corp.	n.a.	448	92	34	9	83	37	9	26	0	92	92

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-2: Waste Water Generation, Collection, Treatment and Disposal, 1999

Sl. No.	City/town	Type of system	Length of sewers (km)	Volume of Waste Water (mld)				% collected to generated	% treated to generated	% treated to collected	Volume (mld) discharged on/in		
				Generated	Collected	Treated	Not treated				Land	Water bodies	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13
Punjab													
30	Amritsar M.Corp.	Combined	416	102	71	0	102	70	0	0	0	102	102
31	Bathinda MCI	Separate	101	49	19	0	49	40	0	0	49	0	49
32	Hoshiarpur MCI	Separate	113	28	17	0	28	60	0	0	3	25	28
33	Jalandhar M. Corp.	Separate	470	140	67	0	140	48	0	0	0	140	140
34	Moga MCI	Separate	13	16	11	0	16	67	0	0	4	12	16
35	Pathankot MCI	Combined	120	14	6	0	14	41	0	0	0	14	14
36	Patiala M.Corp.	Separate	199	48	29	0	48	60	0	0	0	48	48
Rajasthan													
37	Ajmer MCI	Separate	9	42	4	0	42	11	0	0	0	42	42
38	Bikaner M	Combined	72	54	11	0	54	21	0	0	54	0	54
39	Jodhpur M.Corp.	Separate	229	141	46	0	141	33	0	0	141	0	141
Tamil Nadu													
40	Kanchipuram M	Combined	79	13	10	0	13	74	0	0	13	0	13
41	Kumbakonam M	Combined	23	8	4	4	5	41	41	100	8	0	8
42	Tiruchirapalli M.Corp.	Combined	147	70	4	4	66	6	6	100	70	0	70
43	Tirunelveli M.Corp.	Separate	32	27	0.5	0	27	2	0	0	27	0	27
44	Tuticorin M	Separate	16	13	3	1.5	11	24	12	50	0	13	13
Uttar Pradesh													
45	Aligarh M.Corp.	Combined	35	37	7	0	37	20	0	0	37	0	37
46	Allahabad M.Corp.	Combined	450	168	99	60	108	59	36	60	67	101	168
47	Bareilly M.Corp.	Separate	149	64	26	0	64	40	0	0	64	0	64
48	Ghaziabad M.Corp.	Separate	500	129	126	111	18	98	86	88	3	126	129
49	Gorakhpur M.Corp.	Separate	20	59	30	0	59	50	0	0	59	0	59
50	Hapur MB	Separate	16	11	5	0	11	49	0	0	11	0	11
51	Hardwar MB	Separate	92	39	24	18	21	61	46	75	39	0	39
52	Mathura MB	Combined	6	21	20	20	1	94	94	100	21	0	21
53	Meerut M.Corp.	Combined	155	106	40	0	106	38	0	0	82	24	106
54	Mirzapur MB	Combined	15	20	14	14	6	70	70	100	6	14	20
West Bengal													
55	Asansol M.Corp.	Separate	5	42	5	0	42	11	0	0	0	42	42
Union Territories													
56	Chandigarh M.Corp.	Separate	890	207	157	136	71	76	66	87	204	3	207
57	Pondicherry M	Separate	15	27	10	10	17	37	37	100	27	0	27

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-2: Waste Water Generation, Collection, Treatment and Disposal, 1999

Sl. No.	City/town	Type of system	Length of sewers (km)	Volume of Waste Water (mld)				% collected to generated	% treated to generated	% treated to collected	Volume (mld) discharged on/in		
				Generated	Collected	Treated	Not treated				Land	Water bodies	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13
Class II													
Gujarat													
1	Ankleswar M	Combined	28	8	4	0	8	53	0	0	0.4	8	8
2	Dabhoi M	Combined	17	7	6	0	7	83	0	0	7	0	7
3	Mahesana M	Combined	40	12	9	0	12	72	0	0	0	12	12
Haryana													
4	Jind MCI	Separate	65	13	8	0	13	63	0	0	13	0	13
5	Kaithal MCI	Separate	40	9	5	0	9	54	0	0	9	0	9
6	Rewari MCI	Separate	20	10	6	0	10	62	0	0	10	0	10
7	Thanesar MCI	Separate	37	11	7	0	11	65	0	0	11	0	11
Karnataka													
8	Chikmagalur CMC	Separate	40	12	7	0	12	60	0	0	12	0	12
9	Kolar CMC	Separate	10	6	4	4	2	63	63	100	6	0	6
Punjab													
10	Ferozepur MCI	Combined	78	16	13	0	16	81	0	0	0	16	16
11	Kapurthala M	Combined	59	11	7	0	11	63	0	0	0	11	11
12	Mansa MCI	n.a.	34	6	5	0	6	80	0	0	6	0	6
13	Phagwara MCI	Separate	74	12	5	0	12	45	0	0	0	12	12
14	Sangrur MCI	Separate	57	10	7	0	10	70	0	0	0	10	10
Tamil Nadu													
15	Nagapattinam M	Separate	108	6	1.6	1.6	5	25	25	100	0	6	6
16	Udhagamandalam M	Separate	17	5	4	4	1	81	81	100	0	5	5
Uttar Pradesh													
17	Etah MB	Combined	5	3	0.8	0	3	24	0	0	3	0	3
18	Roorkee MB	Combined	15	15	9	9	6	60	60	100	15	0	15
West Bengal													
19	Darjeeling M	Separate	90	5	1.5	0	5	32	0.3	1	0	5	5
Small States													
Himachal Pradesh													
20	Shimla M.Corp.	Separate	65	22	21	0	22	95	0	0	n.a.	22	22
Others (Smaller than Class II towns)													
Small States													
Goa													
21	Panaji MCI	Separate	25	9	5	5	4	52	52	100	0	9	9

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-3: Sewage Treatment Process and Sewage Treatment Plants, 1999

Sl. No.	City/Town	Sewage treatment process adopted	Volume (mld) treated by treatment type			Sewage treatment plants		
			All methods	Primary	Primary & Secondary	Number	installed capacity (mld)	quantity treated (mld)
	1	2	3	4	5	6	7	8
Metropolitan Cities								
1	Ahmedabad M.Corp.	Extended aeration	360	160	200	4	634	360
2	Bangalore M.Corp.	Activated sludge process	403	180	223	3	458	403
3	Bhopal M.Corp.	Trickling filters & stabilisation pond	60	0	60	1	5	5
4	Calcutta M.Corp.	Treated naturally in wetlands	870	870	0	0		
5	Chennai M.Corp.	Extended aeration & Activated sludge process	162	35	127	6	220	162
6	Coimbatore M.Corp.	Extended aeration	36	0	36	2	36	36
7	Delhi M.Corp.	Activated sludge process	915	0	915	7	1290	915
8	Greater Mumbai M.Corp.	Extended aeration & Activated sludge process	735	599	136	4	2302	735
9	Hyderabad M.Corp.	Extended aeration	133	113	20	2	133	133
10	Indore M.Corp.	Not treated	0	0	0	1	14	0
11	Jaipur M.Corp.	Extended aeration	90	0	90	1	n.a.	9
12	Kanpur M.Corp.	Activated sludge process/ UASB	160	0	160	3	160	160
13	Kochi M.Corp.	Activated sludge process	4	0	4	1	5	4
14	Lucknow M.Corp.	n.a.	n.a.	n.a.	n.a.	0	n.a.	n.a.
15	Ludhiana M.Corp.	Not treated	0	0	0	0		
16	Madurai M.Corp.	Extended aeration	30	0	30	5	30	30
17	Nagpur M.Corp.	Not treated	0	0	0	0		
18	Pune M.Corp.	Extended aeration	95	50	45	2	122	95
19	Surat M.Corp.	Extended aeration	185	0	185	4	263	185
20	Vadodara M.Corp.	Trickling filters	54	0	54	2	54	54
21	Varanasi M.Corp.	Activated sludge process/ trickling filters	122	20	102	3	122	122
22	Visakhapatnam M.Corp.	Stabilisation pond	10	0	10	1	10	10

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-3: Sewage Treatment Process and Sewage Treatment Plants, 1999

Sl. No.	City/Town	Sewage treatment process adopted	Volume (mld) treated by treatment type			Sewage treatment plants		
			All methods	Primary	Primary & Secondary	Number	installed capacity (mld)	quantity treated (mld)
	1	2	3	4	5	6	7	8
Class I								
Andhra Pradesh								
1	Eluru M	Stabilisation pond	6	0	6	1	14	6
2	Guntur MCI	Extended aeration	4	0	4	1	8	4
3	Vijaywada M.Corp.	Extended aeration & Activated sludge process	21	0	21	1	27	21
Gujarat								
4	Anand M	Extended aeration	9	0	9	1	20	16
5	Bhavnagar M.Corp.	Not treated	0	0	0	0		
6	Bhuj M	Extended aeration	13	0	13	1	15	15
7	Nadiad M	Not treated	0	0	0	0		
8	Navsari M	Not treated	0	0	0	0		
9	Rajkot M.Corp.	Extended aeration	25	0	25	1	45	25
Haryana								
10	Ambala MCI	Not treated	0	0	0	0		
11	Faridabad M.Corp.	Up-flow anaerobic sludge blanket	80	0	80	3	110	80
12	Gurgaon MCI	Up-flow anaerobic sludge blanket	11	0	11	1	30	11
13	Hissar MCI	Not treated	0	0	0	0		
14	Rohtak MCI	Not treated	0	0	0	0		
Karnataka								
15	Bellary CMC	Extended aeration	5	0	5	2	16	5
16	Mangalore M.Corp.	n.a.	18	18	0	2	18	18
17	Mysore M.Corp.	Stabilisation pond	4	0	4	1	4	4
18	Shimoga CMC	Not treated	0	0	0	0		
Madhya Pradesh								
19	Gwalior M.Corp.	Extended aeration	16	0	16	2	19	16
20	Morena M	Not treated	0	0	0	0		
21	Shivpuri M	Not treated	0	0	0	0		
Maharashtra								
22	Aurangabad M.Corp.	Extended aeration	106	0	106	1	106	106
23	Dhule MCI	Not treated	0	0	0	0		
24	Ichalkaranji MCI	Extended aeration	20	0	20	1	20	20
25	Kolhapur M.Corp.	Activated sludge process	29	0	29	1	29	29
26	Nanded Waghala M.Corp.	Not treated	0	0	0	1	2	0
27	Nashik M.Corp.	Extended aeration	19	0	19	3	19	19
28	Solapur M.Corp.	Activated sludge process	54	0	54	1	54	54
Orissa								
29	Bhubaneswar M.Corp.	Extended aeration	9	5	4	3	9	9

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-3: Sewage Treatment Process and Sewage Treatment Plants, 1999

Sl. No.	City/Town	Sewage treatment process adopted	Volume (mld) treated by treatment type			Sewage treatment plants		
			All methods	Primary	Primary & Secondary	Number	installed capacity (mld)	quantity treated (mld)
	1	2	3	4	5	6	7	8
	Punjab							
30	Amritsar M.Corp.	Not treated	0	0	0	0		
31	Bathinda MCI	Not treated	0	0	0	0		
32	Hoshiarpur MCI	Not treated	0	0	0	0		
33	Jalandhar M. Corp.	Not treated	0	0	0	0		
34	Moga MCI	Not treated	0	0	0	0		
35	Pathankot MCI	Not treated	0	0	0	0		
36	Patiala M.Corp.	Not treated	0	0	0	0		
	Rajasthan							
37	Ajmer MCI	Not treated	0	0	0	0		
38	Bikaner M	Not treated	0	0	0	0		
39	Jodhpur M.Corp.	Not treated	0	0	0	0		
	Tamil Nadu							
40	Kanchipuram M	Not treated	4	0	0	0		
41	Kumbakonam M	Extended aeration	4	0	4	1	8	4
42	Tiruchirapalli M.Corp.	Extended aeration	4	0	4	1	5	4
43	Tirunelveli M.Corp.	Not treated	1	0	0	0		
44	Tuticorin M	Up-flow anaerobic sludge blanket	2	0	2	1	n.a.	2
	Uttar Pradesh							
45	Aligarh M.Corp.	Not treated	0	0	0	0		
46	Allahabad M.Corp.	Extended aeration	60	0	60	1	60	60
47	Bareilly M.Corp.	Not treated	0	0	0	0		
48	Ghaziabad M.Corp.	Up-flow anaerobic sludge blanket	111	0	126	9	126	126
49	Gorakhpur M.Corp.	Not treated	0	0	0	0		
50	Hapur MB	Not treated	0	0	0	0		
51	Hardwar MB	Activated sludge process	18	0	18	1	18	18
52	Mathura MB	Not treated	0	0	0	0		
53	Meerut M.Corp.	Not treated	0	0	0	0		
54	Mirzapur MB	Up-flow anaerobic sludge blanket	14	0	14	2	14	14
	West Bengal							
55	Asansol M.Corp.	Septic tank	5	0	0	0		
	Union Territories							
56	Chandigarh M.Corp.	Activated sludge process	136	0	136	1	136	136
57	Pondicherry M	Extended aeration	10	0	10	3	10	8

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-3: Sewage Treatment Process and Sewage Treatment Plants, 1999

Sl. No.	City/Town	Sewage treatment process adopted	Volume (mld) treated by treatment type			Sewage treatment plants		
			All methods	Primary	Primary & Secondary	Number	installed capacity (mld)	quantity treated (mld)
	1	2	3	4	5	6	7	8
Class II								
Gujarat								
1	Ankleswar M	Not treated	4	0	0	0		
2	Dabhoi M	Not treated	0	0	0	0		
3	Mahesana M	Not treated	0	0	0	0		
Haryana								
4	Jind MCI	Not treated	0	0	0	0		
5	Kaithal MCI	Not treated	0	0	0	0		
6	Rewari MCI	Not treated	0	0	0	0		
7	Thanesar MCI	Not treated	0	0	0	0		
Karnataka								
8	Chikmaglur CMC	Not treated	0	0	0	0		
9	Kolar CMC	Not treated	4	0	0	0		
Punjab								
10	Ferozepur MCI	Not treated	0	0	0	0		
11	Kapurthala M	Not treated	0	0	0	0		
12	Mansa MCI	Not treated	0	0	0	0		
13	Phagwara MCI	Not treated	0	0	0	0		
14	Sangrur MCI	Not treated	0	0	0	0		
Tamil Nadu								
15	Nagapattinam M	Extended aeration	2	0	2	1	4	2
16	Udhagamandalam M	Activated sludge process	4	0	4	1	5	4
Uttar Pradesh								
17	Etah MB	Not treated	0	0	0	0		
18	Roorkee MB	Extended aeration	9	0	9	2	9	9
West Bengal								
19	Darjeeling M	Septic tank	0	0	0	0		
Small States								
Himachal Pradesh								
20	Shimla M.Corp.	Not treated	0	0	0	0		
Others (Smaller than Class II towns)								
Small States								
Goa								
21	Panaji MCI	Trickling filters	5	0	5	1	6	5

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-4: Waste Water Recycle and Reuse, 1999

Sl. No.	Cities/town	Quantity of sewage collected (mld)	Total recycle & reuse of waste water (mld)	Recycle & reuse of waste water (mld) used for			Sewage gas (cu.m)				Sewage sludge as Manure (MT)	
				Agriculture & horticulture	Industrial cooling	Flushing toilets etc.	Pro-duction	Daily production	Daily sales	Daily quantity	Generated per annum	Sold per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Metropolitan Cities												
1	Chennai M.Corp.	245	85 (35%)	65 (27%)	20 (8%)	0	No	0	0	0	0	0
2	Calcutta M.Corp.	870	870* (100%)	870* (100%)	0	0	No	0	0	0	0	0
3	Delhi M.Corp.	1290	10 (1%)	10 (1%)	n.a.	n.a.	Yes	19680	19680	2700	50068	n.a.
4	Greater Mumbai M.Corp.	1460	9 (0.6%)	4.5 (0.3%)	0	4.5 (0.3%)	Yes	4	4	0	300	100
5	Hyderabad M.Corp.	338	133 (39%)	133 (39%)	0	0	No	0	0	0	0	0
6	Jaipur M.Corp.	180	12 (7%)	12 (7%)	0	0	No	0	0	0	n.a.	n.a.
7	Kanpur M.Corp.	160	160 (100%)	160 (100%)	0	0	Yes	10000	n.a.	n.a.	20	20
8	Nagpur M.Corp.	180	20 (11%)	20 (11%)	0	0	No	0	0	0	0	0
9	Pune M.Corp.	390	50 (13%)	50 (13%)	0	0	No	0	0	0	0	0
10	Vadodara M.Corp.	122	5 (4%)	5 (4%)	0	0	No	0	0	0	0	0
11	Varanasi M.Corp.	122	50 (41%)	50 (41%)	0	0	Yes	3800	0	0	12000	12000
Total - Metropolitan Cities		5357	1404 (26%)	1379.5 (25.75%)	20 (0.37%)	4.5 (0.08%)		33484				
*Aquaculture and agriculture Figures from Column 3 to 6 are percentage of Column 2												
Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999												

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-4: Waste Water Recycle and Reuse, 1999

Sl. No.	Cities/town	Quantity of sewage collected (mld)	Total recycle & reuse of waste water (mld)	Recycle & reuse of waste water (mld) used for			Sewage gas (cu.m)				Sewage sludge as Manure (MT)	
				Agriculture & horticulture	Industrial cooling	Flushing toilets etc.	Pro-duction	Daily production	Daily sales	Daily quantity	Generated per annum	Sold per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Class I												
Andhra Pradesh												
1	Guntur MCI	10.8	10.8 (100%)	10.8 (100%)	0	0	No	0	0	0	0	0
2	Vijaywada M.Corp.	26.0	26.0 (100%)	26.0 (100%)	0	0	No	0	0	0	182	182
Gujarat												
3	Bhuj M	13.5	13.5 (100%)	13.5 (100%)	0	0	No	0	0	0	0	0
4	Nadiad M	7.8	4.0 (51%)	4.0 (51%)	0	0	No	0	0	0	0	0
5	Rajkot M.Corp.	46.9	25.0 (53%)	25.0 (53%)	0	0	No	0	0	0	0	0
Haryana												
6	Gurgaon MCI	10.6	10.6 (100%)	10.6 (100%)	0	0	No	0	0	0	0	0
Madhya Pradesh												
7	Gwalior M.Corp.	61.8	2.3 (4%)	2.3 (4%)	0	0	No	0	0	0	0	0
8	Shivpuri M	3.1	3.1 (100%)	3.1 (100%)	0	0	No	0	0	0	0	0
Maharashtra												
9	Dhule MCI	12.0	9.0 (75%)	9.0 (75%)	0	0	No	0	0	0	0	0
10	Kolhapur M.Corp.	31.9	29.0 (91%)	29.0 (91%)	0	0	No	0	0	0	0	0
Punjab												
11	Hoshiarpur MCI	16.5	2.5 (15%)	2.5 (15%)	0	0	No	0	0	0	0	0
12	Moga MCI	10.8	3.6 (33%)	3.6 (33%)	0	0	No	0	0	0	0	0
13	Pathankot MCI	5.6	5.0 (90%)	5.0 (90%)	0	0	No	0	0	0	0	0
Rajasthan												
14	Jodhpur M.Corp.	46.1	17.0 (37%)	17.0 (37%)	0	0	No	0	0	0	0	0
Tamil Nadu												
15	Kanchipuram	9.7	4.4* (45%)	4.4* (45%)	0	0	No	0	0	0	0	0
16	Tiruchirapalli M.Corp.	4.0	4.0 (100%)	4.0 (100%)	0	0	No	0	0	0	0	0
Uttar Pradesh												
17	Allahabad M.Corp.	99.3	60.0 (60%)	60.0 (60%)	0	0	No	0	0	0	0	0
18	Bareilly M.Corp.	25.6	15.0 (59%)	15.0 (59%)	0	0	No	0	0	0	0	0
19	Ghaziabad M.Corp.	126.0	3.0 (2%)	3.0 (2%)	0	0	No	0	0	0	0	0
20	Hapur MB	5.4	3.4 (62%)	3.4 (62%)	0	0	No	0	0	0	0	0
21	Hardwar MB	23.9	9.0 (38%)	9.0 (38%)	0	0	Yes	600	0	600	2500	413
22	Mathura MB	20.0	7.0 (35%)	7.0 (35%)	0	0	No	0	0	0	0	0
23	Mirzapur MB	14.0	4.2 (30%)	4.2 (30%)	0	0	Yes	200	0	160	100	n.a.
Union Territories												
24	Chandigarh M.Corp.	156.6	156.6 (100%)	156.6 (100%)	0	0	No	0	0	0	0	0
25	Pondicherry M	10.0	8.3 (83%)	8.3 (83%)	0	0	No	0	0	0	0	0
Total - Class I Cities		797.9	436.0 (55%)	436.0 (55%)	0	10		800	0	760	2782	

*Aquaculture and agriculture Figures from Column 3 to 6 are percentage of Column 2

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-4: Waste Water Recycle and Reuse, 1999

Sl. No.	Cities/town	Quantity of sewage collected (mld)	Total recycle & reuse of waste water (mld)	Recycle & reuse of waste water (mld) used for			Sewage gas (cu.m)				Sewage sludge as Manure (MT)	
				Agriculture & horticulture	Industrial cooling	Flushing toilets etc.	Pro-duction	Daily production	Daily sales	Daily quantity	Generated per annum	Sold per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Class II												
Gujarat												
1	Dabhoi M	6.0	6.0 (100%)	6.0 (100%)	0	0	No	0	0	0	0	0
Haryana												
2	Jind MCI	8.0	8.0 (100%)	8.0 (100%)	0	0	No	0	0	0	0	0
3	Kaithal MCI	4.6	4.6 (100%)	4.6 (100%)	0	0	No	0	0	0	0	0
4	Thanesar MCI	6.9	6.9 (100%)	6.9 (100%)	0	0	No	0	0	0	0	0
Punjab												
5	Ferozpur MCI	12.7	12.7 (100%)	12.7 (100%)	0	0	No	0	0	0	0	0
6	Mansa MCI	5.1	5.1 (100%)	5.1 (100%)	0	0	No	0	0	0	0	0
Uttar Pradesh												
7	Etah MB	0.8	0.8 (100%)	0.8 (100%)	0	0	No	0	0	0	0	0
8	Roorkee MB	9.0	9.0 (100%)	9.0 (100%)	0	0	No	0	0	0	0	0
Total - Class II Towns		53.1	53.1 (100%)	53.1 (100%)	0	0		0	0	0	0	0

*Aquaculture and agriculture Figures from Column 3 to 6 are percentage of Column 2

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL
B-5: Institutional Arrangement and Staff Position - 1999

Sl. No.	City/ Town	Agency responsible for Operation & Maintenance	Staff Position			
			Managerial	Technical	O&M	Total staff
	1	2	3	4	5	6
Metropolitan Cities						
1	Ahmedabad M.Corp.	M.Corp.	200		800	1000
2	Bangalore M.Corp.	BWS&SB	Combined with water supply			
3	Bhopal M.Corp.	PHED, Madhya Pradesh	5	28	271	304
4	Calcutta M.Corp.	C.M.C	32	173	1920	2125
5	Chennai M.Corp.	CMWSSB	Combined with water supply			
6	Coimbatore M.Corp.	M.Corp.	Combined with water supply			
7	Delhi M.Corp.	DJB	Combined with water supply			
8	Greater Mumbai M.Corp.	M.Corp.	249	447	5480	6176
9	Hyderabad M.Corp.	HMWSSB	Combined with water supply			
10	Indore M.Corp.	M.Corp.	60	22	236	318
11	Jaipur M.Corp.	PHED, Rajasthan	7	4	192	203
12	Kanpur M.Corp.	Jal Sansthan, Kanpur	Combined with water supply			
13	Kochi M.Corp.	KWA	7	21	39	67
14	Lucknow M.Corp.	Jal Sansthan, Lucknow	25	100	225	350
15	Ludhiana M.Corp.	M.Corp.				
16	Madurai M.Corp.	M.Corp.	49		164	213
17	Nagpur M.Corp.	M.Corp.	11	15	331	357
18	Pune M.Corp.	M.Corp.	83	58	509	650
19	Surat M.Corp.	M.Corp.	6	60	449	515
20	Vadodara M.Corp.	M.Corp.	9	7	391	407
21	Varanasi M.Corp.	M.Corp. Jal Nigam & Jal Sansthan, Varanasi	Combined with water supply			
22	Visakhapatnam M.Corp.	M.Corp.	Combined with water supply			
Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999						

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL
B-5: Institutional Arrangement and Staff Position - 1999

Sl. No.	City/ Town	Agency responsible for Operation & Maintenance	Staff Position			
			Managerial	Technical	O&M	Total staff
	1	2	3	4	5	6
Class I						
Andhra Pradesh						
1	Eluru M	Municipality	1	3	98	102
2	Guntur MCI	Municipality	2	1	65	68
3	Vijaywada M.Corp.	M.Corp.		5	72	77
Gujarat						
4	Anand M	Municipality	3	6	30	39
5	Bhavnagar M.Corp.	M.Corp.	40	13	393	446
6	Bhuj M	Municipality	2	2	25	29
7	Nadiad M	Municipality	2	25	30	57
8	Navsari M	Municipality	9	40	20	69
9	Rajkot M.Corp.	M.Corp.	8	24	8	40
Haryana						
10	Ambala MCI	PHED	2	1	22	25
11	Faridabad M.Corp.	M.Corp.	5	49	253	307
12	Gurgaon MCI	PHED	4	3	59	66
13	Hissar MCI	PHED	6	5	86	97
14	Karnal MCI	PHED	3	2	20	25
15	Rohtak MCI	PHED	6	3	39	48
Karnataka						
16	Bellary CMC	KUWS&DB	3	3	25	31
17	Gulbarga M.Corp.	M.Corp.	1	9	32	42
18	Mangalore M.Corp.	Municipality	1	1	35	37
19	Mysore M.Corp.	Pvt. Contractor	3	11	48	62
20	Shimoga CMC	Municipality		2	20	22
Madhya Pradesh						
21	Bhind M	PHED		4	36	40
22	Gwalior M.Corp.	PHED	1	44	209	254
23	Morena M	PHED/ Municipality		1	11	12
24	Shivpuri M	PHED	18	1	0	19
Maharashtra						
25	Aurangabad M.Corp.	Municipality	3	17	112	132
26	Dhule MCI	MJP	2	2	2	6
27	Ichalkaranji MCI	Pvt. Contractor	Not applicable			
28	Kolhapur M.Corp.	Municipality	1	3	128	132
29	Nanded Waghala M.Corp.	Municipality	10	5	40	55
30	Nashik M.Corp.	Municipality	1	20	100	121
31	Solapur M.Corp.	PHED	9	9	337	355
Orissa						
32	Bhubaneswar M.Corp.	PHED		56	442	498

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL
B-5: Institutional Arrangement and Staff Position - 1999

Sl. No.	City/ Town	Agency responsible for Operation & Maintenance	Staff Position			
			Managerial	Technical	O&M	Total staff
	1	2	3	4	5	6
	Punjab					
33	Amritsar M.Corp.	M.Corp.	71	83	339	493
34	Bathinda MCI	PWSSB		8	142	150
35	Hoshiarpur MCI	Municipality	1	1	6	8
36	Jalandhar M. Corp.	Municipality	35	34	305	374
37	Moga MCI	Municipality	1	3	40	44
38	Pathankot MCI	MC	1	2	21	24
39	Patiala M.Corp.	Municipality	20	10	43	73
	Rajasthan					
40	Ajmer MCI	PHED	n.a.	n.a.	n.a.	n.a.
41	Bikaner M	PHED			30	30
42	Jodhpur M.Corp.	PHED	12	0	175	187
	Tamil Nadu					
43	Kanchipuram M	Municipality		4	13	17
44	Kumbakonam M	Municipality		3	6	9
45	Tiruchirapalli M.Corp.	Pvt. Contractor	Not applicable			
46	Tirunelveli M.Corp.	M.Corp.		2	6	8
47	Tuticorin M	Municipality		4	28	32
	Uttar Pradesh					
48	Aligarh M.Corp.	M. Corp.	4	4	32	40
49	Allahabad M.Corp.	Jal Sansthan, Allahabad	3	0	126	129
50	Bareilly M.Corp.	M.Corp.	2	2	70	74
51	Ghaziabad M.Corp.	Yamuna Pollution Control Unit & U.P. Jal Nigam	n.a.	n.a.	n.a.	n.a.
52	Gorakhpur M.Corp.	M. Corp.	1	3	40	44
53	Hapur MB	Municipality	1	2	10	13
54	Hardwar MB	Ganga Pollution Control Unit & U.P., Jal Nigam	Break-up not available			170
55	Mathura MB	Municipality	5	6	47	58
56	Meerut M.Corp.	M.Corp.	4	6	127	137
57	Mirzapur MB	Ganga Poll. Control Unit & UP Jal Nigam		6	86	92
58	Orai	Water works/ Jhansi		2	3	5
59	Rae Bareli MB	Municipality	3	13	20	36
60	Unnao MB	Municipality	2	2	4	8
	West Bengal					
61	Asansol M.Corp.	M. Corp.	2	2	9	13
	Union Territories					
62	Chandigarh M.Corp.	M.Corp.	53	n.a.	124	177
63	Pondichery M	PWD		6	105	111

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL
B-5: Institutional Arrangement and Staff Position - 1999

Sl. No.	City/ Town	Agency responsible for Operation & Maintenance	Staff Position			
			Managerial	Technical	O&M	Total staff
	1	2	3	4	5	6
Class II						
Gujarat						
1	Ankleswar M	Municipality		10	60	70
2	Dabhoi M	Municipality	1	2	6	9
3	Mahesana M	Municipality	1		10	11
Haryana						
4	Jind MCI	PHED	4	9	8	21
5	Kaithal MCI	PHED	3	4	30	37
6	Rewari MCI	PHED	3	3	20	26
7	Thanesar MCI	PHED	3	3	12	18
Karnataka						
8	Chikmagalur CMC	Municipality	1	3	15	19
9	Kolar CMC	Municipality		1	5	6
Punjab						
10	Ferozepur MCI	PWS&SB	1	1	40	42
11	Kapurthala M	Municipality	2	1	12	15
12	Mansa MCI	PWS&SB	2	2	39	43
13	Phagwara MCI	Municipality	2	1	63	66
14	Sangrur MCI	Municipality	1	3	44	48
Tamil Nadu						
15	Nagapattinam M	Municipality		2	4	6
16	Udhagamandalam M	Municipality		1	30	31
Uttar Pradesh						
17	Etah MB	Jal Sansthan	1	2	0	3
18	Roorkee MB	Municipality	5	5	5	15
West Bengal						
19	Darjeeling M	Municipality	4	2	251	257
Small States						
Himachal Pradesh						
20	Shimla M.Corp.	M.Corp.	1	8	200	209
Others (Smaller than Class II towns)						
Goa						
21	Panaji MCI	PWD	4	4	69	77

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-6: Details of Privatisation in Waste Water Treatment - 1999

Sl. No.	City/ town	Privatisation Details						
		Function	Activity	Mode used	Year privatised	No. of contractors	Cost before privatisation (Rs. 000)	Cost after privatisation (Rs. 000)
	1	2	3	4	5	6	7	8
Metropolitan Cities								
1	Chennai	O&M	Pumping stations	Contract	1996	3	2700	1440
2	Hyderabad	O&M	STPs	Contract	1997-1999	2	n.a.	n.a.
Class I								
Gujarat								
1	Rajkot	O&M	Pumping stations	Contract	1998	3	n.a.	n.a.
2	Bhavnagar	O&M		Contract	1994	1	n.a.	40
Maharashtra								
3	Nashik	O&M	STPs	Contract	1995	1	n.a.	952
Union Territories								
4	Chandigarh	O&M	Pumping stations	n.a.	1999	1	n.a.	n.a.

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-7: Capital Works undertaken since 1994

Sl. No.	City/ Town	No. of schemes	Scheme No.	Purpose	Components	Designed		Year		Total Cost (Rs.in lakhs)	Source of funding	Per capita cost (Rs.)
						population ('000)	capacity (mld)	Started	Completed			
1	2	3	4	5	6	7	8	9	10	11	12	
Metropolitan Cities												
1	Ahmedabad	3	1	Sabarmati river cleaning	Laying of new trunk sewers, desilting, renovation of STPs etc.			1996	Ongoing	3,765	n.a.	n.a.
			2	East Ahmedabad Sewerage Project -II	Sewers, pumping stations etc.			n.a.	Ongoing	1,983	n.a.	n.a.
			3	Effluent disposal	Sewers, pumping stations etc.			n.a.	Ongoing	1,044	State govt./ industries	n.a.
2	Bangalore	1	1	Sewage treatment	Tertiary treatment plant		140	1998	2000	n.a.	French funding, HUDCO, KUIDFC	n.a.
3	Bhopal	1	1	Environmental conservation	Wetland project	500	100	Work in progress		6,000	Loan from OECF	1200
4	Calcutta	3	1	Pollution control under GAP II	n.a.			1999	Ongoing	1,800	Govt. of India	471
			2	Mega city	Rehab. of existing sewers			1999	Ongoing	200	Govt. of India	4
			3	10th Finance Commission	Imprv. & dev. of existing system			1998	Ongoing	190	Govt. of India	46
5	Coimbatore	1	1	Augmentation	Sewer lines	737	142	1999	2002	16,050	TN Infrastructure Financial Services Ltd.	2177
6	Greater Mumbai		1	Discharge sewage into sea	Worli & Bandra Outfall	4800 & 5240	726 & 785	1995	1999, 2000	38,300	IBRD Loan, IDA Credit, MCBM	383
			2	Discharge sewage into sea	Pumping station, repairs	5,240	785.00	1996	2001	21,300	IBRD Loan, IDA Credit, MCBM	426
			3	Provide biological trtmt. for sewage	Ghatkopar & Bhandup lagoons	1900 & 1860	285 & 280	1995	1999	12,600	IBRD Loan, IDA Credit, MCBM	335
			4	Stabilise the structures from uplift forces	Pumping stations			1996	1998	925	IBRD Loan, IDA Credit, MCBM	n.a.
			5	Transport sewage to pumping station	Pipelines	1,900	285.00	2000	2002	6,000	IBRD Loan, IDA Credit, MCBM	316
			6	To provide sewerage facility	Construction of Pumping station	4,000	11.89	1998	Ongoing	502	MMRDA	1,255
			31 schemes	To provide sewerage facility	Pipelines	combined	combined	combined	combined	combined	MCGM, MMRDA	237 to 2093
6	Hyderabad	2	1	Augmentation	Sewerage & sewers		1240	n.a.	Ongoing	n.a.	World Bank	n.a.
			2	Augmentation	STP			n.a.	Ongoing	n.a.	HUDCO	n.a.
7	Jaipur	1	1	Improving existing system	Outfall sewer	1,745	209	1996	1999	1,475	JDA/ PHED/ Housing Board/ self	85
8	Kochi	1	1	Augmentation	Pipe lines	89	16	1997	Ongoing	400	KWA funds	450
9	Ludhiana	1	1	Extension of network	Sewer lines	100	15	1994	1998	1,025	Self	1025
10	Nagpur	1	1	Sewage treatment	STP, sump	615	100	1991	Ongoing	2,777	State Government, Self	452
11	Pune	3	1	Augmentation	Pipe lines		70	1996	1997	35	C. Budget of PMC	7
			2	Dispose treated sewage to agri. land	Pipe lines		25	1997	1999	300	C. Budget of PMC	7
			3	To collect sewage for treatment	Pipe lines		50	1997	1999	74	C. Budget of PMC	5
12	Surat	1	1	n.a.	Pipe lines	1,747	350	1997	Ongoing	1,652		483-1885
13	Vadodara	2	1	Replacement of equipment	Civil and mechanical works	300	27	1998	1999	220	Own funds	73
			2	Replacement of equipment	Civil and mechanical works	250	27	1998	1999	190	Own funds	76
14	Visakhapatnam	2	1	Augmentation	Pipe lines	320	50	1994	Ongoing	1,421	HUDCO, self	n.a.
			2	Augmentation	Pipe lines	220	35	2000	2002	20	HUDCO, self	n.a.

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-7: Capital Works undertaken since 1994

Sl. No.	City/ Town	No. of schemes	Scheme No.	Purpose	Components	Designed		Year		Total Cost (Rs.in lakhs)	Source of funding	Per capita cost (Rs.)
						population ('000)	capacity (mld)	Started	Completed			
1	2	3	4	5	6	7	8	9	10	11	12	
Class I												
Andhra Pradesh												
1	Guntur	1	1	Treatment plant	Treatment plant/ sewer lines	350	35	1992	2002	3,200	HUDCO, self	914
2	Tirupati	1	1	Augmentation	Pipe lines	4,100	25	1994	1999	3,588	MCH, HUDCO& FTD	1500
3	Vijaywada	1	1	Augmentation	Pipe lines	200	32	1998	Ongoing	2,500	HUDCO, self	1250
Gujarat												
4	Bhavnagar	3	1	Improving existing system	Pipe lines	75	21	1995	Ongoing	600	Grant, Self	800
			2	Augmentation	Pipe lines	75	21	1994	Ongoing	56	Grant, Self	75
			3	Improving existing system	Pipe lines			1996	1998	190	Grant, Self	n.a.
5	Navsari	1	1	Augmentation	Pipe lines			1995	1998	98	Self	n.a.
6	Rajkot	2	1	Improving existing system	Pipe lines	550	n.a.	1978	1994	5,200	World Bank, HUDCO	1000
			2	Adding new pipe lines	Pipe lines	450	n.a.	1997	2001	1,200	Self	270
Haryana												
7	Gurgaon	1	1	Adding new pipe lines	Pipe lines	20	n.a.	1999	Ongoing	41	State Government	206
8	Hissar	4	1	Improving existing system	Pumping station	215	3	1998	Ongoing	194	State Government	902
			2	Adding new pipe lines	Pipe lines	1	0	1995	Ongoing	12	State Government	1150
			3	Adding new pipe lines	Pipe lines	2	0	1995	Ongoing	10	State Government	417
			4	Adding new pipe lines	Pipe lines	0.7	0	1997	1999	7	State Government	
9	Karnal	4	1	Adding new pipe lines	Pipe lines	54	7	1995	Ongoing	127	State Government	236
			2	Adding new pipe lines	Pipe lines	31	6	1985	Ongoing	130	State Government	250
			3	Adding new pipe lines	Pipe lines	160	23	1980	Ongoing	140	State Government	150
			4	Improving existing system	Treatment plant	218	0	1995	Ongoing	2,392	OECF	
10	Rohtak	2	1	Adding new pipe lines	Pipe lines	357	202	1994	1999	238	n.a	421
			2	Adding new pipe lines	Pipe lines	76	8	1994	Ongoing	441	n.a	578
Karnataka												
11	Davangere	1	1	n.a.	Pipe lines			1996	Ongoing	49	State Government	n.a.
Maharashtra												
12	Kolhapur	2	1	Divert sullage to drainage schemes	Weir, sump, pump, mech. Works			1999	Ongoing	488	GIA & loan	-
			2	Divert sullage to drainage, treatment	Treatment plant (pr. & sec. trt.), sump, pump	621	75	1999	Ongoing	5,085	GIA & loan	820
13	Nashik	1	1	Augmentation	Pipe lines	1,677	200	1998	Ongoing	8,278	Government grant & self	494
Orissa												
14	Bhubaneswar	1	1	Collection of sewage	Sump, sewer lines, pumping station	150	24	1997	Ongoing	274	State govt.	183
15	Puri	1	1	Treat west water	Screens, catchment basin, facullative ponds	142	10	1995	1996	638	State govt.	
Punjab												
16	Amritsar	4	1	Augmentation	Pipe lines			1994	Ongoing	126	Self	n.a.
			2	Augmentation	Pipe lines			1994	Ongoing	16	Self	n.a.
			3	Extension/ augmentation	Sewer lines			1999	2002	3,742	HUDCO/ State govt./ self	n.a.
			4	Extension of network	Sewer lines			1999	2001	782	Self	n.a.
17	Bathinda	1	1	Adding new pipe lines	Pipe lines		5	1994	1999	366		295
18	Jalandhar	1	1	Improving existing system	Treatment plant	1,236	100	1994	2002	2,256	Govt. of India	182
19	Moga	2	1	Augmentation	Pipe lines			1994	1998	109		360
			2	Extension/ augmentation	Sewer lines			1999	2002	1,573	HUDCO/ self	1622
Rajasthan												
20	Ajmer	1	1	Laying sewerage network in Dargah area	Sewer lines	60	7	1995	1999	160	PWD, Rajasthan	267
21	Jodhpur	1	1	Extension of network	Sewer lines	89	10	1996	Ongoing	508	HUDCO/ State govt.	570

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-7: Capital Works undertaken since 1994

Sl. No.	City/ Town	No. of schemes	Scheme No.	Purpose	Components	Designed		Year		Total Cost (Rs.in lakhs)	Source of funding	Per capita cost (Rs.)
						population ('000)	capacity (mld)	Started	Completed			
	1	2	3	4	5	6	7	8	9	10	11	12
Class II												
Gujarat												
1	Mahesana	2	1	Improving existing system	Pumping station			1998	1999	10	Self	n.a.
			2	Augmentation	Pipe lines		3	1995	Ongoing	40	Self	n.a.
Haryana												
2	Jind	3	1	Adding new pipe lines	Pipe lines	135	51	1995	Ongoing	199	State Government	147
			2	Adding new pipe lines	Pipe lines	32	36	1984	Ongoing	60	State Government	188
			3	Adding new pipe lines	Pipe lines	1,120	6	1996	Ongoing	68	State Government	606
3	Thanesar	1	1	Augmentation	T.Pipe lines,Pumping Mach.	56	1	1984	Ongoing	101	State Government	179
Karnataka												
4	Gokak	1	1	n.a.	Pipe lines	350	0	1997	Ongoing	21		600
Punjab												
5	Firozpur	1	1	Augmentation	Pipe lines			1994	1997	122	Self	350
6	Mansa	1	1	Adding new pipe lines	Pipe lines			1999	n.a.	730	HUDCO/ State govt.	1100
7	Phagwara	2	1	Augmentation	Pipe lines			1997	Ongoing	200	Central govt.	n.a.
			2	Improvement	Treatment plant & pumping station		16	1999	2001	525	Central govt.	n.a.
8	Sangrur	2	1	Augmentation	Pipe lines			1994	1996	8	Self	n.a.
			2	Augmentation	Pipe lines			1996	Ongoing	7	Self	n.a.
Rajasthan												
9	Banswara	1	1	Sewerage scheme	n.a.	110	n.a.	n.a.	n.a.	n.a.		n.a.

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-8: Capital Works proposed to be undertaken in future

Sl. No.	City / Town	No. of schemes (clubed)	Scheme No.	Purpose	Components	Designed		Expected year of		Total Cost (Rs. in lakhs)	Source of funding	Per capita cost (Rs.)
						population ('000)	capacity (mld)	starting	completion			
	1	2	3	4	5	6	7	8	9	10	11	12
Metropolitan Cities												
1	Coimbatore			Augmentation	Sewer lines	737	142	1999	2002	16,050	TN Infrastructure Financial Services Ltd.	2177
2	Greater Mumbai	8		Augmentation	Sewer lines , treatment plant	Combined	Combined	2000	n.a.	2,539	World Bank & MCGM	n.a.
3	Hyderabad	1	1	Extension of network	Sewer lines	2,021	1242	2001	2006	30,000	HUDCO, HMWSSB	n.a.
4	Ludhiana	1	1	Extension of network	Sewer lines	425	70	2000	2002	5,782	Self	1360
5	Pune	1		Augmentation/ improvement	Sewer lines	n.a.	n.a.	n.a.	n.a.	14,251	Self / State Govt.	570
6	Surat	1	1	Extention of sewerage	Sewer lines, pumping station, rising main lines, STP, treated effluent disposal line	1,615	341	2000	2005	14,046	Self	570-1282
7	Vadodara		1	Sewage treatment	STP	340	52	1999	2000	1,200	Loan	353
			2	Sewage treatment	STP	440	66	2000	2001	2,106	Loan	478
			3	Sewage treatment	STP	186	43	2000	2002	1,445	Loan	505
Class I												
Gujarat												
1	Bhavnagar			Improving existing system	Treatment plant	n.a.	n.a.	n.a.	n.a.	n.a.	Grant	n.a.
Karnataka												
2	Mangalore	1	1	Upgradation	Replacement of sewer lines, Upgradation of STP	280	29	2001	2005	3,190	ADB	1140
3	Bellary	1	1	Upgradation	n.a.	350	50	n.a.	n.a.	5,070	HUDCO/ State Govt.	n.a.
Maharashtra												
4	Aurangabad	1		Treatment	Sewer lines/ treatment plant	1,600	192	n.a.	n.a.	10,000	n.a.	n.a.
5	Kolhapur	1		Augmentation/ improvement	Sewer lines	765	115	2000	2006	6,079	Grant/ loan	794
6	Nashik		1	Treatment	Pumtping status, Treatment plant	1,000,000	90	2000	2002	5,300	State & Central Govt.	n.a.
Orissa												
7	Bhubaneswar	1	1	Treatment/ disposal	Sewer lines,STP, filters, clear water sump	1,200	150	n.a.	n.a.	4,900	n.a.	408
8	Puri	1	1	Improvement	Treatment facility	159	27	2000	2005	44	State/ Central Govt.	2550

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-8: Capital Works proposed to be undertaken in future

Sl. No.	City / Town	No. of schemes (clubed)	Scheme No.	Purpose	Components	Designed		Expected year of		Total Cost (Rs. in lakhs)	Source of funding	Per capita cost (Rs.)
						population ('000)	capacity (mld)	starting	completion			
	1	2	3	4	5	6	7	8	9	10	11	12
Punjab												
9	Amritsar	1	1	Treatment	2 treatment plants		n.a.	2005	2007	8,647	Self	n.a.
10	Bathinda		1	Augmentation	Pipe lines	n.a.	n.a.	2001	2006	3,420	AB	1875
11	Moga		1	Augmentation	Pipe lines	n.a.	n.a.	1999	2002	1,573	HUDCO, MC	1622
Rajasthan												
12	Ajmer	1	1	Augmentation	n.a.	500,000	70	2000	2005	10,215	ADB	1840
13	Bikaner	1	1	Sewerage system for Bikaner (Phase II)	n.a.	400	n.a.	2000	2005	11,700	ADB	230
Tamil Nadu												
14	Salem MCorp			Sewage Disposal	n.a.	400,000	n.a.	n.a.	2005	1,200	TWAD Board	n.a.
15	Tirunelveli			Augmentation	Pipe line, Treatment plant & Pumphouse	n.a.	n.a.	n.a.	n.a.	3,000	Self	n.a.
16	Vellore M			Sewage Disposal	n.a.	200,000	20	n.a.	n.a.	4,800	n.a.	2400
Uttar Pradesh												
17	Agra	1		New sewerage system	n.a.	159	20	2000	2004	4,805	Central, State Govt.	3000
18	Bareilly	1		Sewage treatment	n.a.	100	n.a.	n.a.	n.a.	663		663
19	Hapur	1		Sewage Disposal	Pumping station	na	n.a.	1999	n.a.	25	State Govt.	
20	Meerut	1		Sewage Rehabilitation	Pipe line Machinery		n.a.	1999	2001	477	Central, State Govt.	n.a.
21	Mirzapur	1		Sewerage scheme	n.a.	57	n.a.	n.a.	n.a.	1,505	State Govt.	n.a.
Union Territories												
22	Pondicherry	1		To upgrade the UGD of Pondichery	n.a.	50	5	2000	2001	56	UT Govt	112
Class II												
Gujarat												
1	Dabhoi	1	1	Extention of sewerage	Civil, electrical, mechanical	15	n.a.	2000	n.a.	85	Central Govt. grant	567
Goa												
2	Panaji	1		Augmentation	Sewage Treatment plant	75	13	2000	2002	800	State Govt. , HUDCO	1050

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-9: Revenue Receipts, 1997-98

Sl. No.	City/ town	Revenue Receipts (Rs. in '000)						
		Recycled	Sewage gas	Manure	Connection charges	Sewage/ Drainage tax	Others	Total
	1	2	3	4	5	6	7	8
Metropolitan Cities								
1	Ahmedabad M.Corp.	0	0	86	6181	8715	552	15534
2	Bangalore M.Corp.	These figures are combined with water supply revenue income figures						
3	Bhopal M.Corp.	n.a.						
4	Calcutta M.Corp.	0	0	0	50000	0	0	50000
5	Chennai M.Corp.	These figures are combined with water supply revenue income figures						
6	Coimbatore M.Corp.	0	0	0	0	21737	0	21737
7	Delhi M.Corp.	n.a.	0	1536	9	0	2656	4201
8	Greater Mumbai M.Corp.	0	0	0	0	2899525*	182047	3081572
9	Hyderabad M.Corp.	These figures are combined with water supply revenue income figures						
10	Indore M.Corp.	0	0	0	237	0	128	365
11	Jaipur M.Corp.	n.a.						
12	Kanpur M.Corp.	0	0	22	0	130	1185	1337
13	Kochi M.Corp.	0	0	0	977	0	0	977
14	Lucknow M.Corp.	0	0	0	0	13766	0	13766
15	Ludhiana M.Corp.	These figures are combined with water supply revenue income figures						
16	Madurai M.Corp.	0	0	0	8689	0	0	8689
17	Nagpur M.Corp.	0	0	0	0	0	260	260
18	Pune M.Corp.	0	0	0	100336	39300**		139636
19	Surat M.Corp.	0	0	169	0	0	250	419
20	Vadodara M.Corp.	357	0	0	305	96312	1463	98437
21	Varanasi M.Corp.		1706		0	5508	4000	11214
22	Visakhapatnam M.Corp.	These figures are combined with water supply revenue income figures						

* Revenue charged by measurement , Sewerage Tax , Sewerage Benefit Tax ; ** Sewerage Benefit Tax

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-9: Revenue Receipts, 1997-98

Sl. No.	City/ town	Revenue Receipts (Rs. in '000)						
		Recycled	Sewage gas	Manure	Connection charges	Sewage/ Drainage tax	Others	Total
	1	2	3	4	5	6	7	8
Class I								
Andhra Pradesh								
1	Eluru M	0	0	0	0	111	2000	2111
2	Guntur MCI	100	0	0	1000	0	12000	13100
3	Vijaywada M.Corp.	1526	0	18	3200	6000	1225	11969
Gujarat								
4	Anand M				n.a.			
5	Bhavnagar M.Corp.	0	0	0	1500	157	157	1814
6	Bhuj M	0	0	0	32	4348	0	4380
7	Nadiad M	0	0	0	584	4689	0	5273
8	Navsari M	0	0	0	22	2849	1095	3966
9	Rajkot M.Corp.	71	0	0	44	0	0	115
Haryana								
10	Ambala MCI	0	0	0	2	80	0	82
11	Faridabad M.Corp.	0	0	0	3190	0	0	3190
12	Gurgaon MCI	0	0	0	746	753	0	1499
13	Hissar MCI	0	0	0	52	922	0	974
14	Rohtak MCI	0	0	0	284	0	0	284
Karnataka								
15	Bellary CMC				0			
16	Mangalore M.Corp.	0	0	0	25	11021	0	11046
17	Mysore M.Corp.	0	0	88	1983	0	0	2071
18	Shimoga CMC				n.a.			
Madhya Pradesh								
19	Gwalior M.Corp.				0			
20	Morena M				0			
21	Shivpuri M	0	0	0	0	0	7	7
Maharashtra								
22	Aurangabad M.Corp.	0	0	0	144	1466	3683	5293
23	Dhule MCI	0	0	0	0	552	0	552
24	Ichalkaranji MCI				0			
25	Kolhapur M.Corp.	0	0	0	22	3246	134	3402
26	Nanded Waghala M.Corp.				0			
27	Nashik M.Corp.	0	0	0	0	7053	0	7053
28	Solapur M.Corp.	0	0	25	0	0	0	25
Orissa								
29	Bhubaneswar M.Corp.	0	0	0	280	2080	0	2360

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-9: Revenue Receipts, 1997-98

Sl. No.	City/ town	Revenue Receipts (Rs. in '000)						
		Recycled	Sewage gas	Manure	Connection charges	Sewage/ Drainage tax	Others	Total
	1	2	3	4	5	6	7	8
	Punjab							
30	Amritsar M.Corp.	0	n.a.	n.a.	2	752	n.a.	754
31	Bathinda MCI	0	0	0	684	0	0	684
32	Hoshiarpur MCI	0	0	0	0	2511	0	2511
33	Jalandhar M. Corp.	0	0	0	0	2736	1190	3926
34	Moga MCI	0	0	0	1677	0	0	1677
35	Pathankot MCI				0			
36	Patiala M.Corp.	0	0	0	6600	0	0	6600
	Rajasthan							
37	Ajmer MCI	0	0	0	50	0	0	50
38	Bikaner M	0	0	0	260	0	0	260
39	Jodhpur M.Corp.				n.a.			
	Tamil Nadu							
40	Kanchipuram M				0			
41	Kumbakonam M				n.a.			
42	Tiruchirapalli M.Corp.	0	0	0	0	18226	487	18713
43	Tirunelveli M.Corp.				0			
44	Tuticorin M				0			
	Uttar Pradesh							
45	Aligarh M.Corp.	0	0	0	0	146	52	198
46	Allahabad M.Corp.	3450	0	0	0	n.a.	0	3450
47	Bareilly M.Corp.	0	0	0	216	2148	0	2364
48	Ghaziabad M.Corp.	0	0	0	0	10646	0	10646
49	Gorakhpur M.Corp.				0			
50	Hapur MB	0	0	0	0	145	143	288
51	Hardwar MB	0	0	44	0	0	51	95
52	Mathura MB				These figures are combined with water supply revenue income figures			
53	Meerut M.Corp.	0	0	0	0	631	0	631
54	Mirzapur MB	0	0	156	2	0	0	158
	West Bengal							
55	Asansol M.Corp.				0			
	Union Territories							
56	Chandigarh M.Corp.	1480	0	40	0	0	0	1520
57	Pondichery M	200	0	0	0	0	0	200

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-9: Revenue Receipts, 1997-98

Sl. No.	City/ town	Revenue Receipts (Rs. in '000)						
		Recycled	Sewage gas	Manure	Connection charges	Sewage/ Drainage tax	Others	Total
	1	2	3	4	5	6	7	8
Class II								
Gujarat								
1	Ankleswar M	0	0	0	105	0	0	105
2	Dabhoi M	1	0	0	5	1077	1	1084
3	Mahesana M	0	0	0	61	2805	0	2866
Haryana								
4	Jind MCI	0	0	0	27	352	0	379
5	Kaithal MCI	0	0	0	119	35	0	154
6	Rewari MCI	n.a.						
7	Thanesar MCI	0	0	0	22	0	215	237
Karnataka								
8	Chikmagalur CMC	0	0	0	50	0	0	50
9	Kolar CMC	These figures are combined with water supply revenue income figures						
Punjab								
10	Ferozepur MCI	0	0	0	1242	0	0	1242
11	Kapurthala M	0	0	0	2915	n.a.	0	2915
12	Mansa MCI	0	0	0	800	0	0	800
13	Phagwara MCI	0	0	0	9	0	1528	1537
14	Sangrur MCI	0	0	0	1062	0	0	1062
Tamil Nadu								
15	Nagapattinam M	0						
16	Udhagamandalam M	0	0	0	0	0	1714	1714
Uttar Pradesh								
17	Etah MB	0	0	0	0	0	14	14
18	Roorkee MB	0	0	0	45	0	0	45
West Bengal								
19	Darjeeling M	0	0	0	10	0	0	10
Small States								
Himachal Pradesh								
20	Shimla M.Corp.	0						
Others (Smaller than Class II towns)								
Small States								
Goa								
21	Panaji MCI	0	0	0.7	0.5	0	0	1.2

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL
B-10: Revenue Expenditure, 1997-98

Sl. No.	City/ town	Revenue Expenditure (Rs. in '000)								
		Salary & Wages	Electricity	Consumables	Repairs/ replacements	Interest	Debt servicing	Depreciation	Others	Total
	1	2	3	4	5	6	7	8	9	10
	Metropolitan Cities									
1	Ahmedabad M.Corp.	104,446	69,122	17,176		0	0	0	5,680	196,424
2	Bangalore M.Corp.	These figures are combined with water supply revenue expenditure figures								
3	Bhopal M.Corp.	12,872	2,006	6,466		0	0	0	0	21,344
4	Calcutta M.Corp.	61,400	30,300		33,817	0	0	0	0	125,517
5	Chennai M.Corp.	These figures are combined with water supply revenue expenditure figures								
6	Coimbatore M.Corp.	5,636		51,660.0		0	0	0	0	57,296
7	Delhi M.Corp.	161,415	35,907	6,619	17,340	0	0	0	0	221,281
8	Greater Mumbai M.Corp.	288,724	148,228	151,361	96,964	440,657	107,494	203,300	8,060	1,444,788
9	Hyderabad M.Corp.	These figures are combined with water supply revenue expenditure figures								
10	Indore M.Corp.	10,056	397	4,100		0	0	0	0	14,553
11	Jaipur M.Corp.	n.a.								
12	Kanpur M.Corp.	27,675	0	3,920	1,594	0	0	0	0	33,189
13	Kochi M.Corp.	795	255	156		0	0	0	0	1,206
14	Lucknow M.Corp.	15,729				0	0	0	0	15,729
15	Ludhiana M.Corp.	These figures are combined with water supply revenue expenditure figures								
16	Madurai M.Corp.	4,971		1,341		0	0	0	0	6,312
17	Nagpur M.Corp.	1,169	1,810	131		0	0	0	0	3,111
18	Pune M.Corp.	74,060	7,818	50	1,811	0	0	775	0	84,514
19	Surat M.Corp.	32,405	32,296	148	6,884	0	0	0	0	71,733
20	Vadodara M.Corp.	20,774	18,361	0	10,092	0	0	0	0	49,227
21	Varanasi M.Corp.	14,331	7,633	5,728	9,368	0	0	0	0	37,061
22	Visakhapatnam M.Corp.	These figures are combined with water supply revenue expenditure figures								

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL
B-10: Revenue Expenditure, 1997-98

Sl. No.	City/ town	Revenue Expenditure (Rs. in '000)								
		Salary & Wages	Electricity	Consumables	Repairs/ replacements	Interest	Debt servicing	Depreciation	Others	Total
	1	2	3	4	5	6	7	8	9	10
Class I										
Andhra Pradesh										
1	Eluru M	3,620	0		150	12	0	0	1,416	5,198
2	Guntur MCI	115	500		3,500	0	0	0	200	4,315
3	Vijaywada M.Corp.	8,976	2,500	89		380	0	0	0	11,945
Gujarat										
4	Anand M									n.a.
5	Bhavnagar M.Corp.	14,004	1,500		3,010	0	0	0	0	18,514
6	Bhuj M	1,275	0		1,249	0	0	0	0	2,524
7	Nadiad M	4,233	1,785	76		1,107	0	0	30	7,230
8	Navsari M	2,463	0		1,242	0	0	0	0	3,705
9	Rajkot M.Corp.	5,039	6,280		10,109	0	2,113	0	92	23,633
Haryana										
10	Ambala MCI	582	361	93		6	0	0	0	1,042
11	Faridabad M.Corp.	11,048	0	5,155		371	394	0	0	16,968
12	Gurgaon MCI	1,386	52	196		320	0	0	137	2,091
13	Hissar MCI	4,177	5,659	941		1,562	0	0	642	12,981
14	Rohtak MCI	3,737	2,903	293		0	0	0	228	7,161
Karnataka										
15	Bellary CMC									Break-up not available
16	Mangalore M.Corp.	2,164	500		6,160	0	0	0	0	8,824
17	Mysore M.Corp.	6,088	0	0		350	0	0	n.a.	3,577
18	Shimoga CMC									n.a.
Madhya Pradesh										
19	Gwalior M.Corp.	5,675	360	389		2,449	0	0	0	8,873
20	Morena M	203	0	0		175	0	0	0	378
21	Shivpuri M	539	0	0		315	0	0	0	854
Maharashtra										
22	Aurangabad M.Corp.	1,769	0	0		8,924	0	0	6,038	16,731
23	Dhule MCI	528	0	0		0	0	0	0	528
24	Ichalkaranji MCI	n.a.	7,190	1,003		0	0	1,680	0	9,873
25	Kolhapur M.Corp.	3,100	2,303	0		1,754	0	0	520	7,677
26	Nanded Waghala M.Corp.	2,056	118	0		1,544	0	0	188	3,906
27	Nashik M.Corp.	452	4,822	805		1,987	0	0	0	8,066
28	Solapur M.Corp.	8,987	29	0		129	0	0	1,597	10,741
Orissa										
29	Bhubaneswar M.Corp.	10,537	70	950		295	0	0	0	11,852

* Probably unusual year - Repairs to UGD is Rs.3,528,000/-

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL
B-10: Revenue Expenditure, 1997-98

Sl. No.	City/ town	Revenue Expenditure (Rs. in '000)								
		Salary & Wages	Electricity	Consumables	Repairs/ replacements	Interest	Debt servicing	Depreciation	Others	Total
	1	2	3	4	5	6	7	8	9	10
	Punjab									
30	Amritsar M.Corp.	24,428	10,945	0	12,377	0	6,062	0	0	53,812
31	Bathinda MCI	8,100	5,000	3,700	0	0	0	0	0	16,800
32	Hoshiarpur MCI	470	0	0	110	3,758	0	0	0	4,338
33	Jalandhar M. Corp.	15,607	9,445	663	7,553	0	0	0	7,908	41,176
34	Moga MCI	2,171	1,030	322	830	0	574	0	0	4,927
35	Pathankot MCI	400	600	50	100	0	0	0	0	1,150
36	Patiala M.Corp.	5,500	5,800	2,400	0	0	0	0	0	13,700
	Rajasthan									
37	Ajmer MCI					n.a.				
38	Bikaner M	1,126	1,760	0	378	0	0	0	0	3,264
39	Jodhpur M.Corp.	10,781	0	0	1,300	0	0	0	567	12,648
	Tamil Nadu									
40	Kanchipuram M	1,591	0	50	0	0	0	0	1,983	3,624
41	Kumbakonam M					n.a.				
42	Tiruchirapalli M.Corp.				2,885					2,885
43	Tirunelveli M.Corp.	3,110		14,944		0	0	0	0	18,054
44	Tuticorin M	2,085	0	238	0	0	0	0	621	2,944
	Uttar Pradesh									
45	Aligarh M.Corp.	1,440	2,400	0	280	0	0	0	0	4,120
46	Allahabad M.Corp.	5,270	0	1,000	0	0	0	0	0	6,270
47	Bareilly M.Corp.	8,294	300	0	3,000	0	0	1,300	0	12,894
48	Ghaziabad M.Corp.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
49	Gorakhpur M.Corp.	2,372	0	406	27	0	0	0	0	2,805
50	Hapur MB	1,501	0	0	0	0	0	0	0	1,501
51	Hardwar MB	4,554	5,927	0	4,937	0	0	0	0	15,418
52	Mathura MB									
										These figures are combined with water supply revenue expenditure figures
53	Meerut M.Corp.				n.a.					6,000
54	Mirzapur MB	13,053	887	0	2,040	0	0	0	248	16,228
	West Bengal									
55	Asansol M.Corp.	2,039	0	0	0	0	0	0	0	2,039
	Union Territories									
56	Chandigarh M.Corp.	7,467	5,500	1,800	300	0	0	0	0	15,067
57	Pondicherry M	9,781	0	0	0	0	0	0	1,949	11,730

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL
B-10: Revenue Expenditure, 1997-98

Sl. No.	City/ town	Revenue Expenditure (Rs. in '000)								
		Salary & Wages	Electricity	Consumables	Repairs/ replacements	Interest	Debt servicing	Depreciation	Others	Total
	1	2	3	4	5	6	7	8	9	10
Class II										
Gujarat										
1	Ankleswar M	1,399	453		878	84	145	0	0	2,960
2	Dabhoi M	801	636		590	0	0	0	0	2,027
3	Mahesana M	126	256		748	0	0	0	0	1,131
Haryana										
4	Jind MCI	1,218	610	131	244	0	0	0	77	2,280
5	Kaithal MCI	1,518	390	311	322	0	0	0	0	2,541
6	Rewari MCI	747	626	122	37	0	0	0	108	1,640
7	Thanesar MCI	455	772	18	21	0	0	0	67	1,333
Karnataka										
8	Chikmaglur CMC	850	0	250	500	0	0	0	1,550	3,150
9	Kolar CMC	These figures are combined with water supply revenue expenditure figures								
Punjab										
10	Ferozepur MCI	1,272	1,907	44	192	0	0	0	0	3,415
11	Kapurthala M	460	n.a.	n.a.	100	n.a.	n.a.	n.a.	n.a.	560
12	Mansa MCI	1,050	900	50	50	0	0	0	150	2,200
13	Phagwara MCI	676	1,500	0	317	0	0	0	14	2,507
14	Sangrur MCI	602	375	68	64	0	0	0	0	1,109
Tamil Nadu										
15	Nagapattinam M	496	0	0	0	0	0	0	0	496
16	Udhagamandalam M	2,503	0	0	183	0	0	0	0	2,686
Uttar Pradesh										
17	Etah MB	96	12	30	8	0	0	0	0	146
18	Roorkee MB	n.a.								
West Bengal										
19	Darjeeling M	165	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	165
Small States										
Himachal Pradesh										
20	Shimla M.Corp.	2,056	96	0	1,395	0	0	0	0	3,547
Others (Smaller than Class II towns)										
Small States										
Goa										
21	Panaji MCI	3,673	760	46	215	0	0	0	0	4,694

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-11: Cost Recovery 1997-98

Sl. No.	City	Population ('000) covered 1998	Waste water collected (mld)	Revenue (Rs.'000) 1997-98			% of receipts to expenditure	Receipt	Expenditure	Gap	Receipt	Expenditure	Gap
				Receipts	Expenditure	Gap		Rs /mld	waste water collected	Rs/capita			
	1	2	3	4	5	6	7	8	9	10	11	12	13
Metropolitan Cities													
1	Ahmedabad M.Corp.	2732	360.00	15534	196424	-180890	8	118	1495	-1377	5.69	72	-66
2	Bangalore M.Corp.	3604	403.00	*	*				n.app.				
3	Bhopal M.Corp.	192	60.00	n.a.	21344	n.app.	n.app.	n.app.	975	n.app.	n.app.	111	n.app.
4	Calcutta M.Corp.	2116	870.00	50000	125517	-75517	40	157	395	-238	24	59	-36
5	Chennai M.Corp.	4035	245.00	*	*				n.app.				
6	Coimbatore M.Corp.	264	36.04	21737	57296	-35559	38	1652	4356	-2703	82	217	-135
7	Delhi M.Corp.	7975	1,290.00	4201	221281	-217080	2	8.9	470	-461	0.53	28	-27
8	Greater Mumbai M.Corp.	8283	1,460.00	3081572	1444788	1636784	213	5783	2711	3071	372	174	198
9	Hyderabad M.Corp.	2252	338.00	*	*				n.app.				
10	Indore M.Corp.	610	95.00	365	14553	-14188	3	11	420	-409	0.60	24	-23
11	Jaipur M.Corp.	961	180.00						n.a.				
12	Kanpur M.Corp.	1447	160.00	1337	33189	-31851	4	23	568	-545	0.92	23	-22
13	Kochi M.Corp.	19	4.00	977	1206	-229	81	669	826	-157	51	63	-12
14	Lucknow M.Corp.	758	151.00	13766	15729	-1963	88	250	285	-36	18	21	-2.59
15	Ludhiana M.Corp.	1106	140.00	*	*				n.app.				
16	Madurai M.Corp.	346	57.00	8689	6312	2377	138	418	303	114	25	18	6.9
17	Nagpur M.Corp.	1220	180.00	260	3111	-2851	8	2.4	47	-45	0.21	2.55	-2.34
18	Pune M.Corp.	1651	390.00	139636	84514	55122	165	736	594	142	85	51	33
19	Surat M.Corp.	1137	185.00	419	71733	-71314	0.6	4.4	1062	-1058	0.37	63	-63
20	Vadodara M.Corp.	842	122.00	98437	49227	49210	200	1383	1105	278	117	58	58
21	Varanasi M.Corp.	683	122.00	11214	37061	-25847	30	163	832	-669	16	54	-38
22	Visakhapatnam M.Corp.	84	10.00	*	*				n.app.				
* These figures are combined with water supply revenue & expenditure													
Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999													

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-11: Cost Recovery 1997-98

Sl. No.	City	Population ('000) covered 1998	Waste water collected (mld)	Revenue (Rs.'000) 1997-98			% of receipts to expenditure	Receipt	Expenditure	Gap	Receipt	Expenditure	Gap
				Receipts	Expenditure	Gap		Rs/mld	waste water collected	Rs/capita			
	1	2	3	4	5	6	7	8	9	10	11	12	13
Class I													
Andhra Pradesh													
1	Eluru M	98	6.00	2111	5198	-3087	41	964	2374	-1410	22	53	-31
2	Guntur MCI	98	10.76	13100	4315	8785	304	3335	1099	2237	134	44	90
3	Vijaywada M.Corp.	287	25.99	11969	11945	25	100	1262	1259	3	42	42	0.1
Gujarat													
4	Anand M	99	9.30										
5	Bhavnagar M.Corp.	289	30.55	1814	18514	-16700	10	163	1661	-1498	6.29	64	-58
6	Bhuj M	104	13.47	4380	2524	1856	174	891	513	377	42	24	18
7	Nadiad M	130	7.84	5273	7230	-1958	73	1843	2527	-684	41	56	-15
8	Navsari M	117	11.07	3966	3705	262	107	982	917	65	34	32	2.2
9	Rajkot M.Corp.	511	46.90	115	23633	-23518	0.5	6.7	1380	-1374	0.22	46	-46
Haryana													
10	Ambala MCI	18	11.34	82	1042	-960	8	20	252	-232	4.61	59	-54
11	Faridabad M.Corp.	585	111.88	3190	16968	-13778	19	78	416	-337	5.45	29	-24
12	Gurgaon MCI	104	10.59	1499	2091	-592	72	388	541	-153	14	20	-5.7
13	Hissar MCI	124	11.44	974	12981	-12007	8	233	3109	-2876	7.85	105	-97
14	Rohtak MCI	180	19.28	284	7161	-6877	4	40	1018	-977	1.57	40	-38
Karnataka													
15	Bellary CMC	126	10.60	0	1200	-1200	0	0	310	-310	0	9.53	-9.53
16	Mangalore M.Corp.	238	41.46	11046	8824	2222	125	730	583	147	46	37	9.4
17	Mysore M.Corp.	363	25.00	2071	10015	-7944	21	227	1098	-871	5.71	28	-21.90
18	Shimoga CMC	78	6.75										
Madhya Pradesh													
19	Gwalior M.Corp.	449	61.85	0	8873	-8873	0	0	393	-393	0	20	-20
20	Morena M	16	0.96	0	378	-378	0	0	1079	-1079	0	24	-24
21	Shivpuri M	5	3.12	7	854	-847	0.8	6.1	750	-744	1.45	176	-175
Maharashtra													
22	Aurangabad M.Corp.	649	105.91	5293	16731	-11438	32	137	433	-296	8.15	26	-18
23	Dhule MCI	147	12.00	552	528	24	104	126	121	5	3.8	3.6	0.2
24	Ichalkaranji MCI	194	20.00	0	9873	-9873	0	0	1352	-1352	0	51	-51
25	Kolhapur M.Corp.	195	31.87	3402	7677	-4275	44	292	660	-367	17	39	-22
26	Nanded Waghala M.Corp.	238	2.00	0	3906	-3906	0	0	5351	-5351	0	16	-16
27	Nashik M.Corp.	485	75.35	7053	8066	-1013	87	256	293	-37	15	17	-2.09
28	Solapur M.Corp.	771	80.00	25	10741	-10716	0.2	0.9	368	-367	0.03	14	-14
Orissa													
29	Bhubaneswar M.Corp.	189	34.00	2360	11852	-9492	20	190	955	-765	13	63	-50

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-11: Cost Recovery 1997-98

Sl. No.	City	Population ('000) covered 1998	Waste water collected (mld)	Revenue (Rs.'000) 1997-98			% of receipts to expenditure	Receipt	Expenditure	Gap	Receipt	Expenditure	Gap
				Receipts	Expenditure	Gap		Rs/mld	waste water collected	Rs/capita			
	1	2	3	4	5	6	7	8	9	10	11	12	13
Punjab													
30	Amritsar M.Corp.	495	71.43	754	53812	-53058	1	29	2064	-2035	1.52	109	-107
31	Bathinda MCI	68	19.31	684	16800	-16116	4	97	2384	-2287	10	247	-237
32	Hoshiarpur MCI	85	16.50	2511	4338	-1827	58	417	720	-303	29	51	-21
33	Jalandhar M. Corp.	420	67.00	3926	41176	-37250	10	161	1684	-1523	9.35	98	-89
34	Moga MCI	96	10.77	1677	4927	-3250	34	427	1254	-827	18	51	-34
35	Pathankot MCI	76	5.58	0	1150	-1150	0	0	565	-565	0	15	-15
36	Patiala M.Corp.	192	29.00	6600	13700	-7100	48	624	1294	-671	34	71	-37
Rajasthan													
37	Ajmer MCI	56	4.39	50	n.a.	n.app.	n.app.	31	n.app.	n.app.	0.90	n.app.	n.app.
38	Bikaner M	120	11.42	260	3264	-3004	8	62	783	-720	2.16	27	-25
39	Jodhpur M.Corp.	311	46.08	n.a.	12648	n.a.	n.a.	n.a.	752	n.a.	n.a.	41	n.a.
Tamil Nadu													
40	Kanchipuram M	115	9.68	0	3624	-3624	0	0	1025	-1025	0	32	-32
41	Kumbakonam M	38	3.50					n.a.					
42	Tiruchirapalli M.Corp.	78	4.00	18713	2885	15828	649	12817	1976	10841	239	37	202
43	Tirunelveli M.Corp.	69	0.50	0	18054	-18054	0	0	98926	-98926	0	261	-261
44	Tuticorin M	40	3.01	0	2944	-2944	0	0	2680	-2680	0	74	-74
Uttar Pradesh													
45	Aligarh M.Corp.	117	7.44	198	4120	-3922	5	73	1517	-1444	1.70	35	-34
46	Allahabad M.Corp.	582	99.31	3450	6270	-2820	55.0	95	173	-78	5.93	11	-5
47	Bareilly M.Corp.	291	25.60	2364	12894	-10530	18	253	1380	-1127	8.12	44	-36
48	Ghaziabad M.Corp.	701	126.00	10646	n.a.	n.app.	n.app.	231	n.app.	n.app.	15	n.app.	n.app.
49	Gorakhpur M.Corp.	294	29.60	0	2805	-2805	0	0	260	-260	0	9.55	-9.55
50	Hapur MB	72	5.45	288	1501	-1213	19	145	755	-610	4.00	21	-17
51	Hardwar MB	168	23.92	95	15418	-15323	0.6	11	1766	-1755	0.56	92	-91
52	Mathura MB	47	20.00*	*					n.app.				
53	Meerut M.Corp.	296	40.00	631	6000	-5369	11	43	411	-368	2.13	20	-18
54	Mirzapur MB	149	14.00	158	16228	-16070	0.98	31	3176	-3145	1.06	109	-108
West Bengal													
55	Asansol M.Corp.	35	4.80	0	2039	-2039	0	0	1164	-1164	0	58	-58
Union Territories													
56	Chandigarh M.Corp.	796	156.57	1520	15067	-13547	10	27	264	-237	1.91	19	-17
57	Pondicherry M	79	10.00	200	11730	-11530	2	55	3214	-3159	2.52	148	-145

* These figures are combined with water supply revenue & expenditure

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-11: Cost Recovery 1997-98

Sl. No.	City	Population ('000) covered 1998	Waste water collected (mld)	Revenue (Rs.'000) 1997-98			% of receipts to expenditure	Receipt	Expenditure	Gap	Receipt	Expenditure	Gap
				Receipts	Expenditure	Gap		Rs /mld	waste water collected	Rs/capita			
	1	2	3	4	5	6	7	8	9	10	11	12	13
Class II													
Gujarat													
1	Ankleswar M	39	4.20	105	2960	-2854	4	36	1014	-977	2.68	75	-73
2	Dabhoi M	7	6.00	1084	2027	-943	53	412	771	-359	160	299	-139
3	Mahesana M	95	8.58	2866	1131	1735	253	663	262	401	30	12	18
Haryana													
4	Jind MCI	69	7.96	379	2280	-1901	17	82	496	-413	5.46	33	-27
5	Kaithal MCI	49	4.64	154	2541	-2387	6	49	809	-760	3.13	52	-49
6	Rewari MCI	62	5.90	n.a.	1640	n.app.	n.app.	n.app.	471	n.app.	n.app.	26	n.app.
7	Thanesar MCI	63	6.88	237	1333	-1096	18	61	345	-284	3.74	21	-17
Karnataka													
8	Chikmagalur CMC	56	7.20	50	3150	-3100	2	11	719	-708	0.89	56	-55
9	Kolar CMC	7	4.00*	*					n.app.				
Punjab													
10	Ferozepur MCI	65	12.73	1242	3415	-2173	36	218	599	-381	19	52	-33
11	Kapurthala M	51	7.14	2915	560	2355	521	699	134	565	57	11	46
12	Mansa MCI	32	5.08	800	2200	-1400	36	345	948	-603	25	68	-43
13	Phagwara MCI	47	5.32	1537	2507	-970	61	356	581	-225	33	53	-21
14	Sangrur MCI	47	7.08	1062	1109	-47	96	286	299	-13	22	23	-0.99
Tamil Nadu													
15	Nagapattinam M	27	1.56	0	496	-496	0	0	218	-218	0	18	-18
16	Udhagamandalam M	50	4.05	1714	2686	-972	64	939	1472	-533	34	54	-20
Uttar Pradesh													
17	Etah MB	37	0.77	14	146	-133	9	12	125	-113	0.36	3.91	-3.55
18	Roorkee MB	58	9.00	45	n.a.	n.app.	n.app.	8.2	n.app.	n.app.	0.77	n.app.	n.app.
West Bengal													
19	Darjeeling M	29	1.55	10	165	-155	6	5.5	n.a.	n.a.	0.33	n.a.	n.a.
Small States													
Himachal Pradesh													
20	Shimla M.Corp.	69	21.25	0	3547	-3547	0	0	434	-434	0	51	-51
Others (Smaller than Class II towns)													
Small States													
Goa													
21	Panaji MCI	29	4.95	1.2	4694	-4693	0.03	0.3	1362	-1362	0.04	162	-162

* These figures are combined with water supply revenue & expenditure

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
Metropolitan Cities								
1	Ahmedabad M.Corp.	3500	2800	80	700	20	3500	100
2	Bangalore M.Corp.	5000	3900	78	1100	22	5000	100
3	Bhopal M.Corp.	1500	200	13	300	20	500	33
4	Calcutta M.Corp.	4870	2200	45	1300	27	3500	72
5	Chennai M.Corp.	4363	4100	94	-	-	4100	94
6	Coimbatore M.Corp.	971	270	28	388	40	658	68
7	Delhi M.Corp.	12000	8500	71	-	-	8500	71
8	Greater Mumbai M.Corp.	11100	8400	76	2000	18	10400	94
9	Hyderabad M.Corp.	4163	2350	56	-	-	2350	56
10	Indore M.Corp.	1600	640	40	480	30	1120	70
11	Jaipur M.Corp.	2000	1000	50	860	43	1860	93
12	Kanpur M.Corp.	2500	1500	60	1000	40	2500	100
13	Kochi M.Corp.	680	20	3	-	-	20	3
14	Lucknow M.Corp.	2500	800	32	950	38	1750	70
15	Ludhiana M.Corp.	2000	1200	60	38	2	1238	62
16	Madurai M.Corp.	1020	350	34	27	3	377	37
17	Nagpur M.Corp.	2100	1260	60	112	5	1372	65
18	Pune M.Corp.	2300	1732	75	500	22	2232	97
19	Surat M.Corp.	2300	1200	52	1000	43	2200	96
20	Vadodara M.Corp.	1400	875	63	375	27	1250	89
21	Varanasi M.Corp.	1150	700	61	449	39	1149	100
22	Visakhapatnam M.Corp.	1280	90	7	578	45	668	52

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
Class I								
Andhra Pradesh								
1	Anantapur MCI	250	-	-	175	70	175	70
2	Chittoor M	149	-	-	125	84	125	84
3	Cuddapah MCI	166	-	-	141	85	141	85
4	Eluru M	247	100	40	147	60	247	100
5	Guntur MCI	557	100	18	-	-	100	18
6	Hindupur M	140	-	-	29	21	29	21
7	Kakinada M	325	-	-	233	72	233	72
8	Kurnool MCI	282	-	-	24	9	24	9
9	Machilipatnam M	200	-	-	170	85	170	85
10	Nandyal MCI	150	-	-	43	29	43	29
11	Nellore MCI	404	-	-	183	45	183	45
12	Nizamabad M	285	-	-	27	9	27	9
13	Qutubullapur M	250	-	-	110	44	110	44
14	Tenali M	170	-	-	16	9	16	9
15	Tirupati MCI	210	-	-	170	81	170	81
16	Vijaywada M.Corp.	837	292.9	35	544	65	837	100
17	Warangal M.Corp.	680	-	-	188	28	188	28
Bihar								
18	Bihar Sharif M	250	-	-	22	9	22	9
19	Gaya M.Corp.	400	-	-	300	75	300	75
20	Katihar M	200	-	-	20	10	20	10
21	Munger M	210	-	-	52	25	52	25
Gujarat								
22	Anand M	175	105	60	60	34	165	94
23	Bharuch M	159	-	-	30	19	30	19
24	Bhavnagar M.Corp.	550	300	55	125	23	425	77
25	Bhuj M	118	106	90	11	9	117	99
26	Jamnagar M.Corp.	500	-	-	250	50	250	50
27	Junagadh M	165	-	-	8	5	8	5
28	Nadiad M	300	140	47	60	20	200	67
29	Navsari M	139	118	85	-	-	118	85

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
30	Porbandar M	142	-	-	90	63	90	63
31	Rajkot M.Corp.	1000	550	55	64	6	614	61
32	Surendranagar M	150	-	-	150	100	150	100
	Haryana							
33	Ambala MCI	141	18.16	13	122	87	141	100
34	Faridabad M.Corp.	1150	632.5	55	-	-	633	55
35	Gurgaon MCI	175	109	62	29	17	138	79
36	Hissar MCI	250	130	52	25	10	155	62
37	Karnal MCI	220	-	-	31	14	31	14
38	Rohtak MCI	243	183	75	50	21	233	96
	Karnataka							
39	Bellary CMC	297	129	43	30	10	159	54
40	Davangere MCI	455	-	-	46	10	46	10
41	Gadag-Betigeri CMC	148	-	-	65	44	65	44
42	Gulbarga M.Corp.	450	-	-	75	17	75	17
43	Hubli-Dharwad M.Corp.	850	-	-	102	12	102	12
44	Mandya M	140	-	-	56	40	56	40
45	Mangalore M.Corp.	410	250	61	10	2	260	63
46	Mysore M.Corp.	1050	400	38	150	14	550	52
47	Shimoga CMC	222	80.6	36	-	-	81	36
48	Tumkur M	300	-	-	50	17	50	17
	Kerala							
49	Alappuzha MC	200	-	-	150	75	150	75
50	Kollam MC	160	-	-	112	70	112	70
51	Kozhikode M.Corp.	493	-	-	450	91	450	91
52	Thalaserry M	134	-	-	29	21	29	21
53	Thiruvananthapuram M.Corp.	585	-	-	585	100	585	100
	Madhya Pradesh							
54	Guna M	125	-	-	75	60	75	60
55	Gwalior M.Corp.	900	516	57	200	22	716	80
56	Jabalpur M.Corp.	1000	-	-	900	90	900	90

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL
B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
57	Morena M	125	16	13	106	85	122	98
58	Ratlam M.Corp.	235	-	-	189	80	189	80
59	Rewa M.Corp.	180	-	-	103	57	103	57
60	Satna M.Corp.	200	-	-	172	86	172	86
61	Shivpuri M	140	5	4	100	71	105	75
	Maharashtra							
62	Amravati M.Corp.	500	-	-	350	70	350	70
63	Aurangabad M.Corp.	868	684	79	155	18	839	97
64	Bhusawal M.Cl.	200	-	-	113	57	113	57
65	Chandrapur MCl	295	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
66	Dhule MCl	330	150	45	105	32	255	77
67	Ichalkaranji MCl	250	197.5	79	53	21	250	100
68	Jalgaon MCl	400	-	-	217	54	217	54
69	Kolhapur M.Corp.	502	200	40	-	-	200	40
70	Nanded Waghala M.Corp.	410	250	61	150	37	400	98
71	Nashik M.Corp.	839	500	60	336	40	836	100
72	Parbhani MCl	233	-	-	28	12	28	12
73	Solapur M.Corp.	900	810	90	-	-	810	90
74	Wardha M	150	-	-	10	7	10	7
75	Yavatmal MCl	130	-	-	43	33	43	33
	Orissa							
76	Bhubaneswar M.Corp.	654	200	31	-	-	200	31
77	Cuttack M.Corp.	563	-	-	400	71	400	71
78	Puri M	150	-	-	99	66	99	66
	Punjab							
79	Amritsar M.Corp.	843	505.992	60	191	23	697	83
80	Bathinda MCl	174	68.848	40	40	23	109	63
81	Hoshiarpur MCl	145	87	60	30	20	117	80
82	Jalandhar M. Corp.	738	440	60	295	40	735	100
83	Moga MCl	148	99.5	67	30	20	130	88
84	Pathankot MCl	195	80	41	60	31	140	72
85	Patiala M.Corp.	328	200	61	128	39	328	100

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
	Rajasthan							
86	Ajmer MCI	550	58	11	96	17	154	28
87	Alwar M	300	-	-	150	50	150	50
88	Bhilwara M	225	-	-	170	76	170	76
89	Bikaner M	600	126	21	330	55	456	76
90	Jodhpur M.Corp.	1000	327	33	65	7	392	39
91	Kota M.Corp.	750	-	-	29	4	29	4
92	Sriganganagar M	225	-	-	64	28	64	28
	Tamil Nadu							
93	Cuddalore M	162	-	-	140	86	140	86
94	Dindigul M	214	-	-	85	40	85	40
95	Erode M	174	-	-	137	79	137	79
96	Kanchipuram M	157	115.95	74	41	26	157	100
97	Kumbakonam M	147	38	26	94	64	132	90
98	Nagercoil M	206	-	-	185	90	185	90
99	Rajapalayam M	123	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
100	Thanjavur M	217	-	-	19	9	19	9
101	Tiruchirapalli M.Corp.	800	80	10	280	35	360	45
102	Tirunelveli M.Corp.	414	70	17	-	-	70	17
103	Tirunvannamalai M	129	-	-	7	5	7	5
104	Tiruppur M	295	-	-	229	78	229	78
105	Tuticorin M	217	40	18	-	-	40	18
106	Vellore M	176	-	-	175	99	175	99
	Uttar Pradesh							
107	Aligarh M.Corp.	600	120	20	350	58	470	78
108	Allahabad M.Corp.	1015	600	59	415	41	1015	100
109	Bareilly M.Corp.	750	300	40	150	20	450	60
110	Etawah MB	140	-	-	70	50	70	50
111	Firozabad MB	250	-	-	100	40	100	40
112	Ghaziabad M.Corp.	887	762	86	125	14	887	100
113	Gorakhpur M.Corp.	600	300	50	75	13	375	63
114	Haldwani-cum-Kathgodam M	141	-	-	28	20	28	20
115	Hapur MB	200	75	38	19	9	94	47

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
116	Hardwar MB	300	184	61	-	-	184	61
117	Jhansi MB	507	-	-	230	45	230	45
118	Mathura MB	400	50	13	-	-	50	13
119	Meerut M.Corp.	1250	315	25	650	52	965	77
120	Mirzapur MB	210	153.168	73	57	27	210	100
121	Muzaffarnagar MB	325	-	-	241	74	241	74
122	Rae Bareli MB	175	-	-	105	60	105	60
123	Saharanpur MB	540	-	-	178	33	178	33
124	Sitapur MB	150	-	-	150	100	150	100
125	Unnao MB	121	-	-	33	27	33	27
	West Bengal							
126	Asansol M.Corp.	315	36	11	183	58	219	70
127	Berhampore M	143	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
128	Balurghat M	132	-	-	130	98	130	98
129	Bankura M	151	-	-	126	83	126	83
130	Barasat M	150	-	-	120	80	120	80
131	Burdwan M	323	-	-	240	74	240	74
132	Halisahar M	149	-	-	16	11	16	11
133	Krishna Nagar M	145	-	-	116	80	116	80
134	Midnapur M	158	-	-	125	79	125	79
135	North Barrackpur M	118	-	-	20	17	20	17
136	Santipur M	134	-	-	65	49	65	49
137	Siliguri M.Corp.	500	-	-	341	68	341	68
	Small States							
	Manipur							
138	Imphal MCI	245	-	-	177	72	177	72
	Meghalaya							
139	Shillong MB	217	-	-	209	96	209	96
	Tripura							
140	Agartala MCI	200	-	-	176	88	176	88
	Union Territories							
141	Chandigarh M.Corp.	850	850	100	-	-	850	100
142	Pondicherry	290	83	29	103	35	186	64

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
Class II								
Andhra Pradesh								
1	Anakapalle M	115	-	-	25	22	25	22
2	Dharmavaram M	100	-	-	10	10	10	10
3	Gudur MCI	72	-	-	39	54	39	54
4	Kapra M	120	-	-	98	82	98	82
5	Kavali MCI	85	-	-	31	36	31	36
6	Madanapalle M	100	-	-	94	94	94	94
7	Rajendra Nagar MCI	120	-	-	20	16	20	16
8	Sangareddy MCI	60	-	-	22	37	22	37
9	Srikakulam MCI	100	-	-	100	100	100	100
10	Srikalahasti M	70	-	-	70	100	70	100
11	Suryapet MCI	89	-	-	46	51	46	51
Bihar								
12	Buxar M	67	-	-	56	83	56	83
13	Deoghar M	100	-	-	40	40	40	40
14	Hajipur M	115	-	-	2	2	2	2
15	Jehanabad M	57	-	-	30	53	30	53
16	Madhubani M	65	-	-	35	54	35	54
Gujarat								
17	Amreli M	85	-	-	64	75	64	75
18	Ankleswar M	60	40	67	-	-	40	67
19	Dabhoi M	65	7	11	33	50	40	61
20	Dohad M	78	-	-	70	90	70	90
21	Gondal M	100	-	-	80	80	80	80
22	Jetpur M	125	-	-	125	100	125	100
23	Mahesana M	138	100	72	20	14	120	87
24	Palanpur M	117	-	-	100	85	100	85
Haryana								
25	Jind MCI	114	72	63	42	37	114	100
26	Kaithal MCI	95	51	54	13	14	64	68
27	Rewari MCI	105	65	62	40	38	105	100
28	Thanesar MCI	100	65	65	21	21	86	86

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
	Karnataka							
29	Bagalkot CMC	100	-	-	32	32	32	32
30	Chikmaglur CMC	100	60	60	40	40	100	100
31	Gokak CMC	68	-	-	25	37	25	37
32	Kolar CMC	112	7.5	7	-	-	8	7
33	Rabkavi-Banhatti CMC	72	-	-	72	100	72	100
34	Ramanagaram CMC	70	-	-	40	57	40	57
	Kerala							
35	Changanessary MC	62	-	-	7	10	7	10
36	Payyanur M	71	-	-	9	12	9	12
37	Taliparamba M	52	-	-	9	17	9	17
38	Thrissur MC	91	-	-	55	60	55	60
	Madhya Pradesh							
39	Mandsaur M	123	-	-	62	50	62	50
40	Nagda M	100	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
41	Sehore M	100	-	-	80	80	80	80
42	Shahdol M	75	-	-	56	75	56	75
43	Vidisha M	125	-	-	57	46	57	46
	Maharashtra							
44	Amalner MCI	100	-	-	76	76	76	76
45	Ballarpur MCI	109	-	-	74	67	74	67
46	Bhandara M	76	-	-	45	59	45	59
47	Kamptee MCI	95	-	-	12	12	12	12
48	Manmad MCI	87	-	-	50	57	50	57
49	Ratnagiri MCI	70	-	-	28	40	28	40
50	Satara MCI	100	-	-	95	95	95	95
51	Virar MCI	100	-	-	100	100	100	100
	Punjab							
52	Ferozepur MCI	93	67	72	26	28	93	100
53	Kapurthala M	85	53	63	32	37	85	100
54	Mansa MCI	67	33	50	-	-	33	50
55	Phagwara MCI	108	49	45	43	40	92	85
56	Sangrur MCI	70	49	70	21	30	70	100

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
	Rajasthan							
57	Barmer M	84	-	-	60	71	60	71
58	Bundi M	80	-	-	25	31	25	31
59	Hanumangarh M	125	-	-	50	40	50	40
60	Sawai Madhopur M	89	-	-	44	49	44	49
	Tamil Nadu							
61	Ambur M	86	-	-	43	50	43	50
62	Arakkonam M	88	-	-	10	11	10	11
63	Attur M	64	-	-	56	88	56	88
64	Cumbum M	54	-	-	34	63	34	63
65	Dharmapuri M	67	-	-	34	51	34	51
66	Gudiyatham M	95	-	-	91	95	91	95
67	Nagapattinam M	112	28	25	80	71	108	96
68	Pudukkottai M	108	-	-	75	69	75	69
69	Sivakasi M	70	-	-	35	50	35	50
70	Srivilliputtur M	74	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
71	Tindivanam M	70	-	-	70	100	70	100
72	Udhagamandalam M	100	51	51	49	49	100	100
	Uttar Pradesh							
73	Auraiya MB	90	-	-	46	51	46	51
74	Balrampur MB	110	-	-	18	16	18	16
75	Basti MB	110	-	-	65	59	65	59
76	Bhadohi MB	125	-	-	75	60	75	60
77	Chandpur MB	80	-	-	36	45	36	45
78	Etah MB	135	40	30	95	70	135	100
79	Ghazipur MB	96	-	-	38	40	38	40
80	Gonda MB	114	-	-	48	42	48	42
81	Lakhimpur MB	100	-	-	70	70	70	70
82	Lalitpur MB	100	-	-	89	89	89	89
83	Mughalsarai MB	160	-	-	136	85	136	85
84	Nawabganj-Barabanki MB	90	-	-	60	67	60	67
85	Orai MB	170	-	-	150	88	150	88
86	Roorkee MB	100	60	60	34	34	94	94

STATUS OF WASTE WATER COLLECTION, TREATMENT AND DISPOSAL

B-12: Population Covered by Safe Sanitation

Sl. No.	City/town	Population 1999 ('000)	Population covered by Sewerage System		Population covered by Septic Tanks and Low Cost Sanitation (LCS)		Total population covered by Sewerage System, Septic Tanks and LCS	
			Number ('000)	%	Number ('000)	%	Number ('000)	%
	1	2	3	4	5	6	7	8
	West Bengal							
87	Bishnupur M	67	-	-	49	72	49	72
88	Chakdaha M	90	-	-	59	66	59	66
89	Contai M	114	-	-	90	79	90	79
90	Cooch Behar M	99	-	-	60	60	60	60
91	Darjeeling M	93	30	32	63	68	93	100
92	Jalpaiguri M	101	-	-	30	29	30	29
93	Jangipur M	78	-	-	36	46	36	46
94	Katwa M	68	-	-	50	74	50	74
95	Raniganj M	121	-	-	87	72	87	72
	Small States							
	Himachal Pradesh							
96	Shimla M.Corp.	111	72	65	39	35	111	100
	Nagaland							
97	Kohima TC	103	-	-	10	10	10	10
	Others (Smaller than Class II towns)							
	Small States							
	Arunachal Pradesh							
98	Itanagar NTAC	34	-	-	28	84	28	84
	Goa							
99	Panaji MCI	57	30	52	14	25	44	77
	Union Territories							
100	Silvassa	20	-	-	20	100	20	100

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF LOW COST SANITATION
B-13 : Number of Individual and Community Toilets

Sl. No.	City/ town	No. of individual pour flush latrines		No. of community latrines		No. of dry latrines		No. of scavengers	
		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
Metropolitan Cities									
1	Ahmedabad M.Corp.	35000	-	18000	-	-	-	-	-
2	Bangalore M.Corp.	-	-	500	15	-	-	-	-
3	Bhopal M.Corp.	210000	-	725	-	6500	5000	-	-
4	Calcutta M.Corp.	50000	-	5000	-	-	1500	-	-
5	Chennai M.Corp.	-	-	757	793	-	-	-	-
6	Coimbatore M.Corp.	892	-	135	-	-	-	-	-
7	Delhi M.Corp.	-	-	16200	-	-	-	-	-
8	Greater Mumbai M.Corp.	-	-	27000	1200	-	-	3653	-
9	Hyderabad M.Corp.	21311	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10	Indore M.Corp.	26992	-	1440	25	20000	-	-	-
11	Jaipur M.Corp.	215000	4816	70	-	10000	11184	-	500
12	Kanpur M.Corp.	37222	-	-	-	-	-	-	-
13	Kochi M.Corp.	-	-	70	-	-	-	-	-
14	Lucknow M.Corp.	81250	-	263	-	13500	-	-	8000
15	Ludhiana M.Corp.	6310	-	314	-	-	4000	-	-
16	Madurai M.Corp.	46297	-	501	-	-	-	-	-
17	Surat M.Corp.	-	-	3150	-	-	-	-	-
18	Varanasi M.Corp.	-	-	811	-	-	-	-	-
19	Visakhapatnam M.Corp.	12863	348	123	74	-	-	-	-

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

STATUS OF LOW COST SANITATION
B-13 : Number of Individual and Community Toilets

Sl. No.	City/ town	No. of individual pour flush latrines		No. of community latrines		No. of dry latrines		No. of scavengers	
		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
Class I									
Andhra Pradesh									
1	Anantapur MCI	3737	100	10	-	-	-	-	-
2	Chittoor M	630	1749	39	-	380	-	-	-
3	Cuddapah MCI	6500	1000	35	-	-	-	-	-
4	Eluru M	-	-	58	16	-	-	-	-
5	Kakinada M	-	-	107	-	-	-	-	-
6	Kurnool MCI	5668	1395	40	2	-	2	-	-
7	Machilipatnam M	-	-	16	-	-	-	20	-
8	Nandyal MCI	6978	-	68	-	-	-	30	-
9	Nellore MCI	2100	400	18	-	-	-	-	-
10	Nizamabad M	5371	2496	14	3	-	-	-	-
11	Qutubullapur M	2000	-	19	1	-	-	-	-
12	Tirupati MCI	18319	-	16	-	3500	-	-	-
13	Warangal M.Corp.	9975	-	54	-	-	-	-	-
Bihar									
14	Bihar Sharif M	100	-	12	-	200	3000	-	-
15	Chhapra M	-	-	14	-	-	9633	-	-
16	Gaya M.Corp.	-	-	12	-	-	-	-	-
17	Katihar M	100	-	-	-	-	-	-	-
18	Munger M	-	-	120	-	-	-	-	-
19	Ranchi M.Corp.	-	-	29	2	-	-	-	-
Gujarat									
20	Anand M	-	-	112	-	-	-	-	-
21	Bharuch M	-	-	111	-	-	-	-	-
22	Bhavnagar M.Corp.	80000	-	500	-	-	-	-	-
23	Bhuj M	15000	-	100	-	-	-	-	-
24	Jamnagar M.Corp.	-	-	779	-	-	-	-	-

STATUS OF LOW COST SANITATION
B-13 : Number of Individual and Community Toilets

Sl. No.	City/ town	No. of individual pour flush latrines		No. of community latrines		No. of dry latrines		No. of scavengers	
		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
25	Junagadh M	-	-	110	-	-	-	-	-
26	Nadiad M	-	-	250	-	-	-	-	-
27	Navsari M	216	-	579	-	-	-	-	-
28	Porbandar M	18000	-	50	6	-	-	-	-
29	Rajkot M.Corp.	-	-	1700	-	-	-	-	-
30	Surendranagar M	-	-	600	15	-	-	-	-
	Haryana								
31	Ambala MCI	35377	-	5	-	4148	-	-	415
32	Faridabad M.Corp.	-	-	13	-	-	-	-	-
33	Gurgaon MCI	1470	-	9	-	-	-	-	-
34	Hissar MCI	5013	-	26	-	-	75	-	-
35	Karnal MCI	3105	-	5	-	1820	-	-	115
36	Rohtak MCI	5	-	5	-	-	3273	-	-
	Karnataka								
37	Belgaum M.Corp.	80000	-	60	-	-	-	-	-
38	Bellary CMC	1000	-	50	-	-	-	-	-
39	Davangere MCI	-	-	40	-	-	-	-	-
40	Gadag-Betigeri CMC	6000	300	26	-	200	-	72	-
41	Gulbarga M.Corp.	35000	8000	14	-	-	-	-	-
42	Hubli-Dharwad M.Corp.	-	-	182	-	-	-	-	-
43	Mandya M	-	-	18	2	-	-	120	100
44	Mangalore M.Corp.	-	-	120	-	-	-	-	-
45	Mysore M.Corp.	-	-	30	10	-	-	-	-
46	Shimoga CMC	-	-	25	-	-	-	60	-
47	Tumkur M	180	9783	20	-	-	26	-	-
	Kerala								
48	Alappuzha MC	-	-	31	-	-	-	-	-
49	Kollam MC	-	-	12	-	-	-	-	-
50	Kozhikode M.Corp.	-	-	60	-	-	-	212	-
51	Thalaserry M	-	-	8	-	-	-	-	-
52	Thiruvananthapuram M.Corp.	-	-	1135	-	-	-	-	-

STATUS OF LOW COST SANITATION
B-13 : Number of Individual and Community Toilets

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		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
	Madhya Pradesh								
53	Bhind M	-	-	3	-	1497	-	-	40
54	Dewas M.Corp.	-	-	36	-	-	-	-	-
55	Guna M	1500	-	18	-	1435	-	-	1435
56	Gwalior M.Corp.	17027	-	10	61	24361	-	n.a.	n.a.
57	Jabalpur M.Corp.	-	-	117	-	3000	12000	-	-
58	Khandwa M	12000	-	24	1	-	2000	-	-
59	Morena M	1550	72	10	-	5000	72	-	100
60	Murwara-Katni M.Corp.	-	-	7	0	199	11052	-	-
61	Ratlam M.Corp.	17271	-	3	-	-	-	-	-
62	Rewa M.Corp.	4688	-	4	3	2761	-	-	-
63	Satna M.Corp.	2540	-	20	-	2400	2540	-	-
64	Shivpuri M	1500	-	30	-	1500	-	-	920
	Maharashtra								
65	Nanded Waghala M.Corp.	6000	500	45	-	-	-	-	-
	Orissa								
66	Cuttack M.Corp.	0	-	35	-	-	-	-	-
67	Puri M	2941	-	19	-	-	-	-	-
	Punjab								
68	Amritsar M.Corp.	78879	8433	33	-	-	220	-	150
69	Bathinda MCI	500	-	10	-	300	500	-	-
70	Hoshiarpur MCI	13487	-	5	-	-	-	-	-
71	Jalandhar M. Corp.	59968	1000	16	2	-	-	-	-
72	Moga MCI	273	-	40	-	-	1200	32	88
73	Patiala M.Corp.	10000	-	16	-	8000	-	-	105
	Rajasthan								
74	Ajmer MCI	16000	6000	7	6	-	8000	-	112
75	Alwar M	6000	-	10	1	536	31	1	-
76	Bhilwara M	20000	450	8	-	95	-	-	-
77	Bikaner M	800	700	4	4	-	-	-	300
78	Jodhpur M.Corp.	-	-	24	-	3411	9589	-	3411
79	Kota M.Corp.	-	-	20	6	6123	-	-	-
80	Sriganganagar M	13495	-	1	-	-	-	-	-

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		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
	Tamil Nadu								
81	Cuddalore M	140	-	12	-	-	-	-	-
82	Dindigul M	n.a.	-	68	-	-	-	-	-
83	Erode M	-	-	35	-	-	-	-	-
84	Kanchipuram M	12703	-	35	-	-	32	200	-
85	Kumbakonam M	-	-	74	-	-	-	-	-
86	Nagercoil M	-	-	48	-	-	-	-	-
87	Rajapalayam M	1451	-	0	-	-	-	-	-
88	Salem M.Corp.	-	-	138	-	-	-	-	-
89	Thanjavur M	-	-	32	-	-	-	-	-
90	Tiruchirapalli M.Corp.	8487	5648	0	-	8487	8487	-	-
91	Tirunelveli M.Corp.	-	-	105	9	2164	10	-	-
92	Tiruvannamalai M	-	-	8	3	-	-	-	-
93	Tiruppur M	3602	-	39	-	323	-	-	-
94	Tuticorin M	-	-	22	-	-	-	-	-
95	Vellore M	12990	-	29	-	1904	-	420	-
	Uttar Pradesh								
96	Aligarh M.Corp.	40	-	3	2	-	-	50	20
97	Allahabad M.Corp.	87	-	29	-	-	-	-	-
98	Bareilly M.Corp.	15000	-	15	-	-	41000	-	2500
99	Etawah MB	8280	-	28	-	9000	-	-	115
100	Faizabad MB	10	-	15	-	15	-	200	-
101	Firozabad MB	200	-	10	1	1000	1000	-	2000
102	Ghaziabad M.Corp.	-	-	6	-	-	-	-	-
103	Gorakhpur M.Corp.	-	-	56	-	-	-	-	-
104	Haldwani-cum-Kathgodam	1410	400	9	-	40	40	-	200
105	Hapur MB	3695	-	11	-	-	5	11	-
106	Jhansi MB	10000	-	20	11	-	-	-	200
107	Mathura MB	-	-	32	2	-	-	-	-
108	Mirzapur MB	5787	-	31	-	15000	-	-	-
109	Moradabad M.Corp.	0	-	-	-	-	8	-	-
110	Muzaffarnagar MB	5965	-	32	-	-	-	-	-
111	Rae Bareli MB	-	-	5	-	-	-	-	-

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B-13 : Number of Individual and Community Toilets

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		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
112	Saharanpur MB	37000	-	927	-	-	-	-	-
113	Sitapur MB	-	-	10	1	526	-	-	-
114	Unnao MB	6160	-	12	-	15016	15016	-	-
	West Bengal								
115	Asansol M.Corp.	7590	250	1	-	11000	250	-	-
116	Baharampur M	4175	489	10	3	1466	1000	-	-
117	Balurghat M	3400	1200	4	12	-	-	-	-
118	Bankura M	1047	200	10	-	500	-	112	-
119	Barasat M	650	-	3	-	10400	-	-	-
120	Burdwan M	6000	-	250	100	-	-	650	-
121	Halisahar M	-	-	86	-	-	-	-	-
122	Krishna Nagar M	3200	-	14	-	3000	-	65	-
123	Midnapur M	2250	100	112	5	-	-	10	-
124	North Barrackpur M	1861	-	4	-	1352	-	-	-
125	Santipur M	4015	-	3	-	809	-	10	-
126	Siliguri M.Corp.	5673	4600	10	4	4500	2000	-	-
	Small States								
	Assam								
127	Guwahati M.Corp.	3000	-	1	-	20000	1700	1500	-
	Manipur								
128	Imphal MCI	28000	-	13	1	-	3500	-	-
	Meghalaya								
129	Shillong MB	1000	2000	-	-	-	2000	-	-
	Tripura								
130	Agartala MCI	16000	-	8	-	-	22400	-	-
	Union Territories								
131	Chandigarh M.Corp.	-	-	172	-	-	-	-	-
132	Pondicherry	-	-	92	-	-	-	-	-

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999

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B-13 : Number of Individual and Community Toilets

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		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
Class II									
Andhra Pradesh									
1	Anakapalle M	5456	680	-	1	31	-	-	-
2	Dharmavaram M	2783	300	2	-	-	-	-	-
3	Kapra M	18600	1000	49	-	-	-	10	15
4	Kavali MCI	1237		10	-	-	-	28	-
5	Madanapalle M	12000	412	12	-	-	-	-	-
6	Rajendra Nagar MCI	1500	900	2	-	-	-	-	-
7	Sangareddy MCI	1400	200	10	1	1000	1000	-	-
8	Srikakulam MCI	20000	-	12	2	-	-	-	-
9	Srikalahasti M	20000	-	3	-	-	-	-	-
10	Suryapet MCI	1690	255	8	-	-	668	5	17
Bihar									
11	Buxar M	143	-	4	-	-	-	-	-
12	Deoghar M	-	-	2	-	-	-	-	-
13	Hajipur M	-	-	12	-	-	-	-	-
14	Hazaribagh M	-	-	4	-	-	-	-	-
15	Jehanabad M	-	-	5	-	-	-	-	-
16	Madhubani M	-	-	9	-	-	-	-	-
17	Mokama M	-	-	5	-	-	-	5	-
Gujarat									
18	Amreli M	-	-	119	-	-	-	-	-
19	Ankleswar M	-	-	354	-	-	-	-	-
20	Dabhoi M	12000	-	80	-	-	-	-	-
21	Dohad M	-	-	90	-	-	-	-	-
22	Gondal M	-	-	105	-	-	-	-	-
23	Jetpur M	-	-	240	-	-	-	-	-
24	Palanpur M	-	-	120	-	-	-	-	-
Haryana									
25	Jind MCI	1126	-	1	1	1270	-	-	-
26	Kaithal MCI	-	-	6	-	-	16000	290	1200
27	Rewari MCI	-	-	4	1	-	-	-	-
28	Thanesar MCI	785	100	3	-	1021	100	-	285

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		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
	Karnataka								
29	Bagalkot CMC	400	-	15	-	-	-	-	-
30	Gokak CMC	10000	-	299	-	-	-	12	-
31	Hospet CMC	-	-	-	-	-	57	10	-
32	Rabkavi-Banhatti CMC	-	-	-	2	-	-	-	-
33	Ramanagaram CMC	-	-	1	-	-	-	-	-
	Kerala								
34	Changanessary MC	2500	-	22	-	-	-	-	-
35	Payyanur M	1000	25	6	-	-	-	-	-
36	Taliparamba M	5000	-	-	-	-	-	-	-
37	Thrissur MC	-	-	18	-	-	-	-	-
	Madhya Pradesh								
38	Hoshangabad M	-	-	2	-	1000	-	-	-
39	Itarsi M	327	-	2	-	1000	881	-	-
40	Khargone M	5000	-	31	-	1090	2090	22	30
41	Mandsaur M	5417	-	60	-	634	-	3	52
42	Nagda M	532	-	-	1	505	1428	-	-
43	Neemuch M	-	-	32	2	-	695	5	-
44	Sehore M	9000	-	6	-	550	-	-	20
45	Shahdol M	4600	200	8	-	-	-	-	-
46	Vidisha M	-	-	7	6	400	400	-	1
	Maharashtra								
47	Amalner MCI	-	-	407	-	-	-	-	-
48	Ballarpur MCI	6393	20	1152	6	-	-	-	-
49	Bhandara M	9800	-	208	-	-	-	15	102
50	Kamptee MCI	407	-	32	-	-	-	-	-
51	Manmad MCI	500	2000	6	7	-	-	210	25
52	Ratnagiri MCI	4282	41	284	-	-	-	16	-
	Punjab								
53	Ferozepur MCI	13250	200	4	-	206	523	-	50
54	Kapurthala M	7422	-	2	-	-	-	200	450
55	Phagwara MCI	7174	-	17	1	13800	-	225	600
56	Sangrur MCI	10519	-	3	-	-	-	128	11

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		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
	Rajasthan								
57	Banswara M	322	-	-	-	-	-	-	-
58	Barmer M	-	-	6	1	-	1	-	-
59	Bundi M	1205	-	2	-	1651	-	-	-
60	Hanumangarh M	5000	3000	6	-	6000	3000	-	-
61	Sawai Madhopur M	1475	1000	2625	1775	3399	4150	5	-
	Tamil Nadu								
62	Ambur M	6872	-	9	-	-	-	-	-
63	Arakkonam M	-	-	9	-	-	-	-	-
64	Attur M	-	-	32	-	-	-	-	-
65	Cumbum M	-	-	21	-	-	-	-	-
66	Dharmapuri M	6806	-	18	2	-	-	-	-
67	Gudiyatham M	-	-	19	-	-	-	36	-
68	Sivakasi M	4948	-	32	-	-	-	-	-
69	Srivilliputtur M	-	1739	6	-	-	267	22	-
70	Tindivanam M	-	-	13	-	-	-	-	-
71	Udhagamandalam M	34	-	37	-	-	-	172	-
	Uttar Pradesh								
72	Auraiya MB	2000	-	5	-	2000	-	-	50
73	Basti MB	5000	-	8	2	5000	-	-	-
74	Bhadohi MB	1500	-	-	-	-	-	-	-
75	Chandpur MB	4300	200	4	-	-	-	10	150
76	Etah MB	-	-	6	-	-	-	-	-
77	Ghazipur MB	7561	-	8	-	-	-	-	78
78	Gonda MB	-	-	6	-	-	-	-	-
79	Lakhimpur MB	6000	-	6	-	2000	-	3	150
80	Lalitpur MB	196	-	14	-	-	-	1063	9566
81	Mughalsarai MB	-	-	15	-	-	-	-	-
82	Nawabganj-Barabanki MB	3949	-	8	1	50	-	-	-
83	Orai MB	-	-	-	-	200	360	-	-
84	Roorkee MB	30	-	-	-	-	-	-	-

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		Existing	Under construction	Existing	Under construction	Existing	Under construction	Public	Private
	1	2	3	4	5	6	7	8	9
	West Bengal								
85	Bishnupur M	861	-	-	-	350	-	-	-
86	Chakdaha M	4390	220	15	-	6016	220	18	45
87	Contai M	1700	250	7	-	-	-	-	-
88	Cooch Behar M	1500	41	5	-	-	-	-	-
89	Darjeeling M	117	-	117	-	-	-	-	-
90	Jalpaiguri M	3000	-	7	-	4000	-	266	-
91	Jangipur M	2721	-	22	-	1621	-	70	20
92	Katwa M	3669	-	18	-	37	-	4	-
93	Raniganj M	1212	300	21	-	100	60	160	58
	Small States								
	Himachal Pradesh								
94	Shimla M.Corp.	8140	-	86	-	97	-	-	-
	Nagaland								
95	Kohima TC	2000	100	10	40	50	100	80	200
	Union Territories								
96	Port Blair MCI	-	-	51	-	-	-	-	-
	Others (Smaller than Class II towns)								
	Small States								
	Goa								
97	Panaji MCI	9950	35	21	-	-	-	26	-
	Union Territories								
98	Silvassa	-	-	120	20	-	-	-	-

Source: Respective urban local governments/relevant agencies, NIUA Survey, 1999