

### **3.4 Solid Waste Amount Survey in the Thilafushi**

#### **3.4.1 Purpose**

The Thilafushi receive wastes not only from Male' but also receive wastes transported directly from resort islands, Hulhule and several inhabited islands nearby and the wastes carried from these islands are not a few amount. The survey was conducted to investigate the amount and types of wastes transported directly by Dhoni or by Barges from all the islands entering to the Thilafushi disposal site for the intention to use the survey data as one of the important elements for drawing up the improvement plan for waste disposal.

Accordingly the survey was carried out to obtain the data show as follows.

- Daily waste amount carried in to the Thilafushi except for MCPW Barge
- Waste amount by island during the survey period
- Major types of wastes carried in to the Thilafushi

#### **3.4.2 Survey Period**

The survey was conducted from 8 July to 11 August, 1998 and took the data for 32 days.

#### **3.4.3 Procedures of Survey**

A surveyor was assigned to stay at Thilafushi from 6:00 to 18:00 hours every day to watch the Dhoni entering to the quay. The data was taken by the items for the name of the resort island, arrival & departure times, type of vessel, nos. of crew, type of wastes, and the dimension of waste heap loaded. Types of wastes and dimension of waste amount was made by sighting the waste and hearing from the boatman.

## 3.4.4 Survey Data

## Summary of Amount of Waste Transported Directly to Thilafushi

No.	Date			Nos. of Boat Arrival (boat)	Unloading Time (min.)	Estimated Weight (ton/day)	Reference (Total SW weight estimated by the numbers of trip times by truck in Thilafushi)			
	Day	Month	Day of the Week				No. of Times of Hauling by Truck in a day	Estimated Weight (ton/day)	Balance	Ratio to the estimated weight by Dhoni (%)
1	8	7	Wed	14	43	25.13	13	26.00	-1	97
2	9	7	Thu	6	26	8.35	9	18.00	-10	46
3	10	7	Fri	7	34	9.84	8	16.00	-6	61
4	11	7	Sat	9	50	32.00	10	20.00	12	160
5	12	7	Sun	7	44	13.42	9	18.00	-5	75
6	13	7	Mon	7	53	8.10	8	16.00	-8	51
7	14	7	Tue	3	26	3.56	2	4.00	-0	89
8	15	7	Wed	8	47	15.77	7	14.00	2	113
9	16	7	Thu	13	41	15.68	10	20.00	-4	78
10	17	7	Fri	5	50	5.70	3	6.00	-0	95
11	18	7	Sat	8	39	17.16	5	10.00	7	172
12	19	7	Sun	8	28	8.33			8	
13	20	7	Mon	11	45	24.10			24	
14	21	7	Tue	9	29	16.00	12	24.00	-8	67
15	22	7	Wed	9	49	22.85			23	
16	23	7	Thu	5	32	7.11			7	
17	25	7	Sat	11	35	23.44			23	
18	26	7	Sun	10	20	11.39			11	
19	27	7	Mon	7	32	18.73			19	
20	28	7	Tue	10	27	18.05			18	
21	29	7	Wed	7	43	8.94			9	
22	30	7	Thu	13	27	10.94			11	
23	31	7	Fri	9	27	9.43			9	
24	2	8	Sun	9	28	8.91			9	
25	3	8	Mon	15	36	16.79			17	
26	4	8	Tue	13	29	11.71	14	28.00	-16	42
27	5	8	Wed	12	34	12.59	13	26.00	-13	48
28	6	8	Thu	13	34	14.78	13	26.00	-11	57
29	8	8	Sat	12	26	11.76	23	46.00	-34	26
30	9	8	Sun	10	32	18.11	8	16.00	2	113
31	10	8	Mon	9	39	10.90				
32	11	8	Tue	13	30	14.00				
Total				302	1,135	453.57	167	334	95	1,389
Maximum				15	53	32.00	23.00	46.00	24	172
Average				9	35	14.17	9.82	19.65	3	82
Minimi				3	20	3.56	2	4	-34	26
Average Loading Weight (ton/boat)						1.50				

## Waste Amount Transported to Thilafushi by Island

Survey Period: 07/July/1998 - 11/August/98

Name of Island	Nos. of Times of Transportation	Waste Amount (ton)	Waste Amount per Time (ton)
Aarab	3	2.33	0.78
Abceru	1	0.26	0.26
Allaerci	1	0.78	0.78
Ariadhoo	1	4.86	4.86
Bahadu	2	1.75	0.87
Bandos	12	24.77	2.06
Banyan Tree	1	0.39	0.39
Baros	6	9.57	1.60
Boduhithi	5	6.88	1.38
Embudhu finolhu	9	14.22	1.58
Faanody	4	4.75	1.19
Fihaalhohi	1	0.73	0.73
Fullmoon	29	14.84	0.51
Fun Island	8	9.82	1.23
Gangehi	1	1.17	1.17
Ifulhule	64	90.79	1.42
Ihuru	3	3.94	1.31
Kaunifinolhu	4	30.33	7.58
Kudabithi	1	1.17	1.17
Kudaburaa	20	26.37	1.32
Kudaveli	2	1.94	0.97
Kuramathi	4	45.68	11.42
Kurumba	38	52.20	1.37
Lagoona	2	5.36	2.68
Legun	1	1.56	1.56
Makunudhoo	4	10.76	2.69
Muun	1	0.49	0.49
Nakackafushi	11	16.03	1.46
Paanode	1	0.78	0.78
Paradise	6	6.89	1.15
Rangali	3	4.88	1.63
Rannalhi	1	2.98	2.98
samaradhiyarafushi	1	1.46	1.46
Sawdaady	1	0.26	0.26
Taaj Lagoon	3	2.61	0.87
Taifanu	1	2.33	2.33
Thari Village	1	0.39	0.39
Thulhaagiri	12	18.85	1.57
Vaadhoo	10	9.55	0.96
Vabbinfaru	21	17.64	0.84
Unknown	2	1.25	0.62
<b>Total</b>	<b>302</b>	<b>453.57</b>	<b>1.50</b>

## Result of Survey on Direct Hauling Waste to Thilafushi

Survey Period: 07/July/1998 - 10/August/98

(Sheet No. : 1.)

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)
8	98 Fullmoon	645	700	15	Food		4 Boat	5 7 2	1.89	0.57
8	98 Kurunba	700	720	20	Food		3 Dhoni	4 6 0.5	0.32	0.10
8	98 Boduhithi	910	940	30	Yard		3 Dhoni	6 10 2	3.24	0.97
8	98 Boduhithi	910	1030	80	Yard		3 Dhoni	6 11 2.5	4.46	1.34
8	98 Embudhu finolhu	1030	1100	30	Yard		3 Boat	4 8 1.5	1.30	0.39
8	98 Hulhule	910	1000	50	Yard		6 Boat	7 9 3.5	5.95	1.79
8	98 Kurunba	1425	1510	45	Yard		6 Dhoni	10 20 3	16.20	4.86
8	98 Bandos	1530	1615	45	palm leaf		4 Dhoni	7 12 5	11.34	3.40
8	98 Embudhu finolhu	1700	1730	30	Yard		3 Dhoni	6 15 3	7.29	2.19
8	98 Pradise	1030	1130	60	tin cans		6 Dhoni	7 13 3.5	8.60	2.58
8	98 Nakacha	1000	1100	60	Yard		2 Dhoni	5 7 2	1.89	0.57
8	98 Kudahuraa	1100	1145	5	Yard		5 Dhoni	6.5 9 3.5	5.53	1.66
8	98 Hulhule	1045	1215	90	Yard		6 Boat	7 8 4	6.05	1.81
8	98 Thilhaagiri	1220	1300	40	Wood		4 Dhoni	6 12 5	9.72	2.92
	Average/Total			43					83.77	25.13
9	98 Fullmoon	715	735	20	Food		4 Boat	5 8 2.5	2.70	0.81
9	98 Kurunba	715	730	15	Food		3 Dhoni	4 5 1.5	0.81	0.24
9	98 Hulhule	900	925	25	Wood		8 Boat	6 7 4.5	5.10	1.53
9	98 Boross	950	1015	25	Yard		3 Dhoni	5 8 3	3.24	0.97
9	98 Fun Island	1050	1130	40	Yard		6 Dhoni	8 20 2.5	10.80	3.24
9	98 Hulhule	1330	1400	30	Yard		8 Boat	6 8 4	5.18	1.56
	Average/Total			26					27.84	8.35
10	98 Kudahuraa	930	1000	30	Yard		3 Dhoni	6 12 2.5	4.86	1.46
10	98 Vadhoo	1020	1050	30	Yard		4 Dhoni	6 8 2	2.59	0.78
10	98 Hulhule	1115	1150	35	Yard		7 Boat	6 7 3.5	3.97	1.19
10	98 Baros	1415	1445	30	Yard		3 Boat	6 9 2	2.92	0.87
10	98 Fun Island	1415	1450	35	Yard		4 Dhoni	5 8 2.5	2.70	0.81
10	98 Lagoona	1645	1730	45	Yard		11 Dhoni	7 15 3.5	9.92	2.98
10	98 Hulhule	1715	1745	30	Yard		3 Dhoni	6 12 3	5.83	1.75
	Average/Total			34					32.79	9.84

### Result of Survey on Direct Hauling Waste to Thilafushi

Survey Period: 07/July/1998 - 10/August/98

(Sheet No. : 2)

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)	
11	7	98	Kurumba	645	710		3 Dhoni	4 6	2	1.30	0.39
11	7	98	Fullmoon	630	700		4 Boat	5 7	2.5	2.36	0.71
11	7	98	Kurumba	1450	1530	etc	4 Dhoni	13 23	4	32.29	9.69
11	7	98	Embudhu finolhu	1440	1505	etc	2 Dhoni	6 12	2	3.89	1.17
11	7	98	Rangali	1315	1400	etc	7 Boat	7 10	5	9.45	2.84
11	7	98	Kani finolhu	1125	1315	etc	10 Dhoni	11 25	5	37.13	11.14
11	7	98	Embudhu finolhu	1100	1125	etc	3 Dhoni	7 8	3	4.54	1.36
11	7	98	Bandos	835	1030	etc	3 Dhoni	6 10	4.5	7.29	2.19
11	7	98	Bandos	835	910	etc	3 Dhoni	6 13	4	8.42	2.53
			Average/Total							106.66	32.00
12	7	98	Kurumba	710	730	etc	3 Dhoni	4.5 7	1.5	1.28	0.38
12	7	98	Fullmoon	645	700	etc	4 Boat	5 8	2	2.16	0.65
12	7	98	Bandos	808	920	etc	4 Dhoni	7 13	4	9.83	2.95
12	7	98	Huhule	1010	1050	Yard	7 Boat	7 10	4	7.56	2.27
12	7	98	Thulhaagiri	1100	1120		3 Dhoni	6 8	2.5	3.24	0.97
12	7	98	Thulhaagiri	1145	1210	etc	2 Dhoni	6 9	2.5	3.65	1.09
12	7	98	Bandos	1145	1220	etc	4 Dhoni	7 15	6	17.01	5.10
			Average/Total							44.72	13.42
13	7	98	Kurumba	645	700		3 Dhoni	4 6	1.5	0.97	0.29
13	7	98	Fullmoon	700	715	Food	4 Boat	6 8	1.5	1.94	0.58
13	7	98	Huhule	1100	1130	Yard	6 Boat	7 7	2	2.65	0.79
13	7	98	Kurumba	1130	1220	Yard	4 Dhoni	6 15	3.5	8.51	2.55
13	7	98	Huhule	1130	1300	Yard	5 Dhoni	5 10	5.5	7.43	2.23
13	7	98	Vabbinfaru	1415	1435	Yard	3 Dhoni	6 8	2.5	3.24	0.97
13	7	98	Thulhaagiri	1445	1515	Yard	2 Dhoni	6 7	2	2.27	0.68
			Average/Total							27.00	8.10
14	7	98	Kurumba	715	730	Food	4 Dhoni	5 8	2	2.16	0.65
14	7	98	Fullmoon	700	720	Food	3 Boat	6 10	2	3.24	0.97
14	7	98	Huhule	1048	1130	Wood	6 Dhoni	8 10	3	6.48	1.94
			Average/Total							11.88	3.56

## Result of Survey on Direct Hauling Waste to Thilafushi

Survey Period: 07/July/1998 - 10/August/98

(Sheet No. : 3)

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)
15	7	98 Kurumba	645	700	15 Food		3 Dhoni	5 6 1	0.81	0.24
15	7	98 Fullmoon	630	650	20 Food		4 Boat	5 8 2	2.16	0.65
15	7	98 Hulhule	1110	1150	40 Yard		7 Boat	7 10 6	11.34	3.40
15	7	98 Hulhule	1155	1215	20 Yard etc		6 Dhoni	6 9 3.5	5.10	1.53
15	7	98 Nakachafushi	1220	1250	30 Yard etc		3 Dhoni	7 12 3	6.80	2.04
15	7	98 Makunudhoo	1240	1350	110 Yard etc		3 Dhoni	7 14 4	10.58	3.18
15	7	98 Vabbinfaru	1245	1303	58 Yard etc		3 Dhoni	6 13 3	6.32	1.90
15	7	98 Hulhule	1430	1515	85 Yard etc		7 Boat	7 10 5	9.45	2.84
		Average/Total		47					52.57	15.77
16	7	98 Kurumba	645	700	15 Food		3 Dhoni	5 7 2	1.89	0.57
16	7	98 Enbudhu fnoihu	845	920	35 Yard		3 Boat	6.5 8 3	4.21	1.26
16	7	98 Thulhaagiri	910	1000	50 Yard		3 Dhoni	6 8 2.5	3.24	0.97
16	7	98 Boduithi	1050	1140	50 Yard		2 Dhoni	6 9 4	5.83	1.75
16	7	98 Kudahithi	1030	1120	50 Yard		2 Dhoni	6 8 3	3.89	1.17
16	7	98 Vabbinfaru	1215	1300	45 Yard		2 Dhoni	6 8 3	3.89	1.17
16	7	98 Hulhule	1235	1415	100 Yard		5 Dhoni	6 7 2.5	2.84	0.85
16	7	98 Boduithi	1500	1540	40 Yard		3 Dhoni	6 8 3.5	4.54	1.36
16	7	98 Enbudhu fnoihu	1115	1150	15 Yard		2 Dhoni	6 9 3	4.37	1.31
16	7	98 Fullmoon	1130	1150	20 Food		6 Boat	6 7 2	2.27	0.68
16	7	98 Nakachafushi	1140	1215	35 Yard etc		5 Dhoni	7 12 3.5	7.94	2.38
16	7	98 Hulhule	1145	1215	30 Yard Wood		2 Dhoni	6 7 3.5	3.97	1.19
16	7	98 Hulhule	1215	1300	45 Yard etc		3 Dhoni	6 7 3	3.40	1.02
		Average/Total		41					52.27	15.68
17	7	98 Kurumba	630	645	15 Food		4 Dhoni	6 7 2	2.27	0.68
17	7	98 Fullmoon	620	640	20 Food		3 Boat	6 8 2	2.59	0.78
17	7	98 Vabbinfaru	915	1030	75 Yard		3 Dhoni	6 10 2.5	4.05	1.22
17	7	98 Hulhule	1415	1520	65 Yard		7 Boat	7 8 4	6.05	1.81
17	7	98 Thulhaagiri	1525	1640	75 Yard		4 Dhoni	6 10 2.5	4.05	1.22
		Average/Total		50					19.01	5.70

**Result of Survey on Direct Hauling Waste to Thilafushi**  
 Survey Period: 07/July/1998 - 10/August/98

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)				
18	7	98	Fullmoon	630	645	15	Food	4	Boat	5	6	2	1.62	0.49
18	7	98	Kurumba	700	720	20	Food	3	Dhoni	5	7	1.5	1.42	0.43
18	7	98	Nalachathushi	1045	1115	30	Yard	4	Dhoni	6	8	2.5	3.24	0.97
18	7	98	Vabbafara	1050	1125	35	Yard	3	Dhoni	6	10	3	4.86	1.46
18	7	98	Hulhale	1115	1220	65	Yard etc	7	Boat	8	10	4	8.64	2.59
18	7	98	Kudabura	1245	1330	45	Yard	3	Dhoni	7	12	3	6.80	2.04
18	7	98	Kurumba	1515	1605	50	Yard	6	Dhoni	12	22	3.5	24.95	7.45
18	7	98	Baross	1330	1445	55	Yard	2	Dhoni	7	15	2	5.67	1.70
			Average/Total			39							57.20	17.16
19	7	98	Kurumba	615	630	15	Food	3	Dhoni	5.5	7	2	2.08	0.62
19	7	98	Fullmoon	635	700	25	Yard	4	Boat	6	6	2.5	2.43	0.73
19	7	98	Hulhale	1115	1145	30	Food	6	Boat	7	8	4	6.05	1.81
19	7	98	Kudabura	1135	1200	25	Yard	3	Dhoni	6	8	2	2.59	0.78
19	7	98	Vachoo	1250	1320	30	Yard	4	Dhoni	6	6	2	1.94	0.58
19	7	98	Vabbafara	1250	1320	30	Yard	2	Dhoni	7	8	2.5	3.78	1.13
19	7	98	Thilhanjar	1300	1345	45	Yard	5	Dhoni	6	14	3.5	7.94	2.38
19	7	98	Kudabura	1615	1640	25	Yard	3	Dhoni	5	7	1	0.95	0.28
			Average/Total			28							27.76	8.33
20	7	98	Fullmoon	630	655	25	Food	3	Boat	5	6	2	1.62	0.49
20	7	98	Hulhale	630	645	15	Food	4	Dhoni	5	7	2	1.89	0.57
20	7	98	Hulhale	1100	1200	60	Food	6	Boat	7	8	6	9.07	2.72
20	7	98	Embudhu finolhu	1150	1230	40	Yard	3	Dhoni	7	12	3.5	7.94	2.38
20	7	98	Fua Island	1430	1510	40	Yard	3	Dhoni	6	8	2	2.59	0.78
20	7	98	Lagoon	1705	1745	40	Yard	8	Dhoni	7	14	3	7.94	2.38
20	7	98	Fua Island	1430	1510	40	Yard	3	Dhoni	6	8	2.5	3.24	0.97
20	7	98	Kurumba	1435	1530	55	Yard	6	Dhoni	12	25	2.5	20.25	6.08
20	7	98	Rannathi	1455	1540	45	Yard	3	Dhoni	7	15	3.5	9.92	2.98
20	7	98	Embudhu finolhu	1455	1545	50	Yard	3	Dhoni	6	13	3.5	7.37	2.21
20	7	98	Kudabura	1450	1615	55	Yard	3	Dhoni	7	15	3	8.51	2.55
			Average/Total			45							80.34	24.10
21	7	98	Kurumba	630	650	20	Food	3	Dhoni	6	7	2	2.27	0.68
21	7	98	Fullmoon	645	700	15	Food	4	Boat	5	6	2	1.62	0.49
21	7	98	Hulhale	900	950	10	Food	7	Boat	7	8	6	9.07	2.72
21	7	98	Kudabura	1125	1200	35	Yard	3	Dhoni	7	14	3.5	9.26	2.78
21	7	98	Thilhanjar	1140	1215	35	Yard	3	Dhoni	6	10	4	6.48	1.94
21	7	98	Aradhoo	1200	1255	15	Yard	5	Dhoni	8	15	5	16.20	4.86
21	7	98	Aarh	1340	1510	90	Wood	15	Dhoni	7	8	1.5	2.27	0.68
21	7	98		1630	1700	30	Yard	3	Boat	6	7	2	2.27	0.68
21	7	98	Gaagehi	1500	1550	10	Yard	10	Boat	6	6	4	3.89	1.17
			Average/Total			29							53.33	16.00

(Sheet No. : 4)

### Result of Survey on Direct Hauling Waste to Thilafushi

Survey Period: 07/July/1998 - 10/August/98

(Sheet No. : 5)

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)
22	7 98 Kurumba	700	715	15	Food	3	Dhoni	5 6 1.5	1.22	0.36
22	7 98 Fullmoon	720	750	30	Food	4	Boat	5 7 2	1.89	0.57
22	7 98 Vaadhoo	1050	1130	40	Yard	3	Dhoni	6 10 3	4.86	1.46
22	7 98 Kamifinolhu	930	1300	210	Yard	12	Boat	10 25 5	33.75	10.13
22	7 98 Thulhaagin	1115	1203	48	Yard	3	Dhoni	7 14 3	7.94	2.38
22	7 98 Nakachafushi	1130	1200	30	Yard	4	Dhoni	7 15 2.5	7.09	2.13
22	7 98 Vabbinfaru	1230	1300	30	Yard	3	Dhoni	6 12 2	3.89	1.17
22	7 98 Makumudhoo	1325	1355	30	Yard	4	Dhoni	8 15 3	9.72	2.92
22	7 98 Baros	1400	1450	10	Yard		Dhoni	6 12 3	5.83	1.75
	Average/Total			49					76.18	22.85
23	7 98 Hulhule	935	1015	40	Domestic	7	Dhoni	10 5 3	4.05	1.22
23	7 98 Ihuru	1043	1130	47	Trees	5	Dhoni	10 8 2.5	5.40	1.62
23	7 98 Paradise	1042	1110	28	Domestic	5	Dhoni	12 8 2.5	6.48	1.94
23	7 98 Banyan Tree	1252	1300	8	Domestic	3	Dhoni	4 6 2	1.30	0.39
23	7 98 Nakachafushi	1310	1347	37	Trees	4	Dhoni	10 8 3	6.48	1.94
	Average/Total			32					23.71	7.11
25	7 98 Muun	700	715	15	Domestic	4	Dhoni	6 4 2.5	1.62	0.49
25	7 98 Bandos	715	725	10	Domestic	4	Dhoni	6 4 2	1.30	0.39
25	7 98 Kuramathi	715	807	52	Steel	3	Barge	30 10 4	32.40	9.72
25	7 98 Hulhule	1100	1134	34	Domestic	6	Dhoni	10 6 2.5	4.05	1.22
25	7 98 Kudahuraa	1215	1312	57	Domestic	2	Dhoni	12 6 3	5.83	1.75
25	7 98 Rangali	1314	1335	21	Trees	4	Dhoni	6 8 3	3.89	1.17
25	7 98 Tailanu	1316	1417	61	Domestic	5	Dhoni	12 8 3	7.78	2.33
25	7 98 Hulhule	1418	1443	25	Domestic	7	Dhoni	10 6 3	4.86	1.46
25	7 98 Kurumba	1445	1545	60	Trees	5	Dhoni	12 8 3	7.78	2.33
25	7 98 Hulhule	1500	1525	25	Domestic	5	Dhoni	4 4 2	0.86	0.26
25	7 98 Makumudhoo	1500	1530	30	Trees	3	Dhoni	12 8 3	7.78	2.33
	Average/Total			35					78.14	23.44



### Result of Survey on Direct Hauling Waste to Thilafushi

Survey Period: 07/July/1998 - 10/August/98

										(Sheet No. : )		
Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)		
26	7	98	Kurumba	700	715	15	Domestic	6	4	2	1.30	0.39
26	7	98	Fullmoon	705	725	20	Domestic	8	4	2.5	2.16	0.65
26	7	98	Kudahuraa	1014	1035	21	Trees	12	6	3	5.83	1.75
26	7	98	samaradhivaraafushi	1054	1110	16	Domestic	10	6	3	4.86	1.46
26	7	98	Paradise	1100	1105	5		4	4	2	0.86	0.26
26	7	98	Hulhule	1107	1140	33	Domestic	8	6	4	5.18	1.56
26	7	98	Vabbinfaru	1250	1310	20	Trees	10	6	2.5	4.05	1.22
26	7	98	Thari Village	1312	1320	8	Domestic	6	4	2	1.30	0.39
26	7	98	Faanody	1322	1356	34	Trees	8	5	4	4.32	1.30
26	7	98	Kurumba	1430	1500	30	Trees	12	10	2.5	8.10	2.43
			Average/Total			20					37.96	11.39
27	7	98	Fullmoon	600	615	15	Domestic	5	4	2	1.08	0.32
27	7	98	Kurumba	710	736	26	Domestic	8	6	2	2.59	0.78
27	7	98	Kuramathi	710	754	44	Domestic	40	10	4	43.20	12.96
27	7	98	Hulhule	1120	1152	32	Domestic	8	6	3	3.89	1.17
27	7	98	Kudahuraa	1204	1300	56	Trees	10	6	3	4.86	1.46
27	7	98	Vabbinfaru	1250	1320	30	Domestic	8	6	3	3.89	1.17
27	7	98	Fun Island	1321	1345	24	Domestic	6	6	3	2.92	0.87
			Average/Total			32					62.42	18.73
28	7	98	Fullmoon	600	620	20	Domestic	6	4	2	1.30	0.39
28	7	98	Kurumba	815	825	10	Domestic	6	6	2.5	2.43	0.73
28	7	98	Faanodiy	925	950	25	Trees	6	5	3	2.43	0.73
28	7	98	Kuramathi	1015	1122	67	Steel	40	12	3	38.88	11.66
28	7	98	Hulhule	1125	1150	25	Domestic	8	6	4	5.18	1.56
28	7	98	Nakachafushi	1230	1300	30	Trees	8	5	2	2.16	0.65
28	7	98	Kudahuraa	1325	1434	69	Trees	8	6	3	3.89	1.17
28	7	98	Paradise	1410	1415	5	Domestic	4	4	2	0.86	0.26
28	7	98	Taaj Lagoon	1515	1525	10	Domestic	8	4	2.5	2.16	0.65
28	7	98	Sawdaady	1635	1643	8	Domestic	4	4	2	0.86	0.26
			Average/Total			27					60.16	18.05

## Result of Survey on Direct Hauling Waste to Thilafushi

Survey Period: 07/July/1998 - 10/August/98

(Sheet No. : )

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)				
29	7	98	Fullmoon	600	620	20	Domestic	3	Dhoni	6	4	2.5	1.62	0.49
29	7	98	Kurumba	650	705	15	Domestic	4	Dhoni	6	5	2	1.62	0.49
29	7	98	Kanifinolhu	1300	1400	60	Timber	11	Barge	10	8	6	12.96	3.89
29	7	98	Hulhule	1115	1147	32	Domestic	6	Dhoni	8	6	3	3.89	1.17
29	7	98	Kudaveli	1124	1225	61	Domestic	4	Dhoni	8	5	3	3.24	0.97
29	7	98	Vabbinfaru	1250	1320	70	Domestic	2	Dhoni	6	4	2	1.30	0.39
29	7	98	Faanodiy	1325	1410	45	Trees	2	Dhoni	8	6	4	5.18	1.56
			Average/Total			43							29.81	8.94
30	7	98	Fullmoon	600	620	20	Domestic	4	Dhoni	4	4	2	0.86	0.26
30	7	98	Kurumba	635	650	15	Domestic	3	Dhoni	6	4	2	1.30	0.39
30	7	98	Bandos	705	725	20	Domestic	5	Dhoni	6	5	2	1.62	0.49
30	7	98	Hulhule	1032	1105	33	Domestic	3	Dhoni	8	6	3	3.89	1.17
30	7	98	Vaadhoov	1035	1055	20	Domestic	6	Dhoni	6	4	2.5	1.62	0.49
30	7	98	Ihuru	1100	1135	35	Trees	4	Dhoni	7	6	3	3.40	1.02
30	7	98	Kudahuraa	1110	1200	50	Trees	2	Dhoni	8	5	2	2.16	0.65
30	7	98	Abeeru	1153	1157	4	Timber	3	Dhoni	4	4	2	0.86	0.26
30	7	98	Thulhaagiri	1158	1255	57	Trees	3	Dhoni	10	6	3	4.86	1.46
30	7	98	Baros	1354	1455	61	Trees	5	Dhoni	12	8	3	7.78	2.33
30	7	98	Allaarei	1500	1555	15	Trees	3	Dhoni	6	8	2	2.59	0.78
30	7	98	Taaj Lagoon	1600	1615	15	Trees	3	Dhoni	8	6	3	3.89	1.17
30	7	98	Vabbinfaru	1613	1622	9	Domestic	2	Dhoni	6	4	2.5	1.62	0.49
			Average/Total			27							36.45	10.94
31	7	98	Fullmoon	600	620	20	Domestic	4	Dhoni	4	4	2.5	1.08	0.32
31	7	98	Kurumba	630	655	25	Domestic	3	Dhoni	4	4	2	0.86	0.26
31	7	98	Hulhule	1108	1155	27	Domestic	8	Dhoni	8	6	4	5.18	1.56
31	7	98	Vabbinfaru	1256	1310	14	Trees	3	Dhoni	6	4	2	1.30	0.39
31	7	98	Fun Island	1314	1345	31	Domestic	3	Dhoni	8	6	4	5.18	1.56
31	7	98	Rangali	1332	1400	28	Trees	5	Dhoni	6	6	3	2.92	0.87
31	7	98	Makunudhoo	1405	1455	50	Domestic	3	Dhoni	12	6	4	7.78	2.33
31	7	98	Legun	1600	1625	25	Domestic	7	Dhoni	8	6	4	5.18	1.56
31	7	98	Bahadu	1605	1630	25	Trees	3	Dhoni	6	4	3	1.94	0.58
			Average/Total			27							31.43	9.43

### Result of Survey on Direct Hauling Waste to Thilafushi

Survey Period: 07/July/1998 - 10/August/98

(Sheet No.: 8)

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)
2	98 Fulmoon	600	620	20	Domestic	4	Dhoni	6 4 2.5	1.62	0.49
2	98 Kurumba	635	650	15	Domestic	3	Dhoni	4 4 2	0.86	0.26
2	98 Hulhule	940	1010	30	Domestic	7	Dhoni	8 6 3	3.89	1.17
2	98 Hulhule	1055	1120	25	Timber	5	Dhoni	10 5 4	5.40	1.62
2	98 Taaj Lagoon	1225	1245	20	Concrete	3	Dhoni	7 4 3.5	2.65	0.79
2	98 Vabbinfaru	1255	1320	25	Trees	2	Dhoni	8 4 3	2.59	0.78
2	98 Hulhule	1315	1400	45	Timber	4	Dhoni	10 5 4	5.40	1.62
2	98 Thulhaagiri	1400	1435	35	Trees	5	Dhoni	10 5 3	4.05	1.22
2	98 Hulhule	1440	1515	35	Timber	5	Dhoni	8 5 3	3.24	0.97
	Average/Total			28					29.70	8.91
3	98 Fulmoon	610	630	20	Domestic	3	Dhoni	6 4 2.5	1.62	0.49
3	98 Kurumba	720	740	20	Domestic	4	Dhoni	6 4 2	1.30	0.39
3	98 Hulhule	940	1015	35	Domestic	7	Dhoni	8 5 3	3.24	0.97
3	98 Kudaveli	1010	1045	35	Trees	3	Dhoni	8 6 2.5	3.24	0.97
3	98 Vadhoo	1020	1100	40	Timber	4	Dhoni	8 6 3	3.89	1.17
3	98 Hulhule	1033	1115	42	Timber	4	Dhoni	10 6 3	4.86	1.46
3	98 Nakachafushi	1045	1110	25	Trees	4	Dhoni	10 6 3	4.86	1.46
3	98 Kurumba	1108	1145	37	Domestic	7	Dhoni	10 8 3	6.48	1.94
3	98 Kudahuraa	1110	1146	36	Trees	3	Dhoni	8 6 3	3.89	1.17
3	98 Hulhule	1220	1245	25	Timber	4	Dhoni	8 4 3	2.59	0.78
3	98 Vabbinfaru	1255	1310	15	Trees	2	Dhoni	7 5 3	2.84	0.85
3	98 Fun Island	1310	1335	25	Domestic	4	Dhoni	7 6 3	3.40	1.02
3	98 Bandos	1330	1507	97	Trees	4	Dhoni	10 6 4	6.48	1.94
3	98 Hulhule	1450	1545	55	Timber	4	Dhoni	10 5 3	4.05	1.22
3	98 Kudahuraa	1657	1727	30	Trees	3	Dhoni	8 5 3	3.24	0.97
	Average/Total			36					55.97	16.79

### Result of Survey on Direct Hauling Waste to Thilafushi

Survey Period: 07/July/1998 - 10/August/98

(Sheet No.: 9)

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)
4	98 Fullmoon	600	615	15	Domestic		3 Dhoni	4 4 2	0.86	0.26
4	98 Kurumba	715	730	15	Domestic		4 Dhoni	6 4 2	1.30	0.39
4	98 Bandos	825	920	55	Trees		7 Dhoni	10 6 3.5	5.67	1.70
4	98 Hulhule	935	955	20	Domestic		7 Dhoni	10 5 3	4.05	1.22
4	98 Hulhule	954	1030	36	Timber		3 Dhoni	8 5 3	3.24	0.97
4	98 Vaadhoo	1045	1117	32	Trees		3 Dhoni	8 5 3	3.24	0.97
4	98 Paanode	1045	1115	32	Trees		3 Dhoni	8 4 3	2.59	0.78
4	98 Nakachafushi	1052	1130	38	Domestic		4 Dhoni	10 6 2	3.24	0.97
4	98 Kudahuraa	1135	1215	40	Trees		2 Dhoni	7 5 2.5	2.36	0.71
4	98 Hulhule	1213	1248	35	Domestic		4 Dhoni	10 5 3	4.05	1.22
4	98 Vabbinfaru	1255	1310	15	Domestic		2 Dhoni	6 4 3	1.94	0.58
4	98 Hulhule	1300	1345	5	Timber		3 Dhoni	10 5 3	4.05	1.22
4	98 Fihaalhothi	1520	1600	40	Steel		3 Dhoni	6 5 3	2.43	0.73
	Average/Total			29					39.03	11.71
5	98 Fullmoon	640	700	20	Domestic		3 Dhoni	4 4 2	0.86	0.26
5	98 Kurumba	700	715	15	Domestic		3 Dhoni	4 3 2.5	0.81	0.24
5	98 Hulhule	908	930	22	Timber		4 Dhoni	8 4 3	2.59	0.78
5	98 Hulhule	943	1020	37	Timber		3 Dhoni	8 5 3	3.24	0.97
5	98 Hulhule	1000	1040	40	Domestic		7 Dhoni	8 6 4	5.18	1.56
5	98 Kurumba	1045	1125	40	Trees		5 Dhoni	10 8 2	4.32	1.30
5	98 Kudahuraa	1135	1200	25	Domestic		4 Dhoni	8 6 3.5	4.54	1.36
5	98 Hulhule	1150	1250	60	Timber		4 Dhoni	8 4 3	2.59	0.78
5	98 Vabbinfaru	1250	1305	15	Domestic		2 Dhoni	6 4 2	1.30	0.39
5	98 Vaadhoo	1320	1345	25	Trees		3 Dhoni	10 6 3	4.86	1.46
5	98 Baros	1315	1420	65	Trees		4 Dhoni	10 6 4	6.48	1.94
5	98 Hulhule	1515	1600	45	Domestic		6 Dhoni	8 6 4	5.18	1.56
	Average/Total			34					41.96	12.59

**Result of Survey on Direct Hauling Waste to Thilafushi**  
 Survey Period: 07/July/1998 - 10/August/98

(Sheet No. : 10 )

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (man)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated volume (m <sup>3</sup> )	Estimated waste weight (ton)				
6	8	98	Fullmoon	640	655	15	Domestic	3	Dhoni	4	4	2	0.86	0.26
6	8	98	Kurumba	700	715	15	Domestic	4	Dhoni	5	4	2	1.08	0.32
6	8	98	Bandos	825	920	55	Trees	5	Dhoni	10	6	4	6.48	1.94
6	8	98	Bandos	900	955	55	Trees	5	Dhoni	8	6	3	3.89	1.17
6	8	98	Hulhule	953	1030	57	Domestic	7	Dhoni	8	6	3	3.89	1.17
6	8	98	Hulhule	955	1052	37	Timber	3	Dhoni	3	5	3	3.24	0.97
6	8	98	Iburu	1045	1115	30	Trees	5	Dhoni	10	8	2	4.32	1.30
6	8	98	Kudahuraa	1140	1213	33	Domestic	3	Dhoni	8	5	3	3.24	0.97
6	8	98	Hulhule	1215	1244	29	Timber	4	Dhoni	8	5	3	3.24	0.97
6	8	98	Vabbinfaru	1248	1310	22	Domestic	2	Dhoni	6	5	2.5	2.03	0.61
6	8	98	Kurumba	1418	1444	26	Timber	6	Dhoni	10	8	3	6.48	1.94
6	8	98	Hulhule	1445	1530	45	Timber	4	Dhoni	10	6	4	6.48	1.94
6	8	98	Hulhule	1522	1600	38	Timber	4	Dhoni	10	5	3	4.05	1.22
			Average/Total		34								49.28	14.78
8	8	98	Fullmoon	635	650	15	Domestic	3	Dhoni	4	4	2.5	1.08	0.32
8	8	98	Kurumba	722	730	8	Domestic	4	Dhoni	4	5	2	1.08	0.32
8	8	98	Hulhule	915	940	25	Timber	5	Dhoni	8	5	3	3.24	0.97
8	8	98	Hulhule	950	1015	65	Timber	4	Dhoni	8	5	3	3.24	0.97
8	8	98	Nakachafushi	1020	1085	15	Domestic	4	Dhoni	10	6	3	4.86	1.46
8	8	98	Paradise	1037	1110	33	Domestic	3	Dhoni	10	6	3	4.86	1.46
8	8	98	Kudahuraa	1045	1125	40	Trees	4	Dhoni	8	6	3	3.89	1.17
8	8	98	Hulhule	1115	1155	20	Domestic	4	Dhoni	8	6	3	3.89	1.17
8	8	98	Faanody	1130	1145	15	Domestic	4	Dhoni	8	6	3	3.89	1.17
8	8	98	Hulhule	1135	1155	20	Timber	5	Dhoni	8	5	2.5	2.70	0.81
8	8	98	Hulhule	1235	1310	35	Timber	4	Dhoni	10	6	3	4.86	1.46
8	8	98	Vabbinfaru	1255	1310	15	Domestic	3	Dhoni	6	4	2.5	1.62	0.49
			Average/Total		26								39.20	11.76
9	8	98	Kurumba	710	725	15	Domestic	4	Dhoni	4	4	2	0.86	0.26
9	8	98	Fullmoon	726	735	9	Domestic	5	Dhoni	5	4	2	1.08	0.32
9	8	98	Hulhule	945	1005	20	Timber	3	Dhoni	8	5	3	3.24	0.97
9	8	98	Hulhule	1005	1030	25	Domestic	8	Dhoni	8	6	4	5.18	1.56
9	8	98	Vaadu	1027	1050	23	Trees	3	Dhoni	7	5	2.5	2.36	0.71
9	8	98	Hulhule	1047	1120	33	Timber	4	Dhoni	8	5	2.5	2.70	0.81
9	8	98	Vabbinfaru	1110	1125	15	Domestic	2	Dhoni	6	4	2	1.30	0.39
9	8	98	Kudahuraa	1126	1155	29	Domestic	3	Dhoni	8	6	2.5	3.24	0.97
9	8	98	Kuramathi	1330	1450	120	Timber	3	Barge	35	10	4	37.80	11.34
9	8	98	Aarah	1700	1730	30	Domestic	12	Dhoni	8	6	2	2.59	0.78
			Average/Total		32								60.36	18.11

### Result of Survey on Direct Hauling Waste to Thilafushi

Survey Period: 07/July/1998 - 10/August/98

(Sheet No. : 11 )

Date	Name of Island	Arrival time	Depart. time	Unloading Time (min.)	Type of Waste	Nos. of crew (men)	Type of Vessel	Estimated Size of Waste Heap (W x L x H ft)	Estimated waste volume (m <sup>3</sup> )	Estimated waste weight (ton)
10	8	98 Kurumba	720	735	15 Domestic	4	Dhoni	6 5 2	1.62	0.49
10	8	98 Fullmoon	1007	1018	11 Domestic	5	Dhoni	4 4 2	0.864	0.26
10	8	98 Hulhule	1020	1045	25 Domestic	7	Dhoni	8 6 4	5.184	1.56
10	8	98 Kani finolhu	1022	1245	143 Trees	10	Barge	16 10 4	17.28	5.18
10	8	98 Vaadhu	1040	1115	35 Trees	3	Dhoni	8 5 3	3.24	0.97
10	8	98 Fun Island	1240	1335	55 Domestic	3	Dhoni	7 4 2.5	1.89	0.57
10	8	98 Vabbinfaru	1250	1320	30 Domestic	3	Dhoni	8 4 2	1.728	0.52
10	8	98 Hulhule	1444	1510	26 Timber	6	Dhoni	8 6 2.5	3.24	0.97
10	8	98 Paradise	1610	1625	15 Domestic	2	Dhoni	6 4 2	1.296	0.39
		Average/Total		39					36.342	10.90
11	8	98 Fullmoon	645	705	20 Domestic	4	Dhoni	6 5 2.5	2.025	0.61
11	8	98 Kurumba	655	715	20 Domestic	4	Dhoni	4 4 2	0.864	0.26
11	8	98 Bandos	840	905	25 Trees	4	Dhoni	10 6 2	3.24	0.97
11	8	98 Boduhithi	907	955	48 Trees	2	Dhoni	10 6 3	4.86	1.46
11	8	98 Aarah	940	1005	25 Domestic	10	Dhoni	6 6 3	2.916	0.87
11	8	98 Vaadhu	1105	1130	25 Domestic	3	Dhoni	8 6 2.5	3.24	0.97
11	8	98 Hulhule	1125	1205	40 Domestic	7	Dhoni	8 6 4	5.184	1.56
11	8	98 Kudahuraa	1130	1208	38 Trees	4	Dhoni	6 5 3	2.43	0.73
11	8	98 Nakachafushi	1200	1230	30 Domestic	4	Dhoni	10 6 3	4.86	1.46
11	8	98 Vabbinfaru	1255	1310	15 Trees	3	Dhoni	6 4 2	1.296	0.39
11	8	98 Bahadu	1330	1350	20 Domestic	3	Dhoni	8 6 3	3.888	1.17
11	8	98 Thilhaagiri	1344	1435	51 Domestic	3	Dhoni	10 5 4	5.4	1.62
11	8	98 Embudhu	1455	1525	30 Trees	3	Dhoni	10 6 4	6.48	1.94
		Average/Total		30					46.683	14.00

### 3.5 Solid Waste Composition Survey in Male'

#### 3.5.1 Purpose and Survey Items

The data of solid waste composition along with the amount of waste generation is a basic for planning and design of SWM system. The survey is intended to obtain the current waste composition data by the waste generation sources. In order to obtain the data as intended, the survey was carried out to take the following data from the waste generated in Male' Municipality.

- Amount of waste by 18 types from different waste generation sources
- Total waste volume and bulk density
- Amount of organic, inorganic and hazardous wastes
- Amount and types of reusable and recyclable wastes

#### 3.5.2 Survey Period

The solid waste composition survey in Male' was conducted from 20 August to 6 September, 1998 for 36 samples. Due to the period of school holidays, the data for school waste was surveyed on 20 September for 3 samples.

#### 3.5.3 Procedures of Survey

##### Objet Waste Generation Sources and Numbers of Samples

The survey team consist of one leader and four workers took 39 samples as shown in the following table in consideration of data to be obtained from the Waste Amount Survey.

Code	Generation Source Category	Total Nos. of Samples	Remarks
A-1	Residential Area 1	9	Residential house
A-2	Residential Area 2	6	Micro Bins
B-1	Commercial Area (General)	7	
C-1	Buildings (Government Office)	2	
C-2	Building (Private Office & Shops)	3	
D	Fruits Market & Parks	3	
E	Restaurant & Hotels	3	
G	School	3	
I-3	Construction Waste (Mixed)	3	
	Total	39	

## **Method of Sampling**

Samples for waste composition survey were taken from the following collection vehicles respectively. Wastes amount was measured by truck scale at first to take more than 500 kgs. for the original samples. Then the sample for testing was reduced to take approximately 100 kgs by dividing the original samples equally to 4 heaps and one waste heap was taken for the composition survey.

From the municipality collection vehicle used for disposal of the survey  
Category A-1, B-1, C-1, C-2, E & G

Micro Bin collection vehicle  
Category A-2

From municipality tractors carried waste into the Transfer station  
Category D

From Private vehicle carried waste into the Transfer Station  
Category I-3

## **Categorisation of Waste and Weighing Samples**

The sample was separated into 18 categories to be indicated in the following sections and put into plastic containers or sacks depending on the size, amount and the nature of the wastes. The separated waste was weighed the wet-base weight by 5 kg dial scale or 30 kg spring scale depending on the weight.



3.5.4 Survey Data

(1) Residential Area 1 (Residential Houses)

Result of Waste Composition Survey in Male Residential Area

Sample No. Sampling Date, 1998	(unit: grams)										Total	Ratio (%)		
	1 22 Aug.	2 22 Aug.	3 23 Aug.	4 23 Aug.	5 23 Aug.	6 23 Aug.	7 25 Aug.	8 25 Aug.	9 25 Aug.	Max.			Avg.	Min.
Organic Waste														
Food Waste	3,190	1,521	13,150	7,150	8,150	11,150	7,650	5,650	10,150	15,210	9,050	3,190	81,450	10.98
Paper	6,330	2,650	9,270	11,130	9,150	9,080	2,930	2,270	17,500	11,130	6,082	1,750	54,560	7.54
Cardboard	2,660	1,000	2,760	3,300	4,120	3,750	2,840	2,500	11,300	11,300	3,913	1,000	35,260	4.74
Subtotal	8,990	3,650	12,930	14,460	13,270	12,830	5,770	5,770	13,050	14,460	9,930	3,650	39,820	12.09
Plastics	1,450	1,330	2,010	3,350	3,500	2,650	1,330	1,130	4,740	4,740	2,443	1,130	21,990	2.96
Bottle & Others	1,630	530	4,150	1,170	2,400	2,013	2,850	2,450	1,530	20,130	4,623	1,170	41,610	5.60
PET	530	450	650	30	1,300	1,150	390	620	200	1,300	591	30	5,520	0.72
Subtotal	3,610	750	6810	4550	7200	23930	4570	4200	6470	23,930	7,658	3,610	68,920	9.27
Rubber & Leather	320	180	460	2,490	1,200	1,850	840	530	400	2,490	924	180	8,320	1.12
Textiles	3,530	1,700	130	2350	9400	4680	1950	540	2020	3,400	2,511	130	25,300	3.40
Yard Waste	8,200	880	3010	3500	10,150	7650	38850	29400	3150	38,850	12,543	3,010	112,890	15.19
Wood	0	1950	1360	2210	2900	4850	5300	6900	22800	22,800	5,363	0	48,270	6.50
Other Org. Waste	2,190	7900	3290	4270	13500	19650	1080	5080	9680	19,650	7,404	1,080	66,640	8.97
Organic Waste Total	30,030	47,150	40,240	40,980	64,770	86,590	66,010	38,120	67,720	86,590	55,734	30,030	501,610	67.50
In-organic Waste														
Glass	200	0	210	650	380	300	0	980	180	980	322	0	2,900	0.39
Broken Glass	1,430	860	2,610	3,270	2,100	2,650	2,470	1,690	1,330	3,270	2,046	860	18,410	2.48
Bottle	1,630	360	2,820	3,920	2,430	2,950	2,470	2,670	1,510	3,920	2,368	860	21,310	2.87
Subtotal	1,870	3,070	2,230	1,900	5,440	5,320	1,250	2,280	5,130	5,440	3,166	1,250	23,490	3.83
Tin Cans (Steel Cans)	140	310	710	550	800	800	250	100	80	800	388	80	3,490	0.47
Aluminum cans	1,790	140	760	0	1,760	3,740	2,450	5,220	2,900	5,220	2,084	0	18,760	2.52
Other Metals	930	2,570	1,550	1,870	1,520	3,500	3,260	3,400	14,150	3,400	18,708	350	168,370	22.66
Dir. Ash, Sand	14,740	30,150	22,070	25,090	23,750	13,160	39,020	43,670	23,770	48,670	26,713	13,160	240,420	32.55
In-organic Waste Total	100	20	0	0	200	130	0	160	0	200	68	0	610	0.08
Hazardous Waste (Batteries)	0	120	0	0	120	80	0	140	0	140	51	0	460	0.06
Other Hazardous Waste	100	140	0	0	320	210	0	300	3,250	3,250	480	0	1,070	0.14
Hazardous Waste Total	44,870	77,440	62,310	66,070	83,840	99,960	10,6030	107,090	94,740	107,090	82,928	44,870	743,100	100.00
Total Weight (kg)	240	365	320	400	400	440	350	330	320	440	440	240	3,165	
Total Waste Volume (lit.)	0.187	0.212	0.195	0.165	0.222	0.227	0.300	0.325	0.296	0.325	0.257	0.165	0.255	
Bulk Density (kg/lit.)														

Record Sheets (Male Municipality) ( Sheet No. 1 / 39 )

Survey Date : 22 August, 1998  
 Generation Source : ( A )  
 Weather : Cloudy  
 Name of Surveyor : Mr. Ibrahim

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 O F-3  
 Generation Sources Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1		Gross Weight 1		Container Weight 2		Gross Weight 2		Container Weight 3		Gross Weight 3		Container Weight 4		Gross Weight 4		Container Weight 5		Gross Weight 5		Net Weight (kg)	Ratio(%)
	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2		
<b>Organic Waste</b>																						
Food Waste	1,350		4,540																		3,190	7.11
Paper	1,350	1,350	3,700	3,240	1,350	3,440															6,330	14.11
Cardboard	2,420	1,350	3,350	3,050																	2,660	5.93
Subtotal	3,770	2,700	7,080	6,290	1,350	3,440															8,990	20.04
Plastics	2,500		3,950																		1,450	3.23
Bottle & Others	1,350		2,980																		1,630	3.63
PET	1,350		1,880																		590	1.18
Subtotal	5,200	0	8,810	0	0	0															3,610	8.05
Rubber & Leather	0		320																		320	0.71
Textiles	1,350		4,880																		3,530	7.87
Yard Waste	1,980	1,350	4,920	2,630	0	3,980															8,200	18.28
Wood	0		0																		0	0.00
Other Org. Waste	1,350		3,540																		2,190	4.88
Organic Waste Total	15,000	4,050	34,090	8,920	1,350	7,420															30,030	66.93
<b>In-organic Waste</b>																						
Glass	0		200																		200	0.45
Broken Glass	1,350		2,780																		1,430	3.19
Bottle	1,350	0	2,980	0	0	0															1,630	3.63
Subtotal	1,350	0	3,220	0	0	0															1,870	4.17
Tin Cans (Steel Cans)	0		140																		140	0.31
Aluminum cans	1,350	0	3,100	40																	1,790	3.99
Other Metals	1,350	1,350	4,720	4,250	1,350	4,390															2,310	20.75
Dirt, Ash, Sand	5,400	1,350	14,160	4,290	1,350	4,390															14,740	32.85
In-organic Waste Total																						
<b>Hazardous Waste</b>																						
Hazardous Waste (Batteries)	0		100																		100	0.22
Other Hazardous Waste	0		0																		0	0.00
Hazardous Waste Total	0		100																		100	0.22
Total Weight (kg):	20,400	5,400	48,350	13,210	2,700	11,810															44,870	100.00
Total Waste Volume (lit):																						240
Bulk Density (kg/lit):																						0.187

Record Sheets (Male Municipality) ( Sheet No. 2 / 39 )

Survey Date : 22 August, 1998  
 Generation Sources : ( A )  
 Weather : Cloudy  
 Name of Surv. : Mr. Ibrahim

Code  
 A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt. Office)

Code  
 C-2 Building (Office & Shops)  
 D Fruits Market & Parks  
 E Restaurant & Hotels

Code  
 F-3 Home Industry (Others)  
 G School  
 I-3 Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio (%)
<b>Organic Waste</b>												
Food Waste	1.350	11.000	1.940	7.500							15.210	19.64
Paper	1.350	4.000									2.650	3.42
Cardboard	2.500	3.500									1.000	1.29
Subtotal	3.850	7.500	0	0	0	0	0	0	0	0	3.650	4.71
Plastics	1.350	3.180									1.830	2.36
Bottle & Others	1.350	3.350	1.350	4.650							5.300	6.84
PET	1.350	1.800									450	0.58
Subtotal	4.050	8.330	1.350	4.650	0	0	0	0	0	0	7.580	9.79
Rubber & Leather	0	180									180	0.23
Textiles	1.350	3.050									1.700	2.20
Yard Waste	1.350	5.750	0	2.940		1.640					8.980	11.60
Wood	0	1.950									1.950	2.52
Other Org. Waste	1.350	9.250									7.900	10.20
<b>Organic Waste Total</b>	<b>13.300</b>	<b>47.010</b>	<b>3.290</b>	<b>15.090</b>	<b>0</b>	<b>1.640</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>47.150</b>	<b>60.89</b>
<b>In-organic Waste</b>												
Glass	0	0									0	0.00
Broken Glass	0	860									860	1.11
Bottle	0	860	0	0	0	0	0	0	0	0	860	1.11
Subtotal	0	860	0	0	0	0	0	0	0	0	3.070	3.96
Tin Cans (Steel Cans)	1.980	5.050									310	0.40
Aluminum cans	1.350	1.660									140	0.18
Other Metals	0	140									25.770	33.28
Dirt, Ash, Sand	2.420	22.250	1.350	4.250	1.350	4.390					30.150	38.93
<b>In-organic Waste Total</b>	<b>5.750</b>	<b>29.960</b>	<b>1.350</b>	<b>4.250</b>	<b>1.350</b>	<b>4.390</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50.150</b>	<b>64.87</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	20									20	0.03
Other Hazardous Waste	0	120									120	0.15
<b>Hazardous Waste Total</b>	<b>0</b>	<b>140</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>140</b>	<b>0.18</b>
<b>Total Weight (kg)</b>	<b>19.050</b>	<b>77.110</b>	<b>4.640</b>	<b>19.340</b>	<b>1.350</b>	<b>6.030</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77.440</b>	<b>100.00</b>
<b>Total Waste Volume (lit.) :</b>												<b>365</b>
<b>Bulk Density (kg/lit.) :</b>												<b>0.212</b>

Record Sheets (Male Municipality) ( Sheet No. 3 / 39 )

Survey Date : 22 August, 1998  
 Generation Source : ( A )  
 Weather : Cloudy  
 Name of Survey : Mr. Ibrahim

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 G I-3  
 Generation Sources Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (g)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1.350	14.500									13.150	21.10
Paper	2.500	6.750	1.980	7.000							9.270	14.88
Cardboard	0	2.760									2.760	4.43
Subtotal	2.500	9.510	1.980	7.000	0	0	0	0	0	0	12.030	19.31
Plastics	1.350	3.360									2.010	3.23
Bottle & Others	1.350	2.200	1.350	4.650							4.150	6.66
PET	1.350	2.000									650	1.04
Subtotal	4.050	7.560	1.350	4.650	0	0	0	0	0	0	6.810	10.93
Rubber & Leather	0	460									460	0.74
Textiles	0	130									130	0.21
Yard Waste	1.350	4.360									3.010	4.83
Wood	0	1.360									1.360	2.18
Other Org. Waste	1.350	4.640									3.290	5.28
<b>Organic Waste Total</b>	<b>10.600</b>	<b>42.520</b>	<b>3.330</b>	<b>11.650</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40.240</b>	<b>64.58</b>
<b>In-organic Waste</b>												
Glass	0	210									210	0.34
Broken Glass												
Bottle	1.350	3.960									2.610	4.19
Subtotal	1.350	4.170	0	0	0	0	0	0	0	0	2.820	4.55
Tin Cans (Steel Cans)	1.950	4.180									2.230	3.58
Aluminum cans	1.350	2.060									710	1.14
Other Metals	0	760									760	1.22
Dir. Ash, Sand	1.350	9.250	1.350	9.000							15.550	24.96
<b>In-organic Waste Total</b>	<b>6.000</b>	<b>20.420</b>	<b>1.350</b>	<b>9.000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22.070</b>	<b>35.42</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	0									0	0.00
<b>Hazardous Waste Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>
<b>Total Weight (kg) :</b>	<b>16.600</b>	<b>62.940</b>	<b>4.680</b>	<b>20.650</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>62.310</b>	<b>100.00</b>
<b>Total Waste Volume (lit.) :</b>												<b>320</b>
<b>Bulk Density (kg/lit.) :</b>												<b>0.195</b>

**Record Sheets (Male Municipality) ( Sheet No. 4 / 39 )**

Survey Date : 23 August, 1998  
 Generation Source : ( A )  
 Weather : Cloudy  
 Name of Surveyor : Mr. Ibrahim

Code : A B-1 C-1  
 Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Generation Sources : C-2 D E  
 Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code : F-3 O I-3  
 Home Industry (Others) School Const. Waste (Mixed)  
 Generation Source

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight Ratio (%)	
<b>Organic Waste</b>												
Food Waste	1.350	8.500									7.150	10.82
Paper	2.420	5.750	1.350	5.000	1.350	5.500					11.150	16.85
Cardboard	2.420	5.750									3.330	5.04
Subtotal	4.840	11.500	1.350	5.000	1.350	5.500	0	0	0	0	14.460	21.89
Plastics	1.350	4.700									3.350	5.07
Bottle & Others	1.350	2.520									1.170	1.77
PET	1.350	1.380									30	0.05
Subtotal	4.050	8.600	0	0	0	0	0	0	0	0	4.550	6.89
Rubber & Leather	1.350	3.840									2.490	3.77
Textiles	1.350	3.700									2.350	3.56
Yard Waste	2.500	6.000									3.500	5.30
Wood	1.350	3.560									2.210	3.34
Other Org. Waste	1.980	6.250									4.270	6.46
Organic Waste Total	18.770	51.950	1.350	5.000	1.350	5.500	0	0	0	0	40.980	62.03
<b>In-organic Waste</b>												
Glass	1.350	2.000									650	0.98
Broken Glass	1.350	4.620									3.270	4.95
Bottle	2.700	6.620	0	0	0	0	0	0	0	0	3.920	5.93
Subtotal	1.350	3.250									1.900	2.88
Tin Cans (Steel Cans)	1.350	1.900									550	0.83
Aluminum cans	0	0									0	0.00
Other Metals	1.980	5.000	50	15.750							18.720	28.33
Dirt, Ash, Sand	7.380	16.770	50	15.750	0	0	0	0	0	0	25.090	37.97
In-organic Waste Total												
Hazardous Waste												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	0									0	0.00
Hazardous Waste Total	0	0	0	0	0	0	0	0	0	0	0	0.00
Total Weight (kg) :	26.150	68.720	1.400	20.750	1.350	5.500	0	0	0	0	66.070	100.00
Total Waste Volume (lit.) :											400	
Bulk Density (kg/lit.) :											0.165	

Record Sheets (Male Municipality) ( Sheet No. 5 / 39 )

Survey Date : 23 August, 1998  
 Generation Source : ( A )  
 Weather : Cloudy  
 Name of Surv. : Mr. Ameen

Code A B-1 C-1  
 Residential Area  
 Commercial Area (General)  
 Buildings (Govt. Office)

Code C-2 D E  
 Building (Office & Shops)  
 Fruits Market & Parks  
 Restaurant & Hotels

Code F-3 G I-3  
 Home Industry (Others)  
 School  
 Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio (%)
<b>Organic Waste</b>												
Food Waste	1,350	9,500									8,150	9.17
Paper	1,350	6,000	0	4,500							9,150	10.30
Cardboard	0	4,120									4,120	4.64
Subtotal	1,350	10,120	0	4,500	0	0	0	0	0	0	13,270	14.94
Plastics	0	3,500									3,500	3.94
Bottle & Others	0	2,400									2,400	2.70
PET	1,350	2,650									1,300	1.46
Subtotal	1,350	8,550	0	0	0	0	0	0	0	0	7,200	8.10
Rubber & Leather	1,350	2,550									1,200	1.35
Textiles	1,350	9,750									8,400	9.46
Yard Waste	1,350	11,500									10,150	11.43
Wood	0	2,900									2,900	3.26
Other Org. Waste	2,500	16,000									13,500	15.20
<b>Organic Waste Total</b>	<b>10,600</b>	<b>70,870</b>	<b>0</b>	<b>4,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64,770</b>	<b>72.91</b>
<b>In-organic Waste</b>												
Glass	0	380									380	0.43
Broken Glass	0	2,100									2,100	2.36
Bottle	0	2,480	0	0	0	0	0	0	0	0	2,480	2.79
Subtotal	0	2,140	0	3,300							5,440	6.12
Tin Cans (Steel Cans)	1,350	1,900									550	0.62
Aluminum cans	0	1,760									1,760	1.98
Other Metals	1,980	15,500									13,520	15.22
Dirt, Ash, Sand	3,330	23,780	0	3,300	0	0	0	0	0	0	23,750	26.73
<b>In-organic Waste Total</b>	<b>3,330</b>	<b>23,780</b>	<b>0</b>	<b>3,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23,750</b>	<b>26.73</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	200									200	0.23
Other Hazardous Waste	0	120									120	0.14
Hazardous Waste Total	0	320	0	0	0	0	0	0	0	0	320	0.36
<b>Total Weight (kg)</b>	<b>13,930</b>	<b>94,970</b>	<b>0</b>	<b>7,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>88,840</b>	<b>100.00</b>
<b>Total Waste Volume (lit.)</b>												<b>400</b>
<b>Bulk Density (kg/lit.)</b>												<b>0.222</b>

**Record Sheets (Male Municipality) ( Sheet No. 6 / 39 )**

Survey Date : 23 August, 1998  
 Generation Source : ( A )  
 Weather : Cloudy / Shower  
 Name of Surv. : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Offices & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 G I-3  
 Generation Sources Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio (%)
<b>Organic Waste</b>												
Food Waste	1,350	12,500									11,150	11.15
Paper	0	3,250	2,420	8,250							9,080	9.08
Cardboard	0	3,750									3,750	3.75
Subtotal	0	7,000	2,420	8,250	0	0	0	0	0	0	12,880	12.88
Plastics	1,350	4,000									2,650	2.65
Bottle & Others	2,320	7,500	50	15,000							20,130	20.14
PET	1,350	2,500									1,150	1.15
Subtotal	5,020	14,000	50	15,000	0	0	0	0	0	0	23,930	23.94
Rubber & Leather	1,350	3,200									1,850	1.85
Textiles	2,320	7,000									4,680	4.68
Yard Waste	1,350	9,000									7,650	7.65
Wood	0	4,850									4,850	4.85
Other Org. Waste	1,350	21,000									19,650	19.66
<b>Organic Waste Total</b>	<b>12,740</b>	<b>78,530</b>	<b>2,470</b>	<b>23,250</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>86,590</b>	<b>86.62</b>
<b>In-organic Waste</b>												
Glass	0	300									300	0.30
Broken Glass	1,350	4,000									2,650	2.65
Bottle	1,350	4,300	0	0	0	0	0	0	0	0	2,950	2.95
Subtotal	1,980	5,750	0	1,550							5,320	5.32
Tin Cans (Steel Cans)	1,350	2,150									800	0.80
Aluminum cans	0	3,740									3,740	3.74
Other Metals	1,350	1,700									350	0.35
Dirt, Ash, Sand	6,030	17,640	0	1,550	0	0	0	0	0	0	13,160	13.17
<b>In-organic Waste Total</b>	<b>18,770</b>	<b>96,400</b>	<b>2,470</b>	<b>24,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>99,960</b>	<b>100.00</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	130									130	0.13
Other Hazardous Waste	0	80									80	0.08
<b>Hazardous Waste Total</b>	<b>0</b>	<b>210</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>210</b>	<b>0.21</b>
<b>Total Weight (kg) :</b>	<b>18,770</b>	<b>96,400</b>	<b>2,470</b>	<b>24,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>99,960</b>	<b>100.00</b>
<b>Total Waste Volume (lit) :</b>											<b>440</b>	
<b>Bulk Density (kg/lit) :</b>											<b>0.227</b>	

Record Sheets (Male Municipality) ( Sheet No. 7 / 39 )

Survey Date : 25 August, 1998  
 Generation Source : ( A )  
 Weather : Fine  
 Name of Surv : Mr. Ameen

Code A Residential Area C-2 Building (Office & Shops) F-3 Home Industry (Others)  
 B-1 Commercial Area (General) D Fruits Market & Parks G School  
 C-1 Buildings (Govt. Office) E Restaurant & Hotels I-3 Const. Waste (Mixed)

Type of Waste	Container Weight 1		Gross Weight 1		Container Weight 2		Gross Weight 2		Container Weight 3		Gross Weight 3		Container Weight 4		Gross Weight 4		Container Weight 5		Gross Weight 5		Net Weight Ratio (%)	
	Weight 1	Weight 2	Weight 1	Weight 2	Weight 2	Weight 3	Weight 3	Weight 4	Weight 4	Weight 5	Weight 5	Weight 5	Weight 5	Weight 5	Weight 5	Weight 5	Weight 5	Weight 5	Weight 5	Weight 5		
<b>Organic Waste</b>																						
Food Waste	1,350		9,000																			7,228
Paper	2,320		5,250																			2,900
Cardboard	1,940		4,780																			2,840
Subtotal	4,260		10,030		0		0	0	0	0								0	0	0	0	5,770
Plastics	1,350		2,680																			1,390
Bottle & Others	1,350		4,200																			2,850
PET	1,350		1,740																			390
Subtotal	4,050		8,620		0		0	0	0	0								0	0	0	0	4,570
Rubber & Leather	0		840																			840
Textiles	1,350		3,300																			1,950
Yard Waste	2,500		13,000		50		14,500		50		9,000		5,000									38,850
Wood	0		5,300																			5,300
Other Org. Waste	1,980		3,060																			1,080
Organic Waste Total	15,490		53,150		50		14,500		50		9,000		5,000					0	0	0	0	66,010
<b>In-organic Waste</b>																						
Glass	0		0																			0
Broken Glass	0		0																			0
Bottle	1,350		3,820																			2,470
Subtotal	1,350		3,820		0		0	0	0	0								0	0	0	0	2,470
Tin Cans (Steel Cans)	1,350		2,600																			1,250
Aluminium cans	1,350		1,600																			250
Other Metals	0		2,450																			2,450
Dirt, Ash, Sand	1,350		17,000		50		17,000		50													35,600
In-organic Waste Total	5,400		27,470		50		17,000		50		0		0	0	0			0	0	0	0	39,070
<b>Hazardous Waste</b>																						
Hazardous Waste (Batteries)	0		0																			0
Other Hazardous Waste	0		0																			0
Hazardous Waste Total	0		0		0		0		0		0		0		0		0	0	0	0	0	0
Total Weight (kg) :	20,890		80,620		100		31,500		50		9,000		5,000		50		5,000		0	0	0	105,030
Total Waste Volume (lit.) :																						350
Bulk Density (kg/lit.) :																						0.300



Record Sheets (Male Municipality) ( Sheet No. 8 / 39 )

Survey Date : 25 August, 1998  
 Generation Source : ( A )  
 Weather : Fine  
 Name of Surv : Mr. Ameen

Code : A B-1 C-1  
 Generation Sources : Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code : C-2 D E  
 Generation Sources : Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code : F-3 G I-3  
 Generation Source : Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	7,000									5,650	5.28
Paper	1,350	2,600	1,980	3,000							2,270	2.12
Cardboard	1,350	4,850									3,500	3.27
Subtotal	2,700	7,450	1,980	3,000	0	0	0	0	0	0	5,770	5.39
Plastics	1,350	2,480									1,130	1.06
Bottle & Others	1,350	3,800									2,450	2.29
PET	1,350	1,970									620	0.58
Subtotal	4,050	8,250	0	0	0	0	0	0	0	0	4,200	3.92
Rubber & Leather	0	580									580	0.54
Textiles	0	540									540	0.50
Yard Waste	1,980	4,980	50	17,500	50	9,000					29,400	27.45
Wood	0	5,000	0	1,900							6,900	6.44
Other Org. Waste	2,420	7,500									5,080	4.74
Organic Waste Total	12,500	41,300	2,030	22,400	50	9,000	0	0	0	0	58,120	54.27
<b>In-organic Waste</b>												
Glass	0	980									980	0.92
Broken Glass	1,350	3,040									1,690	1.58
Bottle	1,350	4,020	0	0	0	0	0	0	0	0	2,670	2.49
Subtotal	2,320	4,600									2,290	2.13
Tin Cans (Steel Cans)	0	100									100	0.09
Aluminum cans	0	2,900	0	2,320							5,220	4.87
Other Metals	50	21,500	50	17,000							38,400	35.86
Dirt, Ash, Sand	3,720	33,120	50	19,320							48,670	45.45
In-organic Waste Total												
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	160									160	0.15
Other Hazardous Waste	0	140									140	0.13
Hazardous Waste Total	0	300	0	0	0	0	0	0	0	0	300	0.28
Total Weight (kg) :	16,220	74,720	2,080	41,720	50	9,000	0	0	0	0	107,090	100.00
Total Waste Volume (lit) :											330	
Bulk Density (kg/lit) :											0.325	

Record Sheets (Male Municipality) ( Sheet No. 9 / 39 )

Survey Date : 25 August, 1998  
 Generation Source : ( A )  
 Weather : Fine  
 Name of Surv. : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Offices & Shops) Fruits Market & Parks Restaurants & Hotels  
 Code F-3 G I-3  
 Generation Source Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	11,500									10,150	11.09
Paper	1,350	3,100									1,750	1.91
Cardboard	2,420	7,000	1,980	5,000	0	3,700					11,300	12.35
Subtotal	3,770	10,100	1,980	5,000	0	3,700	0	0	0	0	13,050	14.26
Plastics	1,980	4,200	1,350	2,320							4,740	5.18
Bottle & Others	1,350	2,880									1,530	1.67
PET	0	200									200	0.22
Subtotal	3,330	7,280	1,350	2,320	1,350	2,900	0	0	0	0	6,470	7.07
Rubber & Leather	0	400									400	0.44
Textiles	2,500	4,520									2,020	2.21
Yard Waste	1,350	4,500									3,150	3.44
Wood	0	22,800									22,800	24.92
Other Org. Waste	2,320	12,000									9,680	10.58
Organic Waste Total	14,620	73,100	3,330	7,320	1,350	6,600	0	0	0	0	67,720	74.02
<b>In-organic Waste</b>												
Glass	0	180									180	0.20
Broken Glass	1,350	2,680									1,330	1.45
Bottle	1,350	2,860	0	0	0	0	0	0	0	0	1,510	1.65
Subtotal	1,350	4,100	0	2,380							5,130	5.61
Tin Cans (Steel Cans)	0	80									80	0.09
Aluminum cans	0	2,900									2,900	3.17
Other Metals	1,350	15,500									14,150	15.47
Dirt, Ash, Sand	4,050	25,440	0	2,380	0	0	0	0	0	0	23,770	25.98
In-organic Waste Total												
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	0									0	0.00
Hazardous Waste Total	0	0	0	0	0	0	0	0	0	0	0	0.00
Total Weight (kg) :	18,670	98,540	3,330	9,700	1,350	6,600	0	0	0	0	91,490	100.00
Total Waste Volume (lit) :											320	
Bulk Density (kg/lit) :											0.286	

(2) Residential Area 2 (Micro Bins)

Result of Waste Composition Survey in Male'  
Residential Area (Micro Bins)

Sample No.	(unit : grams)															Total	Ratio (%)	
	10 20 Aug.	11 23 Aug.	12 24 Aug.	13 27 Aug.	14 29 Aug.	15 3 Sep.	Max.	Avg.	Min.									
Organic Waste																		
Food Waste	14,650	26,650	56,300	53,450	51,670	77,180	77,180	77,180	46,650	14,650	279,900	36.27						
Paper	2,180	9,350	3,850	12,960	16,410	11,350	16,410	16,410	9,347	2,180	56,080	7.27						
Cardboard	480	5,520	5,750	13,320	6,040	6,000	13,320	13,320	6,185	480	37,110	4.81						
Subtotal	2,660	14,870	9,600	26,280	22,450	17,350	26,280	26,280	15,532	2,660	93,190	12.08						
Plastics	2,190	3,650	9,800	7,250	2,270	8,270	9,800	9,800	5,588	2,190	33,530	4.35						
Bottle & Others	670	440	1,570	2,730	3,680	1,650	3,680	3,680	1,790	440	10,740	1.39						
PET	500	590	1,110	260	870	550	1,110	1,110	647	260	3,880	0.50						
Subtotal	3,360	4,680	12,480	10,340	6,820	10,470	12,480	12,480	8,025	3,360	48,150	6.24						
Rubber & Leather	700	1,680	1,720	760	0	1,820	1,820	1,820	1,113	0	6,680	0.87						
Textiles	3,270	430	5,930	5,650	2,890	1,970	5,930	5,930	3,357	430	20,140	2.61						
Yard Waste	3,180	530	20,020	9,500	8,650	24,820	24,820	24,820	11,117	530	66,700	8.64						
Wood	450	680	5,000	0	0	0	5,000	5,000	1,022	0	6,130	0.79						
Other Org. Waste	2,970	13,900	0	21,020	73,650	14,650	73,650	73,650	21,032	0	126,190	16.35						
Organic Waste Total	31,240	63,420	111,050	127,000	166,130	148,240	166,130	166,130	107,847	31,240	647,080	83.86						
In-organic Waste																		
Glass	470	180	880	960	980	280	980	980	625	180	3,750	0.49						
Broken Glass																		
Bottle	1,750	1,010	2,750	3,650	3,630	370	3,650	3,650	2,193	370	13,160	1.71						
Subtotal	2,220	1,190	3,630	4,610	4,610	650	4,610	4,610	2,818	650	16,910	2.19						
Tin Cans (Steel Cans)	1,380	2,500	3,520	3,310	3,080	5,100	5,100	5,100	3,148	1,380	18,890	2.45						
Aluminum cans	240	600	210	190	1,270	450	1,270	1,270	493	190	2,960	0.38						
Other Metals	0	1,780	800	1,240	1,100	0	1,780	1,780	820	0	4,920	0.64						
Dirt, Ash, Sand	5,650	19,150	16,520	0	18,150	19,650	19,650	19,650	13,187	0	79,120	10.25						
In-organic Waste Total	9,490	25,220	24,680	9,350	28,210	25,850	28,210	28,210	20,467	9,350	122,800	15.91						
Hazardous Waste																		
Hazardous Waste (Batteries)	280	40	0	320	240	0	320	320	147	0	880	0.11						
Other Hazardous Waste	0	0	0	240	120	500	500	500	143	0	860	0.11						
Hazardous Waste Total	280	40	0	560	360	500	560	560	290	0	1,740	0.23						
Total Weight (kg) :	41,010	88,680	135,730	136,910	194,700	174,590	194,700	194,700	128,603	41,010	771,620	100.00						
Total Waste Volume (lit.) :	200	290	480	440	640	560	640	640	435	200	2,610							
Bulk Density (kg/lit.) :	0.205	0.306	0.283	0.311	0.304	0.312	0.312	0.312	0.287	0.205	0.296							

Record Sheets (Male Municipality) ( Sheet No. 10/39 )

Survey Date : 20 August  
 Generation Source : ( A ) Micro Bin  
 Weather : Fine  
 Name of Surv. : Mr. Ibrahim

Code : A B-1 C-1  
 Generation Sources : Residential Area Commercial Area (General) Buildings (Govn. Office)  
 Code : C-2 D E  
 Generation Sources : Building (Office & Shop) Fruits Market & Parks Restaurant & Hotels  
 Code : F-3 G I-3  
 Generation Sources : Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (E)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	16,000									14,650	35.72
Paper	2,320	4,500									2,180	5.32
Cardboard	2,320	2,800									460	1.17
Subtotal	4,640	7,300	0	0	0	0	0	0	0	0	2,660	6.49
Plastics	1,350	3,540									2,190	5.34
Bottle & Others	1,350	2,020									670	1.63
PET	2,320	2,820									500	1.22
Subtotal	5,020	8,380	0	0	0	0	0	0	0	0	3,360	8.19
Rubber & Leather	1,350	2,050									700	1.71
Textiles	1,350	4,620									3,270	7.97
Yard Waste	2,320	5,500									3,180	7.75
Wood	0	450									450	1.10
Other Org. Waste	1,350	4,320									2,970	7.24
<b>Organic Waste Total</b>	<b>17,380</b>	<b>48,620</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,240</b>	<b>76.18</b>
<b>In-organic Waste</b>												
Glass	1,350	1,820									470	1.15
Broken Glass	1,350	3,100									1,750	4.37
Bottle	2,700	4,920	0	0	0	0	0	0	0	0	2,220	5.41
Subtotal	2,320	3,700									1,380	3.37
Tin Cans (Steel Cans)	0	240									240	0.59
Aluminum cans	0	0									0	0.00
Other Metals	1,350	7,000									5,650	13.76
Dirt, Ash, Sand	6,370	15,860	0	0	0	0	0	0	0	0	9,490	22.14
<b>In-organic Waste Total</b>	<b>6,370</b>	<b>15,860</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,490</b>	<b>22.14</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	280									280	0.68
Other Hazardous Waste	0	0									0	0.00
<b>Hazardous Waste Total</b>	<b>0</b>	<b>280</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>280</b>	<b>0.68</b>
<b>Total Weight (kg) :</b>	<b>23,750</b>	<b>64,760</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>41,010</b>	<b>100.00</b>
<b>Total Waste Volume (lit) :</b>												<b>200</b>
<b>Bulk Density (kg/lit) :</b>												<b>0.205</b>

Record Sheets (Male Municipality) ( Sheet No. 11/39 )

Survey Date : 23 August  
 Generation Source : ( A ) Micro Bin  
 Weather : Fine/Shower  
 Name of Surveyor : Mr. Ibrahim

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Gov. Offices)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 G J-3  
 Generation Sources Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	28,000									26,650	90.05
Paper	1,980	8,000	1,350	4,680							9,350	10.54
Cardboard	1,980	7,500									5,520	6.22
Subtotal	3,960	15,500	1,350	4,680	0	0	0	0	0	0	14,870	16.77
Plastics	1,350	5,000									3,650	4.12
Bottle & Others	1,350	1,790									440	0.50
PET	1,980	2,570									590	0.67
Subtotal	4,680	9,360	0	0	0	0	0	0	0	0	4,680	5.28
Rubber & Leather	0	1,680									1,680	1.89
Textiles	1,350	1,780									490	0.48
Yard Waste	1,350	1,880									590	0.60
Wood	0	680									680	0.77
Other Org. Waste	1,350	15,250									13,900	15.67
<b>Organic Waste Total</b>	<b>14,040</b>	<b>74,130</b>	<b>1,350</b>	<b>4,680</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63,420</b>	<b>71.52</b>
<b>In-organic Waste</b>												
Glass	0	180									180	0.20
Broken Glass	1,350	2,360									1,010	1.14
Bottle	1,350	2,540	0	0	0	0	0	0	0	0	1,190	1.34
Subtotal	2,500	5,000									2,500	2.82
Tin Cans (Steel Cans)	1,350	1,950									600	0.68
Aluminum cans	0	1,780									1,780	2.01
Other Metals	1,350	20,500									19,150	21.59
Dirt, Ash, Sand	6,550	31,770	0	0	0	0	0	0	0	0	25,220	28.44
<b>In-organic Waste Total</b>	<b>14,040</b>	<b>74,130</b>	<b>1,350</b>	<b>4,680</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63,420</b>	<b>71.52</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	40									40	0.05
Other Hazardous Waste	0	0									0	0.00
<b>Hazardous Waste Total</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0.05</b>
<b>Total Weight (kg) :</b>	<b>20,590</b>	<b>105,940</b>	<b>1,350</b>	<b>4,680</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>88,660</b>	<b>100.00</b>
<b>Total Waste Volume (lit) :</b>											<b>290</b>	
<b>Bulk Density (kg/lit) :</b>											<b>0.306</b>	

Micro Bin (3)

Record Sheets (Male Municipality) (Sheet No. 12/39)

Survey Date : 24 August  
 Generation Source : (A) Micro Bin  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 G I-3  
 Generation Source Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	30,000	1,350	29,000							56,300	41.48
Paper	1,350	5,500	1,350	1,050							3,850	2.84
Cardboard	0	5,750									5,750	4.24
Subtotal	1,350	11,250	1,350	1,050	0	0	0	0	0	0	9,600	7.07
Plastics	1,350	4,250	1,350	8,250							9,600	7.22
Film	1,350	2,920									1,570	1.16
Bottle & Others	1,350	2,460									1,110	0.82
PET	1,350	2,460									1,110	0.82
Subtotal	4,050	9,630	1,350	8,250	0	0	0	0	0	0	12,480	9.19
Rubber & Leather	0	1,720									1,720	1.27
Textiles	2,320	8,250									5,930	4.37
Yard Waste	1,980	22,000									20,020	14.75
Wood	0	5,000									5,000	3.68
Other Org. Waste	0	0									0	0.00
<b>Organic Waste Total</b>	11,050	87,850	4,050	38,300	0	0	0	0	0	0	111,050	81.82
<b>In-organic Waste</b>												
Glass	0	880									880	0.65
Broken Glass	0	880									880	0.65
Bottle	1,350	4,100									2,750	2.05
Subtotal	1,350	4,980	0	0	0	0	0	0	0	0	3,630	2.67
Tin Cans (Steel Cans)	1,980	5,500									3,520	2.59
Aluminum cans	1,350	1,560									210	0.15
Other Metals	0	800									800	0.59
Dirt, Ash, Sand	1,980	18,500									16,520	12.17
<b>In-organic Waste Total</b>	6,660	31,340	0	0	0	0	0	0	0	0	24,680	18.18
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	0									0	0.00
<b>Hazardous Waste Total</b>	0	0	0	0	0	0	0	0	0	0	0	0.00
<b>Total Weight (kg)</b>	17,710	119,190	4,050	38,300	0	0	0	0	0	0	135,730	100.00
<b>Total Waste Volume (lit.) :</b>											480	
<b>Bulk Density (kg/lit.) :</b>											0.283	

Record Sheets (Male Municipality) (Sheet No. 13/39)

Survey Date : 27 August  
 Generation Source : (A) Micro Bin  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code  
 A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Gov. Office)

Generation Sources  
 C-2 Building (Office & Shops)  
 D Fruits Market & Parks  
 E Restaurant & Hotels

Code  
 F-3 Home Industry (Others)  
 G School  
 I-3 Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (g)	Ratio (%)
Organic Waste												
Food Waste	1,350	24,500	1,350	24,500	1,350	7,500					53,450	39.04
Paper	2,320	4,500	2,420	6,050	1,350	8,500					12,960	9.47
Cardboard	0	5,500	0	2,880	0	2,320	0	2,620			13,320	9.75
Subtotal	2,320	10,000	2,420	8,930	1,350	10,820	0	2,620	0	0	26,280	19.20
Plastics	1,980	8,000	1,350	2,680							7,350	5.37
Film	1,350	4,080									2,730	1.99
Bottle & Others	0	260									260	0.19
PET	3,330	12,340	1,350	2,680	0	0	0	0	0	0	10,340	7.55
Subtotal	0	760									760	0.56
Rubber & Leather	1,350	7,000									5,650	4.12
Textiles	2,500	12,000									9,500	6.94
Yard Waste	0	0									0	0.00
Wood	1,980	23,000									21,020	15.55
Other Org. Waste	12,830	89,600	5,120	37,110	2,700	18,320	0	2,620	0	0	127,000	92.76
Organic Waste Total											0	
In-organic Waste												
Glass	0	960									960	0.70
Broken Glass	1,350	5,000									3,650	2.67
Bottle	1,350	5,960	0	0	0	0	0	0	0	0	4,610	3.37
Subtotal	1,350	4,660									3,310	2.42
Tin Cans (Steel Cans)	1,350	1,540									100	0.14
Aluminum cans	0	1,240									1,240	0.91
Other Metals	0	0									0	0.00
Dir. Ash. Sand	4,050	13,400	0	0	0	0	0	0	0	0	9,350	6.83
In-organic Waste Total												
Hazardous Waste												
Hazardous Waste (Batteries)	0	320									320	0.23
Other Hazardous Waste	0	240									240	0.18
Hazardous Waste Total	0	560	0	0	0	0	0	0	0	0	560	0.41
Total Weight (kg) :	16,880	103,560	5,120	37,110	2,700	18,320	0	2,620	0	0	136,910	100.00
Total Waste Volume (lit.) :											440	
Bulk Density (kg/lit.) :												0.311

Record Sheets (Male Municipality) ( Sheet No. 14/39 )

Survey Date : 29 August  
 Generation Source : (A) Micro Bin  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code  
 A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt. Office)

Generation Sources  
 C-2 Building (Office & Shops)  
 D Fruits Market & Parks  
 E Restaurant & Hotels

Code  
 P-3 Home Industry (Others)  
 C School  
 I-3 Const. Waste (Mixed)

Type of Waste	Container Weight 1		Gross Weight 1		Container Weight 2		Gross Weight 2		Container Weight 3		Gross Weight 3		Container Weight 4		Gross Weight 4		Container Weight 5		Gross Weight 5		Net Weight (K)	Ratio(%)
	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2				
Organic Waste																						
Food Waste	1,350	1,980	25,000	30,000																	51,670	26.54
Paper	2,500	1,350	11,000	5,500	1,350	1,350	2,140	2,140	1,350	1,350	4,320	4,320									16,410	8.43
Cardboard	0	0	2,260	3,780																	6,040	3.10
Subtotal	2,500	1,350	13,260	9,280	1,350	1,350	2,140	2,140	1,350	1,350	4,320	4,320	0	0	0	0	0	0	0	0	22,450	11.53
Plastics	1,980	1,350	2,920	2,680																	2,270	1.17
Bottle & Others	2,320	0	6,000																		3,680	1.89
PET	1,350	0	2,220																		870	0.45
Subtotal	5,650	1,350	11,140	2,680	1,350	1,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,820	3.50
Rubber & Leather	0	0	0	0																	0	0.00
Textiles	1,350	0	4,240																		2,890	1.48
Yard Waste	1,350	0	10,000																		8,650	4.44
Wood	0	0	0	0																	0	0.00
Other Org. Waste	1,350	0	75,000																		73,650	37.83
Organic Waste Total	13,550	4,680	138,640	41,960	1,350	1,350	2,140	2,140	1,350	1,350	4,320	4,320	0	0	0	0	0	0	0	0	166,130	85.33
In-organic Waste																						
Glass	0	0	980																		980	0.50
Broken Glass	1,350	0	4,980																		3,630	1.86
Bottle	1,350	0	5,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,610	2.37
Subtotal	2,420	0	5,500																		3,080	1.58
Tin Cans (Steel Cans)	1,350	0	2,620																		1,270	0.65
Aluminum cans	0	0	1,100																		1,100	0.56
Other Metals	1,350	0	19,500																		18,150	9.52
Dirt, Ash, Sand	6,470	0	34,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28,210	14.49
In-organic Waste Total	6,470	0	34,680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28,210	14.49
Hazardous Waste																						
Hazardous Waste (Batteries)	0	0	240																		240	0.12
Other Hazardous Waste	0	0	120																		120	0.06
Hazardous Waste Total	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	360	0.18
Total Weight (kg) :	20,020	4,680	175,680	41,960	1,350	1,350	2,140	2,140	1,350	1,350	4,320	4,320	0	0	0	0	0	0	0	0	194,700	100.00
Total Waste Volume (lit) :																						640
Bulk Density (kg/lit) :																						0.304



Record Sheets (Male Municipality) (Sheet No. 15/39)

Survey Date : 3 September  
 Generation Source : (A) Micro Bin  
 Weather : Cloudy  
 Name of Surveyor : Mr. Ameen

Code  
 A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt. Office)

Code  
 C-2 Building (Office & Shops)  
 D Fruits Market & Parks  
 E Restaurant & Hotels

Code  
 P-3 Home Industry (Others)  
 O School  
 I-3 Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (g)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	2,420	24,000	1,350	15,000	1,350	21,000	1,350	19,000	1,350	6,000	77,180	44.21
Paper	1,350	9,000	2,320	6,000							11,330	6.49
Cardboard	0	2,900	0	3,100							6,000	3.44
Subtotal	1,350	11,900	2,320	9,100	0	0	0	0	0	0	17,330	9.93
Plastics	1,980	6,500	1,350	5,100							8,270	4.74
Film	1,350	3,000									1,650	0.95
Bottle & Others	1,350	1,900									550	0.32
PET	4,680	11,400	1,350	5,100	0	0	0	0	0	0	10,470	6.00
Subtotal	0	1,820									1,820	1.04
Rubber & Leather	1,350	3,320									1,970	1.13
Textiles	1,980	6,000	1,350	20,000	1,350	3,500					24,830	14.22
Yard Waste	0	0									0	0.00
Wood	1,350	16,000									14,650	8.39
Other Org. Waste	13,130	74,440	6,370	49,200	2,700	24,500	1,350	19,000	1,350	6,000	148,240	84.91
Organic Waste Total											0	0
<b>In-organic Waste</b>												
Glass	0	280									290	0.16
Broken Glass	1,350	1,720									370	0.21
Bottle	1,350	2,000	0	0	0	0	0	0	0	0	650	0.37
Subtotal	1,350	5,100	1,350	2,700							5,100	2.92
Tin Cans (Steel Cans)	1,350	1,800									450	0.26
Aluminum cans	0	0									0	0.00
Other Metals	1,350	21,000									19,650	11.25
Dirt, Ash, Sand	5,400	29,900	1,350	2,700	0	0	0	0	0	0	25,850	14.81
In-organic Waste Total											0	0
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	500									500	0.29
Hazardous Waste Total	0	500	0	0	0	0	0	0	0	0	500	0.29
Total Weight (kg) :	18,530	104,840	7,720	51,900	2,700	24,500	1,350	19,000	1,350	6,000	174,590	100.00
Total Waste Volume (lit.) :											560	0.312
Bulk Density (kg/lit.) :												

(3) Commercial Area (General Commercial Area)

Result of Waste Composition Survey in Male  
Commercial Area - General

Sample No.	(unit : grams)										Total	Ratio (%)	
	16 26 Aug.	17 26 Aug.	18 27 Aug.	19 29 Aug.	20 2 Sep.	21 2 Sep.	22 3 Sep.	Max.	Avg.	Min.			
Organic Waste													
Food Waste	8,650	200	3,650	3,650	19,680	21,650	33,970	33,970	13,061	200	91,430	12.83	
Paper	11,870	15,050	18,360	11,830	12,900	5,720	36,830	36,830	16,051	5,720	112,360	15.76	
Cardboard	40,380	32,360	37,240	61,930	14,200	10,980	21,200	61,930	31,613	10,980	221,290	31.04	
Subtotal	55,250	47,410	55,000	73,560	27,100	16,700	58,030	73,560	47,664	16,700	333,650	46.81	
Plastics	6,450	9,690	3,180	8,220	4,150	2,800	6,900	9,690	5,913	2,800	41,390	5.81	
Film	1,220	1,850	350	5,150	7,700	300	1,850	7,700	2,631	300	18,420	2.53	
Bottle & Others	1,900	4,080	630	1,850	2,070	370	350	4,080	1,607	350	11,250	1.58	
PET	9,570	15,620	4,160	15,230	13,920	3,470	9,100	15,620	10,151	3,470	71,060	9.97	
Subtotal	620	2,830	1,020	1,340	2,850	500	1,650	2,850	1,173	340	8,210	1.15	
Rubber & Leather	2,030	1,400	6,650	1,340	16,300	7,580	16,150	16,300	7,190	0	50,330	7.06	
Textiles	8,150	0	2,150	0	200	0	1,390	4,150	1,224	0	8,570	1.20	
Yard Waste	6,650	0	0	0	9,020	4,650	17,650	17,650	5,424	0	37,970	5.33	
Wood	90,920	70,310	73,230	95,180	89,210	59,340	142,470	142,470	88,666	59,340	620,660	87.07	
Other Org. Waste													
Other Org. Waste Total													
In-organic Waste													
Glass	1,400	580	0	120	220	200	0	1,400	360	0	2,520	0.35	
Broken Glass	440	0	0	840	1,050	380	2,150	2,150	694	0	4,860	0.68	
Bottle	1,840	580	0	960	1,270	580	2,150	2,150	1,054	0	7,380	1.04	
Subtotal	1,650	590	1,650	1,210	2,150	1,250	4,650	4,650	1,879	590	13,150	1.84	
Tin Cans (Steel Cans)	570	0	270	1,130	3,580	270	150	3,580	853	0	5,970	0.84	
Aluminum cans	700	200	0	1,540	0	0	0	1,540	349	0	2,440	0.34	
Other Metals	0	0	9,000	0	13,650	14,150	23,080	23,080	8,554	0	59,880	8.40	
Dir. Ash. Sand	4,760	1,370	10,920	4,840	20,650	16,250	30,030	30,030	12,689	1,370	88,820	12.46	
In-organic Waste Total													
Hazardous Waste													
Hazardous Waste (Batteries)	900	0	540	340	220	100	700	900	400	0	2,800	0.39	
Other Hazardous Waste	0	0	100	240	0	120	100	240	80	0	560	0.08	
Hazardous Waste Total	900	0	640	580	220	220	800	900	480	0	3,360	0.47	
Total Weight (kg)	96,580	71,680	84,790	100,600	110,600	75,810	173,300	173,300	101,834	71,680	712,840	100.00	
Total Waste Volume (lit.)	930	670	480	760	640	480	890	930	680	480	4,760		
Bulk Density (kg/lit.)	0.104	0.107	0.177	0.132	0.172	0.158	0.217	0.217	0.152	0.104	0.150		

Record Sheets (Male Municipality) ( Sheet No. 16 / 39 )

Survey Date : 26 August  
 Generation Source : ( B-1 )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Offices & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 O I-3  
 Generation Source Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2 (kg)	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio (%)	
<b>Organic Waste</b>													
Food Waste	1.350	10.000										8.650	8.966306
Paper	1.350	2.860	1.350	2.240	2.320	8.000	2.500	4.340	1.350	3.300		11.870	12.290333
Cardboard	0	43.380										43.380	44.91613
Subtotal	1.350	46.240	1.350	2.240	2.320	8.000	2.500	4.340	1.350	3.300		55.250	57.20646
Plastics	1.350	4.400	2.420	3.480	1.980	4.320						6.450	6.678401
Film	0	1.220										1.220	1.263201
Bottle & Others	0	1.900										1.900	1.967281
PET	0	1.900										1.900	1.967281
Subtotal	1.350	7.520	2.420	3.480	1.980	4.320	0	0	0	0		9.570	9.908884
Rubber & Leather	0	620										620	0.641955
Textiles	1.350	3.380										2.030	2.101884
Yard Waste	1.350	9.500										8.150	8.4386
Wood	0	0										0	0
Other Org. Waste	1.350	8.000										6.650	6.885484
Other Org. Waste Total	8.100	85.280	3.770	5.720	4.300	12.320	2.500	4.340	1.350	3.300		90.920	94.13957
<b>In-organic Waste</b>													
Glass	0	1.400										1.400	1.449575
Broken Glass	0	440										440	0.455581
Bottle	0	1.840	0	0	0	0	0	0	0	0		1.840	1.905156
Subtotal	1.350	3.000										1.650	1.708428
Tin Cans (Steel Cans)	1.350	1.920										570	0.590184
Aluminum cans	0	700										700	0.724788
Other Metals	0	0										0	0
Dirt, Ash, Sand	2.700	7.460	0	0	0	0	0	0	0	0		4.760	4.928557
In-organic Waste Total													
<b>Hazardous Waste</b>													
Hazardous Waste (Batteries)	0	900										900	0.93187
Other Hazardous Waste	0	0										0	0
Other Hazardous Waste	0	900	0	0	0	0	0	0	0	0		900	0.93187
Hazardous Waste Total	10.800	93.620	3.770	5.720	4.300	12.320	2.500	4.340	1.350	3.300		96.580	100
Total Weight (kg) :													930
Total Waste Volume (lit) :													0.104
Bulk Density (kg/lit) :													

Record Sheets (Male Municipality) ( Sheet No. 17 / 39 )

Survey Date : 26 August  
 Generation Source : ( B-1 )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt. Office)

Code C-2  
 D  
 E

Generation Sources Building (Office & Shops)  
 Fruits Market & Parks  
 Restaurant & Hotels

Code P-3  
 G  
 I-3

Generation Source Home Industry (Others)  
 School  
 Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2 (g)	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio (%)
<b>Organic Waste</b>												
Food Waste	0	200									200	0.279018
Paper	1,350	4,920	1,350	4,700	1,980	3,300	2,500	6,000	1,350	4,660	15,050	20.99609
Cardboard	0	7,500	0	4,680	0	3,180	0	7,500	0	9,500	33,360	45.14509
Subtotal	1,350	12,420	1,350	9,380	1,980	6,480	2,500	13,500	1,350	14,160	47,410	66.14118
Plastics	2,320	4,020	1,350	2,840	0	3,480	1,980	5,000			9,690	13.51842
Bottle & Others	1,350	3,200									1,850	2.580915
PET	2,420	6,500									4,080	5.691964
Subtotal	6,090	13,720	1,350	2,840	0	3,480	1,980	5,000	0	0	15,620	21.79129
Rubber & Leather	1,350	4,200									2,830	3.976004
Textiles	0	1,400									1,400	1.953125
Yard Waste	0	0									0	0
Wood	1,350	4,180									2,880	3.948103
Other Org. Waste	0	0									0	0
Organic Waste Total	10,140	36,120	2,700	12,220	1,980	9,960	4,480	18,500	1,350	14,160	70,310	98.08873
<b>In-organic Waste</b>												
Glass	0	580									580	0.809152
Broken Glass	0	0									0	0
Bottle	0	580	0	0	0	0	0	0	0	0	580	0.809152
Subtotal	0	580	0	0	0	0	0	0	0	0	580	0.809152
Tin Cans (Steel Cans)	1,350	1,940									590	0.823103
Aluminum cans	0	0									0	0
Other Metals	0	200									200	0.279018
Dirt, Ash, Sand	0	0									0	0
In-organic Waste Total	1,350	2,720	0	0	0	0	0	0	0	0	1,370	1.911272
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0
Other Hazardous Waste	0	0									0	0
Hazardous Waste Total	0	0	0	0	0	0	0	0	0	0	0	0
Total Weight (kg) :	11,490	38,840	2,700	12,220	1,980	9,960	4,480	18,500	1,350	14,160	71,680	100
Total Waste Volume (lit) :											670	670
Bulk Density (kg/lit) :												0.107

Record Sheets (Male Municipality) ( Sheet No. 18 / 39 )

Survey Date : 27 August  
 Generation Source : (B-1)  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code  
 A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt. Office)

Code  
 C-2 Residential Area  
 D Commercial Area (General)  
 E Buildings (Govt. Office)

Code  
 P-3 Building (Office & Shops)  
 G Fruits Market & Parks  
 I-3 Restaurant & Hotels

Code  
 Home Industry (Others)  
 School  
 Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2 (g)	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (g)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	5,000										
Paper	1,350	4,240	2,420	7,000	1,980	6,200	1,980	6,300	1,350	3,700	3,650	4.304753
Cardboard	0	37,240									18,340	21.6535
Subtotal	1,350	41,480	2,420	7,000	1,980	6,200	1,980	6,300	1,350	3,700	37,240	43.92027
Plastics	2,320	5,500										
Film	1,350	1,700									3,180	3.750442
Bottle & Others	1,350	1,980									350	0.412785
PET	1,350	1,980									630	0.743012
Subtotal	5,020	9,180	0	0	0	0	0	0	0	0	4,160	4.906239
Rubber & Leather	0	1,020									1,020	1.202972
Textiles	1,350	8,000									6,650	7.842906
Yard Waste	1,350	3,500									2,150	2.535676
Wood	0	0									0	0
Other Org. Waste	0	0									0	0
<b>Organic Waste Total</b>	<b>10,420</b>	<b>68,180</b>	<b>2,420</b>	<b>7,000</b>	<b>1,980</b>	<b>6,200</b>	<b>1,980</b>	<b>6,300</b>	<b>1,350</b>	<b>3,700</b>	<b>73,230</b>	<b>86.36632</b>
<b>In-organic Waste</b>												
Glass	0	0										
Broken Glass	0	0									0	0
Bottle	0	0									0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Tin Cans (Steel Cans)	1,350	3,000									1,650	1.945984
Aluminum cans	1,350	1,620									370	0.318434
Other Metals	0	0									0	0
Dirt, Ash, Sand	2,500	11,500									9,000	10.61446
<b>In-organic Waste Total</b>	<b>5,200</b>	<b>16,120</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,920</b>	<b>12.87868</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	540									540	0.636868
Other Hazardous Waste	0	100									100	0.117938
<b>Hazardous Waste Total</b>	<b>0</b>	<b>640</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>640</b>	<b>0.754806</b>
<b>Total Weight (kg) :</b>	<b>15,620</b>	<b>84,940</b>	<b>2,420</b>	<b>7,000</b>	<b>1,980</b>	<b>6,200</b>	<b>1,980</b>	<b>6,300</b>	<b>1,350</b>	<b>3,700</b>	<b>84,790</b>	<b>100</b>
<b>Total Waste Volume (lit.) :</b>											<b>480</b>	<b>0.1777</b>
<b>Bulk Density (kg/lit.) :</b>												

Record Sheets (Male Municipality) ( Sheet No. 19 / 39 )

Survey Date : 29 August  
 Generation Source : ( B-1 )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt. Office)  
 C-2 Building (Office & Shops)  
 D Fruits Market & Parks  
 E Restaurant & Hotels  
 F-3 Home Industry (Others)  
 G School  
 H-3 Const. Waste (Mixed)

Type of Waste	Container Weight 1		Gross Weight 1		Container Weight 2		Gross Weight 2 (k)		Container Weight 3		Gross Weight 3		Container Weight 4		Gross Weight 4		Container Weight 5		Gross Weight 5		Net Weight (k)	Ratio (%)	
	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2			
<b>Organic Waste</b>																							
Food Waste	1,350		4,980																		3,690	3.60835	
Paper	1,980	1,350	5,000	4,840					2,420	5,000	2,320	4,860									11,630	11.56064	
Cardboard	0	0	5,000	25,000					0	18,000	0	8,950									61,930	61.56064	
Subtotal	1,980	1,350	10,000	29,840	1,350	2,420	2,420	23,000	2,320	13,810	0	4,980									73,560	73.12127	
Plastics	1,350	2,420	3,860	5,500					1,350	3,980											8,220	8.170974	
Bottle & Others	1,350		6,500																		5,150	5.119284	
PET	1,350		3,200																		1,850	1.838966	
Subtotal	4,050	2,420	13,560	5,500	2,420	3,980	0	0	0	15,220	0	0									12,300	12.22664	
Rubber & Leather	1,350		2,580																		1,340	1.332008	
Textiles	0		1,340																		200	0.198807	
Yard Waste	0		0																		0	0	
Wood	0		200																		0	0	
Other Org. Waste	0		0																		0	0	
<b>Organic Waste Total</b>	<b>8,730</b>	<b>3,770</b>	<b>32,660</b>	<b>35,340</b>	<b>3,770</b>	<b>3,770</b>	<b>26,980</b>	<b>2,320</b>	<b>13,810</b>	<b>0</b>	<b>4,980</b>	<b>95,180</b>	<b>0</b>	<b>4,980</b>	<b>95,180</b>	<b>94.61233</b>							
<b>In-organic Waste</b>																							
Glass	0		120																		120	0.119284	
Broken Glass	0		840																		840	0.83499	
Bottle	0		960		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	960	0.954274	
Subtotal	1,350	2,560	2,560																		1,210	1.202783	
Tin Cans (Steel Cans)	1,350	2,480	2,480																		1,130	1.12326	
Aluminium cans	0		1,540																		1,540	1.530815	
Other Metals	0		0																		0	0	
Dirt, Ash, Sand	0		0																		0	0	
<b>In-organic Waste Total</b>	<b>2,700</b>	<b>7,540</b>	<b>7,540</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,840</b>	<b>0</b>	<b>4,840</b>	<b>4.81133</b>								
<b>Hazardous Waste</b>																							
Hazardous Waste (Batteries)	0		340																		340	0.337972	
Other Hazardous Waste	0		240																		240	0.235569	
<b>Hazardous Waste Total</b>	<b>0</b>	<b>580</b>	<b>580</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>580</b>	<b>0.576541</b>	
<b>Total Weight (kg) :</b>	<b>11,430</b>	<b>40,780</b>	<b>37,770</b>	<b>35,340</b>	<b>3,770</b>	<b>26,980</b>	<b>2,320</b>	<b>13,810</b>	<b>0</b>	<b>4,980</b>	<b>100,600</b>	<b>100</b>	<b>4,980</b>	<b>100,600</b>	<b>100</b>								
<b>Total Waste Volume (lit.) :</b>																						<b>760</b>	
<b>Bulk Density (kg/lit.) :</b>																						<b>0.132</b>	

Record Sheets (Male Municipality) ( Sheet No. 20 / 39 )

Survey Date : 2 September  
 Generation Source : ( B-1 )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code P-3 G I-3  
 Generation Source Home Industry (Others) School Const. Waste (Miscd)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2 (K)	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (K)	Ratio (%)
<b>Organic Waste</b>												
Food Waste	2,320	22,000									19,680	17.87791
Paper	1,350	8,600	1,350	7,000							12,900	11.71875
Cardboard	0	4,700	0	4,300	0	3,400	0	1,800			14,200	12.89971
Subtotal	1,350	13,300	1,350	11,300	0	3,400	0	1,800	0	0	27,100	24.61846
Plastics	1,350	5,500									4,150	3.769985
Film	1,350	6,000	1,350	2,000	2,420	4,820					7,700	6.994913
Bottle & Others	1,350	3,420									2,070	1.880451
PET	4,050	14,920	1,350	2,000	2,420	4,820	0	0	0	0	13,920	12.64535
Subtotal	0	340									340	0.308866
Rubber & Leather	1,350	4,200									2,850	2.589026
Textiles	1,350	11,000	1,350	8,000							16,300	14.80741
Yard Waste	0	0									0	0
Wood	1,980	11,000									9,020	8.194041
Other Org. Waste	12,400	76,760	4,050	21,300	2,420	8,220	0	1,800	0	0	89,210	81.04106
<b>Organic Waste Total</b>												
<b>In-organic Waste</b>												
Glass	0	220									220	0.199855
Broken Glass	1,350	2,400									1,050	0.953852
Bottle	1,350	2,620	0	0	0	0	0	0	0	0	1,270	1.157706
Subtotal	1,350	3,500									2,150	1.953125
Tin Cans (Steel Cans)	2,420	6,000									3,580	3.25218
Aluminum cans	0	0									0	0
Other Metals	1,350	15,000									13,650	12.40007
Dirt, Ash, Sand	6,470	27,120	0	0	0	0	0	0	0	0	20,650	18.75908
<b>In-organic Waste Total</b>												
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	220									220	0.199855
Other Hazardous Waste	0	0									0	0
Subtotal	0	220	0	0	0	0	0	0	0	0	220	0.199855
<b>Hazardous Waste Total</b>												
Total Weight (kg):	18,870	104,100	4,050	21,300	2,420	8,220	0	1,800	0	0	110,080	100
Total Waste Volume (lit):											640	
Bulk Density (kg/lit):												0.172

Record Sheets (Male Municipality) ( Sheet No. 21 / 39 )

Survey Date : 2 September  
 Generation Source : (B-1)  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt, ODOs)

Code C-2 Building (Office & Shops)  
 D Fruits Market & Parks  
 E Restaurant & Hotels

Code F-3 Home Industry (Others)  
 G School  
 H-3 Const. Waste (Mixed)

Type of Waste	Container Weight 1		Gross Weight 1	Container Weight 2		Gross Weight 2 (R)	Container Weight 3		Gross Weight 3	Container Weight 4		Gross Weight 4	Container Weight 5		Gross Weight 5	Net Weight (R)	Ratio(%)	
	Weight 1	Gross Weight 1	Weight 2	Weight 3	Weight 4	Weight 5	Weight 3	Weight 4	Weight 5	Weight 4	Weight 5	Weight 5	Weight 5	Weight 5	Weight 5	(R)		
<b>Organic Waste</b>																		
Food Waste	1,350	23,000														21,650	28.5524	
Paper	1,350	6,500	1,350	1,920												5,720	7.545179	
Cardboard	0	4,500	0	2,380	0	2,460	0	1,640							10,280	14.48358		
Subtotal	1,350	11,000	1,350	4,300	0	2,460	0	1,640	0	0	0	0	0	0	16,700	22.02876		
Plastics	1,350	3,380	1,350	1,920											2,800	3.693444		
Bottle & Others	0	300													300	0.395726		
PET	1,350	1,720													370	0.488062		
Subtotal	2,700	5,600	1,350	1,920	0	0	0	0	0	0	0	0	0	0	3,470	4.577233		
Rubber & Leather	0	500													500	0.659544		
Textiles	0	3,400													3,400	4.484896		
Yard Waste	2,420	10,000													7,580	9.998681		
Wood	1,350	2,740													1,390	1.833531		
Other Org. Waste	1,350	6,000													4,650	6.133755		
Organic Waste Total	10,520	62,240	2,700	6,220	0	2,460	0	1,640	0	0	0	0	0	0	59,340	78.27463		
<b>In-organic Waste</b>																		
Glass	0	200													200	0.263817		
Broken Glass	0	380													380	0.501253		
Bottle	0	580	0	0	0	0	0	0	0	0	0	0	0	0	580	0.765071		
Subtotal	1,350	2,600													1,250	1.648859		
Tin Cans (Steel Cans)	1,350	1,620													270	0.356154		
Aluminum cans	0	0													0	0		
Other Metals	1,350	15,500													14,150	18.66508		
Dir. Ash, Sand	4,050	20,300	0	0	0	0	0	0	0	0	0	0	0	0	16,250	21.43517		
In-organic Waste Total																		
<b>Hazardous Waste</b>																		
Hazardous Waste (Batteries)	0	100													100	0.131909		
Other Hazardous Waste	0	120													120	0.15829		
Hazardous Waste Total	0	220	0	0	0	0	0	0	0	0	0	0	0	0	220	0.290199		
Total Weight (kg) :	14,570	82,760	2,700	6,220	0	2,460	0	1,640	0	0	0	0	0	0	75,810	100		
Total Waste Volume (lit.) :															480			
Bulk Density (kg/lit.) :															0.158			



Record Sheets (Male Municipality) ( Sheet No. 22 / 39 )

Survey Date : 3 September  
 Generation Source : ( B-1 )  
 Weather : Cloudy  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 G I-3  
 Generation Sources Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio (%)
<b>Organic Waste</b>												
Food Waste	1,350	11,000	1,980	6,000	1,350	14,000	1,350	9,000			33,970	19.60
Paper	2,420	19,500	1,350	3,700	1,350	5,100	1,350	15,000			36,830	21.25
Cardboard	0	4,000	0	3,200	0	4,300	0	4,900	4,800	0	4,800	12.23
Subtotal	2,420	23,500	1,350	6,900	1,350	9,400	1,350	19,900	4,800	0	58,030	33.49
Plastics	1,350	5,500	1,350	4,100							6,900	3.98
Film	1,350	3,200									1,850	1.07
Bottle & Others	1,350	1,700									350	0.20
PET	1,350	1,700									9,100	5.25
Subtotal	4,050	10,400	1,350	4,100	0	0	0	0	0	0	1,650	0.95
Rubber & Leather	1,350	3,000									1,770	1.02
Textiles	1,350	3,120									16,150	9.32
Yard Waste	1,350	17,500									4,150	2.39
Wood	1,350	5,500									17,650	10.18
Other Org. Waste	1,350	19,000									142,470	82.21
<b>Organic Waste Total</b>	<b>14,570</b>	<b>93,020</b>	<b>4,680</b>	<b>17,000</b>	<b>2,700</b>	<b>23,400</b>	<b>2,700</b>	<b>28,900</b>	<b>4,800</b>	<b>0</b>		
<b>In-organic Waste</b>												
Glass	0	0									0	0.00
Broken Glass	1,350	3,500									2,150	1.24
Bottle	1,350	3,500	0	0	0	0	0	0	0	0	2,150	1.24
Subtotal	1,350	6,000									4,650	2.68
Tin Cans (Steel Cans)	1,350	1,500									150	0.09
Aluminum cans	0	0									0	0.00
Other Metals	2,420	25,500									23,080	13.32
Dir. Ash, Sand	6,470	36,500	0	0	0	0	0	0	0	0	30,030	17.33
<b>In-organic Waste Total</b>	<b>6,470</b>	<b>36,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	700									700	0.40
Other Hazardous Waste	0	100									100	0.06
<b>Hazardous Waste Total</b>	<b>0</b>	<b>800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>800</b>	<b>0.46</b>
<b>Total Weight (kg) :</b>	<b>21,040</b>	<b>130,320</b>	<b>4,680</b>	<b>17,000</b>	<b>2,700</b>	<b>23,400</b>	<b>2,700</b>	<b>28,900</b>	<b>4,800</b>	<b>0</b>	<b>175,300</b>	<b>100</b>
<b>Total Waste Volume (lit) :</b>											<b>800</b>	
<b>Bulk Density (kg/lit) :</b>											<b>0.217</b>	

## (4) Buildings (Government Office Buildings)

**Result of Waste Composition Survey in Male'**  
Buildings - Government Offices

Sample No.	23		24		Max.	Avg.	Min.	Total	Ratio (%)
	27 Aug.	31 Aug.	27 Aug.	31 Aug.					
(unit : grams)									
Organic Waste									
Food Waste	0	6,650	6,650	3,325	0	6,650	4.63		
Paper	31,940	38,900	38,900	35,420	31,940	70,840	49.36		
Cardboard	4,200	1,850	4,200	3,025	1,850	6,050	4.22		
Subtotal	36,140	40,750	40,750	38,445	36,140	76,890	53.58		
Plastics	2,050	1,990	2,050	2,020	1,990	4,040	2.82		
Bottle & Others	3,290	2,550	3,290	2,920	2,550	5,840	4.07		
PET	550	2,950	2,950	1,750	550	3,500	2.44		
Subtotal	5,890	7,490	7,490	6,690	5,890	13,380	9.32		
Rubber & Leather	0	630	630	315	0	630	0.44		
Textiles	0	630	630	315	0	630	0.44		
Yard Waste	23,320	12,760	23,320	18,040	12,760	36,080	25.14		
Wood	0	1,740	1,740	870	0	1,740	1.21		
Other Org. Waste	1,150	1,270	1,270	1,210	1,150	2,420	1.69		
Organic Waste Total	66,500	71,920	71,920	69,210	66,500	138,420	96.45		
In-organic Waste									
Glass	0	0	0	0	0	0	0.00		
Broken Glass	0	0	0	0	0	0	0.00		
Bottle	1,550	300	1,550	925	300	1,850	1.29		
Subtotal	1,550	300	1,550	925	300	1,850	1.29		
Tin Cans (Steel Cans)	450	1,390	1,390	920	450	1,840	1.28		
Aluminum cans	770	250	770	510	250	1,020	0.71		
Other Metals	0	180	180	90	0	180	0.13		
Dirt, Ash, Sand	0	0	0	0	0	0	0.00		
In-organic Waste Total	2,770	2,120	2,770	2,445	2,120	4,890	3.41		
Hazardous Waste									
Hazardous Waste (Batteries)	0	0	0	0	0	0	0.00		
Other Hazardous Waste	0	200	200	100	0	200	0.14		
Hazardous Waste Total	0	200	200	100	0	200	0.14		
Total Weight (kg)	69,270	74,240	74,240	71,755	69,270	143,510	100.00		
Total Waste Volume (lit.)	720	720	720	720	720	1,440			
Bulk Density (kg/lit.)	0.096	0.103	0.103	0.100	0.096	0.100			

Record Sheets (Male Municipality) (Sheet No. 23 / 39 )

Survey Date : 27 August  
 Generation Source : ( C-1 )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 O I-3  
 Generation Source Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2 (K)	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (g)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	0	0									0	0.00
Paper	1.980	6.000	1.350	3.780	1.350	2.200	2.320	6.000	3.840	24.800	31.940	46.11
Cardboard	0	2.600	0	1.600							4.200	6.06
Subtotal	1.980	8.600	1.350	5.380	1.350	2.200	2.320	6.000	3.840	24.800	36.140	52.17
Plastics	1.350	3.400									2.050	2.96
Bottle & Others	1.350	2.900	2.500	4.240							3.290	4.75
PET	1.350	1.900									350	0.79
Subtotal	4.050	8.200	2.500	4.240	0	0	0	0	0	0	5.890	8.50
Rubber & Leather	0	0									0	0.00
Textiles	0	0									0	0.00
Yard Waste	1.980	6.500	1.350	2.500	1.350	7.000	2.500	14.500			23.330	33.67
Wood	0	0									0	0.00
Other Org. Waste	1.350	2.500									1.150	1.66
<b>Organic Waste Total</b>	<b>9.360</b>	<b>25.800</b>	<b>5.200</b>	<b>12.120</b>	<b>2.700</b>	<b>9.200</b>	<b>4.820</b>	<b>20.500</b>	<b>3.840</b>	<b>24.800</b>	<b>66.500</b>	<b>96.00</b>
<b>In-organic Waste</b>												
Glass	0	0									0	0.00
Broken Glass												
Bottle	1.350	2.900									1.550	2.24
Subtotal	1.350	2.900	0	0	0	0	0	0	0	0	1.550	2.24
Tin Cans (Steel Cans)	1.350	1.800									450	0.65
Aluminum cans	1.350	2.120									770	1.11
Other Metals	0	0									0	0.00
Dirt, Ash, Sand	0	0									0	0.00
<b>In-organic Waste Total</b>	<b>4.050</b>	<b>6.820</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.770</b>	<b>4.00</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	0									0	0.00
<b>Hazardous Waste Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>
<b>Total Weight (kg) :</b>	<b>13.410</b>	<b>32.620</b>	<b>5.200</b>	<b>12.120</b>	<b>2.700</b>	<b>9.200</b>	<b>4.820</b>	<b>20.500</b>	<b>3.840</b>	<b>24.800</b>	<b>69.270</b>	<b>100</b>
<b>Total Waste Volume (lit.) :</b>												<b>720</b>
<b>Bulk Density (kg/lit.) :</b>												<b>0.096</b>

Record Sheets (Male Municipality) ( Sheet No. 23 / 39 )

Survey Date : 31 August  
 Generation Source : ( C-1 )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code      Generation Sources      Code      Generation Sources      Code      Generation Sources

A      Residential Area      C-2      Building (Office & Shops)      F-3      Home Industry (Others)

B-1      Commercial Area (General)      D      Fruits Market & Parks      G      School

C-1      Buildings (Govt. Offices)      E      Restaurant & Hotels      I-3      Concr. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2 (g)	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (g)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	8,000									6,650	8.96
Paper	2,420	12,500	2,420	10,500	2,420	9,500	2,420	13,500	2,420	5,000	38,900	52.40
Cardboard	1,350	3,200									1,850	2.49
Subtotal	3,770	15,700	2,420	10,500	2,420	9,500	2,420	13,500	2,420	5,000	40,750	54.89
Plastics	1,350	3,340									1,990	2.68
Bottle & Others	1,350	3,900									2,550	3.43
PET	1,350	4,300									2,950	3.97
Subtotal	4,050	11,540	0	0	0	0	0	0	0	0	7,490	10.09
Rubber & Leather	1,350	1,980									630	0.85
Textiles	1,350	1,980									630	0.85
Yard Waste	2,420	9,000	2,320	8,500							12,760	17.19
Wood	0	1,740									1,740	2.34
Other Org. Waste	1,350	2,620									1,370	1.71
Organic Waste Total	15,640	52,560	4,740	19,000	2,420	9,500	2,420	13,500	2,420	5,000	71,920	96.85
<b>In-organic Waste</b>												
Glass	0	0									0	0.00
Broken Glass	0	300									300	0.40
Bottle	0	300									300	0.40
Subtotal	0	300	0	0	0	0	0	0	0	0	300	0.40
Tin Cans (Steel Cans)	1,350	2,740									1,390	1.87
Aluminum cans	1,350	1,600									250	0.34
Other Metals	0	180									180	0.24
Dirt, Ash, Sand	0	0									0	0.00
In-organic Waste Total	2,700	4,820	0	0	0	0	0	0	0	0	2,120	2.86
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	200									200	0.27
Hazardous Waste Total	0	200	0	0	0	0	0	0	0	0	200	0.27
Total Weight (kg) :	18,340	57,580	4,740	19,000	2,420	9,500	2,420	13,500	2,420	5,000	74,240	100
Total Waste Volume (lit.) :											720	
Bulk Density (kg/lit.) :											0.103	

## (5) Buildings (Private Office Buildings and Shops)

**Result of Waste Composition Survey in Male'**  
**Buildings - Private Offices & Shops**

Sample No.	25		26		27		Max.	Avg.	Min.	Total	Ratio (%)
	31 Aug.	1 Sep.	1 Sep.	1 Sep.	1 Sep.	1 Sep.					
(unit : grams)											
Organic Waste											
Food Waste	0	26,300	11,800	26,300	12,700	26,300	12,700	0	38,100	21.08	
Paper	16,440	10,220	7,590	16,440	11,417	16,440	11,417	7,590	34,250	18.95	
Cardboard	14,620	19,920	18,400	19,920	17,647	19,920	17,647	14,620	52,940	29.28	
Subtotal	31,060	30,140	25,990	31,060	29,063	31,060	29,063	25,990	87,190	48.23	
Plastics	1,350	2,320	2,010	2,320	1,893	2,320	1,893	1,350	5,680	3.14	
Bottle & Others	3,680	720	370	3,680	1,757	3,680	1,757	720	5,270	2.92	
PET	120	970	550	970	547	970	547	120	1,640	0.91	
Subtotal	5,150	4,010	3,430	5,150	4,197	5,150	4,197	3,430	12,590	5.96	
Rubber & Leather	1,490	800	700	1,480	993	1,480	993	700	2,980	1.65	
Textiles	0	740	1,780	1,780	840	1,780	840	0	2,520	1.39	
Yard Waste	1,400	2,830	4,080	4,080	2,770	4,080	2,770	1,400	8,310	4.60	
Wood	800	0	1,770	1,770	857	1,770	857	0	2,570	1.42	
Other Org. Waste	0	0	5,150	5,150	1,717	5,150	1,717	0	5,150	2.85	
Organic Waste Total	39,890	64,820	54,700	64,820	53,137	64,820	53,137	39,890	159,410	88.18	
In-organic Waste											
Glass	0	650	100	650	250	650	250	0	750	0.41	
Broken Glass	0	280	1,450	1,450	750	1,450	750	280	2,250	1.24	
Bottle	520	930	1,550	1,550	1,000	1,550	1,000	520	3,000	1.66	
Subtotal	520	930	1,550	1,550	1,073	1,550	1,073	420	3,220	1.78	
Tin Cans (Steel Cans)	420	350	350	350	300	350	300	200	900	0.50	
Aluminum cans	200	0	0	0	0	0	0	0	0	0.00	
Other Metals	0	0	0	0	0	0	0	0	0	0.00	
Dirt, Ash, Sand	8,650	1,950	2,450	8,650	4,350	8,650	4,350	1,950	13,050	7.22	
In-organic Waste Total	9,790	4,780	5,600	9,790	6,723	9,790	6,723	4,780	20,170	11.16	
Hazardous Waste											
Hazardous Waste (Batteries)	0	660	280	660	313	660	313	0	940	0.52	
Other Hazardous Waste	0	140	120	140	87	140	87	0	260	0.14	
Hazardous Waste Total	0	800	400	800	400	800	400	0	1,200	0.66	
Total Weight (kg)	49,680	70,400	60,700	70,400	60,260	70,400	60,260	49,680	180,780	100.00	
Total Waste Volume (lit)	560	640	560	640	587	640	587	560	1,760		
Bulk Density (kg/lit)	0.889	0.110	0.108	0.110	0.102	0.110	0.102	0.089	0.103		

Record Sheets (Male Municipality) ( Sheet No. 25 / 39 )

Survey Date : 31 August  
 Generation Source : ( C-2 )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code : A B-1 C-1  
 Generation Sources : Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code : C-2 D E  
 Generation Sources : Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code : F-3 G I-3  
 Generation Source : Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio (%)
<b>Organic Waste</b>	0	0									0	0.00
Food Waste												
Paper	2,320	8,500	2,400	5,500	2,420	6,000	2,420	6,000			16,440	33.09
Cardboard	0	2,100	0	4,320		3,780		4,420			14,620	29.43
Subtotal	2,320	10,600	2,400	9,820	2,420	9,780	2,420	10,420	0	0	31,060	62.52
Plastics	1,350	2,700									1,350	2.72
Film											3,680	7.41
Bottle & Others	2,320	6,000									120	0.24
PET	0	120									5,150	10.37
Subtotal	3,670	8,820	0	0	0	0	0	0	0	0	1,480	2.98
Rubber & Leather		1,480									0	0.00
Textiles	0	0									1,400	2.82
Yard Waste	2,400	3,800									800	1.61
Wood	0	800									0	0.00
Other Org. Waste	0	0									0	0.00
<b>Organic Waste Total</b>	<b>8,390</b>	<b>25,500</b>	<b>2,400</b>	<b>9,820</b>	<b>2,420</b>	<b>9,780</b>	<b>2,420</b>	<b>10,420</b>	<b>0</b>	<b>0</b>	<b>39,890</b>	<b>80.29</b>
<b>In-organic Waste</b>												
Glass	0	0									0	0.00
Broken Glass											520	1.05
Bottle	0	520									0	0.00
Subtotal	0	520	0	0	0	0	0	0	0	0	520	1.05
Tin Cans (Steel Cans)	0	420									420	0.85
Aluminum cans	0	200									200	0.40
Other Metals	0	0									0	0.00
Dirt, Ash, Sand	1,350	10,000									8,650	17.41
<b>In-organic Waste Total</b>	<b>1,350</b>	<b>11,140</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,790</b>	<b>19.71</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	0									0	0.00
<b>Hazardous Waste Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>
<b>Total Weight (kg) :</b>	<b>9,740</b>	<b>36,640</b>	<b>2,400</b>	<b>9,820</b>	<b>2,420</b>	<b>9,780</b>	<b>2,420</b>	<b>10,420</b>	<b>0</b>	<b>0</b>	<b>49,680</b>	<b>100.00</b>
<b>Total Waste Volume (lit.) :</b>											<b>560</b>	
<b>Bulk Density (kg/lit.) :</b>											<b>0.889</b>	

Record Sheets (Male Municipality) ( Sheet No. 26 / 39 )

Survey Date : 1 September  
 Generation Source : ( C-2 )  
 Weather : Cloudy  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Gov. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 G H-3  
 Generation Source Home Industry (Others) School Const. Waste (Misc)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	17,000	1,350	12,000							26,300	37.36
Paper	1,350	4,400	1,980	4,700	1,350	3,100	1,350	2,500	1,350	2,900	10,220	14.52
Cardboard	0	3,500	0	3,700	0	3,900	0	4,100	0	4,720	19,920	28.30
Subtotal	1,350	7,900	1,980	8,400	1,350	7,000	1,350	6,600	1,350	7,620	30,140	42.81
Plastics	2,420	4,740									2,320	3.30
Film	0	720									720	1.02
Bottle & Others	1,350	2,320									970	1.38
PET	3,770	7,780	0	0	0	0	0	0	0	0	4,010	5.70
Subtotal	0	800									800	1.14
Rubber & Leather	0	740									740	1.05
Textiles	1,350	4,180									2,830	4.02
Yard Waste	0	0									0	0.00
Wood	0	0									0	0.00
Other Org. Waste	0	0									0	0.00
<b>Organic Waste Total</b>	<b>7,820</b>	<b>38,400</b>	<b>3,330</b>	<b>20,400</b>	<b>1,350</b>	<b>7,000</b>	<b>1,350</b>	<b>6,600</b>	<b>1,350</b>	<b>7,620</b>	<b>64,820</b>	<b>92.07</b>
<b>In-organic Waste</b>												
Glass	1,350	2,000									650	0.92
Broken Glass	0	280									280	0.40
Bottle	1,350	2,280	0	0	0	0	0	0	0	0	930	1.32
Subtotal	1,350	2,900									1,850	2.20
Tin Cans (Steel Cans)	1,350	1,700									380	0.50
Aluminum cans	0	0									0	0.00
Other Metals	1,350	3,300									1,950	2.77
Dirt, Ash, Sand	5,400	10,180	0	0	0	0	0	0	0	0	4,780	6.79
<b>In-organic Waste Total</b>	<b>13,220</b>	<b>49,380</b>	<b>3,330</b>	<b>20,400</b>	<b>1,350</b>	<b>7,000</b>	<b>1,350</b>	<b>6,600</b>	<b>1,350</b>	<b>7,620</b>	<b>70,400</b>	<b>100.00</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	660									660	0.94
Other Hazardous Waste	0	140									140	0.20
Hazardous Waste Subtotal	0	800	0	0	0	0	0	0	0	0	800	1.14
<b>Total Weight (kg)</b>	<b>13,220</b>	<b>49,380</b>	<b>3,330</b>	<b>20,400</b>	<b>1,350</b>	<b>7,000</b>	<b>1,350</b>	<b>6,600</b>	<b>1,350</b>	<b>7,620</b>	<b>70,400</b>	<b>100.00</b>
<b>Total Waste Volume (lit) :</b>												<b>640</b>
<b>Bulk Density (kg/lit) :</b>												<b>0.110</b>

Record Sheets (Male Municipality) ( Sheet No. 27 / 39 )

Survey Date : 1 September  
 Generation Source : (C-2)  
 Weather : Cloudy  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 G I-3  
 Generation Source Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	5,500	1,350	9,000							11,800	19.44
Paper	1,350	3,680	1,350	3,720	1,350	4,240					7,590	12.50
Cardboard	0	1,820	0	4,620	0	4,100	3,240	0	4,620	0	18,400	30.31
Subtotal	1,350	5,500	1,350	8,340	1,350	8,340	3,240	0	4,620	0	25,990	42.82
Plastics	1,350	2,500	1,940	2,800							2,010	3.31
Film	1,350	2,220									870	1.43
Bottle & Others	1,350	1,900									550	0.91
PET	1,350	1,900	1,940	2,800	0	0	0	0	0	0	3,430	5.65
Subtotal	4,050	6,620	1,940	2,800							700	1.15
Rubber & Leather	0	700									1,780	2.93
Textiles	2,320	4,100									4,080	6.72
Yard Waste	2,420	6,500									1,770	2.92
Wood	1,350	3,120									5,150	8.43
Other Org. Waste	1,350	6,500									54,700	90.12
<b>Organic Waste Total</b>	14,190	38,540	4,640	20,140	1,350	8,340	3,240	0	4,620	0		
<b>In-organic Waste</b>												
Glass	0	100									100	0.16
Broken Glass											1,480	2.39
Bottle	1,350	2,800									1,550	2.55
Subtotal	1,350	2,900	0	0	0	0	0	0	0	0	1,350	2.06
Tin Cans (Steel Cans)	1,350	2,400	0	200							350	0.58
Aluminum cans	1,350	1,700									0	0.00
Other Metals	0	0									2,450	4.04
Dirt, Ash, Sand	1,350	3,800									5,600	9.23
<b>In-organic Waste Total</b>	5,400	10,800	0	200	0	0	0	0	0	0		
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	280									280	0.46
Other Hazardous Waste	0	120									120	0.20
<b>Hazardous Waste Subtotal</b>	0	400	0	0	0	0	0	0	0	0	400	0.66
<b>Total Weight (kg) :</b>	19,590	49,740	4,640	20,340	1,350	8,340	3,240	0	4,620	0	60,700	100.00
<b>Total Waste Volume (lit) :</b>											560	
<b>Bulk Density (kg/lit) :</b>											0.108	



(6) Fruits Market & Parks (Waste from Public Areas)

Result of Waste Composition Survey in Male Market & Public Areas

Sample No.	28		29		30		Max.	Avg.	Min.	Total	Ratio (%)
	29 Aug.	30 Aug.	29 Aug.	30 Aug.	29 Aug.	30 Aug.					
(unit : grams)											
Organic Waste											
Food Waste	19,150	11,650	106,780	106,780	106,780	45,860	11,650	137,580	40.27		
Paper	5,190	6,050	15,770	15,770	15,770	9,003	5,190	27,010	7.91		
Cardboard	5,190	3,860	11,930	11,930	11,980	8,677	5,190	26,050	7.62		
Subtotal	10,380	14,910	27,700	27,700	27,750	17,680	10,380	53,040	15.52		
Plastics	6,380	3,250	8,350	8,350	8,850	6,160	3,250	18,480	5.41		
Bottle & Others	2,510	2,750	1,380	1,380	2,750	2,213	1,380	6,640	1.94		
PET	1,050	750	750	750	1,050	850	750	2,550	0.75		
Subtotal	9,940	6,750	10,930	10,930	10,980	9,223	6,750	27,670	8.10		
Rubber & Leather	1,200	2,850	600	600	2,850	1,550	600	4,650	1.36		
Textiles	820	1,050	1,870	1,870	1,870	1,247	820	3,740	1.09		
Yard Waste	6,020	6,150	4,650	4,650	6,150	5,607	4,650	16,820	4.92		
Wood	320	3,260	7,890	7,890	7,890	3,823	320	11,470	3.36		
Other Org. Waste	3,180	8,580	9,650	9,650	9,650	7,137	3,180	21,410	6.27		
Organic Waste Total	51,010	55,200	170,170	170,170	170,170	92,127	51,010	276,380	80.89		
In-organic Waste											
Glass	1,500	400	0	0	1,500	633	0	1,900	0.56		
Broken Glass	2,270	5,150	2,050	2,050	5,150	3,157	2,050	9,470	2.77		
Bottle	3,770	5,550	2,050	2,050	5,550	3,790	2,050	11,370	3.33		
Subtotal	2,030	2,150	7,330	7,330	7,330	3,837	2,030	11,510	3.37		
Tin Cans (Steel Cans)	690	750	1,700	1,700	1,700	1,047	690	3,140	0.92		
Aluminum cans	0	120	400	400	400	173	0	520	0.15		
Other Metals	14,650	14,080	8,650	8,650	14,650	12,460	8,650	37,380	10.94		
Dirt, Ash, Sand	21,140	22,650	20,130	20,130	22,650	21,307	20,130	63,920	18.71		
In-organic Waste Total											
Hazardous Waste											
Hazardous Waste (Batteries)	180	0	200	200	200	127	0	380	0.11		
Other Hazardous Waste	1,000	0	0	0	1,000	333	0	1,000	0.29		
Hazardous Waste Total	1,180	0	200	200	1,180	460	0	1,380	0.40		
Total Weight (kg)	73,330	77,850	190,500	190,500	190,500	113,893	73,330	341,680	100.00		
Total Waste Volume (lit.)	440	560	720	720	720	573	440	1,720			
Bulk Density (kg/lit.)	0.167	0.139	0.265	0.265	0.265	0.190	0.167	0.199			

Record Sheets (Male Municipality) ( Sheet No. 28 / 39 )

Survey Date : 29 August  
 Generation Source : ( D )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Offices & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 G I-3  
 Generation Source Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (t)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	20,500									19,150	26.11
Paper	1,350	2,040	2,500	7,000							5,190	7.08
Cardboard	0	1,860	0	1,980	0	1,350					5,190	7.08
Subtotal	1,350	3,900	2,500	8,980	0	1,350	0	0	0	0	10,380	14.16
Plastics	2,420	6,000	1,350	2,660	1,350	2,840					6,380	8.70
Film	1,350	3,860									2,510	3.42
Bottle & Others	1,350	3,860									1,050	1.43
PET	1,350	2,400									1,050	1.43
Subtotal	5,120	12,260	1,350	2,660	1,350	2,840	0	0	0	0	9,940	13.56
Rubber & Leather	0	1,200									1,200	1.64
Textiles	1,980	2,800									820	1.12
Yard Waste	1,980	8,000									6,020	8.21
Wood	0	320									320	0.44
Other Org. Waste	2,320	5,500									3,180	4.34
<b>Organic Waste Total</b>	<b>14,100</b>	<b>54,480</b>	<b>3,850</b>	<b>11,640</b>	<b>1,350</b>	<b>4,190</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>51,010</b>	<b>69.56</b>
<b>In-organic Waste</b>												
Glass	0	1,500									1,500	2.05
Broken Glass											2,270	3.10
Bottle	1,350	3,620									3,770	5.14
Subtotal	1,350	5,120	0	0	0	0	0	0	0	0	2,090	2.77
Tin Cans (Steel Cans)	1,350	3,380									690	0.94
Aluminum cans	1,350	2,040									0	0.00
Other Metals	0	0									14,650	19.98
Dirt, Ash, Sand	1,350	16,000									21,140	28.83
In-organic Waste Total	5,400	26,540	0	0	0	0	0	0	0	0	21,140	28.83
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	180									180	0.25
Other Hazardous Waste	0	1,000									1,000	1.36
Hazardous Waste Total	0	1,180	0	0	0	0	0	0	0	0	1,180	1.61
<b>Total Weight (kg) :</b>	<b>19,500</b>	<b>82,200</b>	<b>3,850</b>	<b>11,640</b>	<b>1,350</b>	<b>4,190</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73,330</b>	<b>100.00</b>
<b>Total Waste Volume (lit.) :</b>												<b>440</b>
<b>Bulk Density (kg/lit.) :</b>												<b>0.167</b>

Record Sheets (Male Municipality) ( Sheet No. 29 / 39 )

Survey Date : 30 August  
 Generation Source : (D)  
 Weather : Fine  
 Name of Surveyor : Mr. Amreen

Code  
 A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt. Office)

Code  
 C-2 Building (Office & Shops)  
 D Fruits Market & Parks  
 E Restaurant & Hotels

Code  
 F-3 Home Industry (Others)  
 G School  
 I-3 Const. Waste (Mixed)

Type of Waste	Container Weight 1		Gross Weight 1		Container Weight 2		Gross Weight 2		Container Weight 3		Gross Weight 3		Container Weight 4		Gross Weight 4		Container Weight 5		Gross Weight 5		Net Weight (R)	Ratio(%)
	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2	Weight 1	Weight 2				
Organic Waste																						
Food Waste	1,350		13,000																		11,650	14.96
Paper	2,320	1,350	7,000	2,720																	6,050	7.77
Cardboard	0	0	3,280	3,280	0	2,300															8,860	11.58
Subtotal	2,320	1,350	10,280	6,000	0	2,300	0	2,300	0	0	0	0	0	0	0	0	0	0	0	0	14,910	19.15
Plastics	1,350	1,980	2,300	3,000	1,350	1,800															3,250	4.17
Bottle & Others	1,350		4,100																		2,750	3.53
PET	1,350		2,100																		750	0.96
Subtotal	4,050	1,980	8,500	3,000	1,350	1,800															6,750	8.67
Rubber & Leather	1,350		4,200																		2,850	3.66
Textiles	1,350		2,400																		1,050	1.35
Yard Waste	1,350		7,500																		6,150	7.90
Wood	0		550	2,650																	3,200	4.19
Other Org. Waste	2,420		11,000																		8,580	11.02
Organic Waste Total	14,190	3,330	57,460	11,680	1,350	4,100															55,200	70.91
In-organic Waste																						
Glass	0		400																		400	0.51
Broken Glass	1,350		6,500																		5,150	6.62
Bottle	1,350	0	6,900	0	0	0															5,550	7.13
Subtotal	1,350	0	3,500																		2,150	2.76
Tin Cans (Steel Cans)	1,350		2,100																		750	0.96
Aluminum cans	0		120																		120	0.15
Other Metals	2,420		16,500																		14,080	18.09
Dirt, Ash, Sand	6,470	0	29,120	0	0	0															22,650	29.09
In-organic Waste Total																						
Hazardous Waste																						
Hazardous Waste (Batteries)	0		0																		0	0.00
Other Hazardous Waste	0		0																		0	0.00
Hazardous Waste Total	0		0																		0	0.00
Total Weight (kg) :	20,660	86,580	3,330	11,680	1,350	4,100	2,180														77,850	100.00
Total Waste Volume (lit.) :																					560	
Bulk Density (kg/lit.) :																					0.139	

Record Sheets (Male Municipality) ( Sheet No. 30 / 39 )

Survey Date : 30 August  
 Generation Source : ( D )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Offices)  
 Code C-2 D E  
 Generation Sources Building (Offices & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code P-3 0 1-3  
 Generation Sources Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (g)	Ratio(%)
Organic Waste												
Food Waste	1,350	21,600	2,420	26,000	1,350	29,000	1,350	14,000	1,350	24,000	106,780	56.05
Paper	1,980	8,000	1,350	5,100	1,350	3,800	1,350	4,900			15,770	8.28
Cardboard	0	2,400	0	3,880	0	2,500	0	3,200			11,980	6.29
Subtotal	1,980	10,400	1,350	8,980	1,350	6,300	1,350	8,100	0	0	27,750	14.57
Plastics	1,350	5,200	1,350	3,700	1,350	4,000					8,850	4.65
Film	2,320	3,700									1,380	0.72
Bottle & Others	1,350	2,100									750	0.39
PET	5,020	11,000	1,350	3,700	1,350	4,000	0	0	0	0	10,980	5.76
Subtotal											600	0.31
Rubber & Leather	1,350	3,220									1,870	0.98
Textiles	1,350	6,000									4,650	2.44
Yard Waste	0	3,240	0	1,900	1,350	4,100					7,890	4.14
Wood	1,350	11,000									9,650	5.07
Other Org. Waste	12,400	67,060	5,120	40,580	5,400	43,400	2,700	22,100	1,350	24,000	170,170	89.33
Organic Waste Total												
In-organic Waste												
Glass	0	0									0	0.00
Broken Glass	1,350	3,400									2,050	1.08
Bottle	1,550	3,400	0	0	0	0	0	0	0	0	2,050	1.08
Subtotal	2,320	9,000	1,350	2,000							7,380	3.85
Tin Cans (Steel Cans)	1,350	2,800	1,350	1,600							1,700	0.89
Aluminum cans	0	400									400	0.21
Other Metals	1,350	10,000									8,650	4.54
Dirt, Ash, Sand	6,370	25,600	2,700	3,600	0	0	0	0	0	0	20,130	10.57
In-organic Waste Total												
Hazardous Waste												
Hazardous Waste (Batteries)	0	200									200	0.10
Other Hazardous Waste	0	0									0	0.00
Hazardous Waste Total	0	200	0	0	0	0	0	0	0	0	200	0.10
Total Weight (kg) :	18,770	92,860	7,820	44,180	5,400	43,400	2,700	22,100	1,350	24,000	190,500	100.00
Total Waste Volume (lit) :											720	
Bulk Density (kg/lt) :											0.265	

(7) Restaurants & Hotels

Result of Waste Composition Survey in Male' Hotels & Restaurants

Sample No.	31			32	33	Max.	Avg.	Min.	Total	Ratio (%)
	29 Aug.	30 Aug.	1 Sep.							
(unit : grams)										
Organic Waste										
Food Waste	86,350	174,630	374,630	374,630	211,870	86,350	635,610	82.98		
Paper	4,680	3,820	3,520	4,680	4,007	3,520	12,020	1.57		
Cardboard	6,860	7,020	16,660	16,650	10,177	6,860	30,530	3.99		
Subtotal	11,540	10,840	20,170	20,170	14,183	10,840	42,550	5.55		
Plastics	9,050	2,450	4,690	9,050	5,393	2,450	16,180	2.11		
Bottle & Others	3,250	950	2,630	3,250	2,277	950	6,830	0.89		
PET	1,150	290	1,090	1,150	823	290	2,470	0.32		
Subtotal	13,450	3,690	3,940	13,450	8,493	3,690	25,480	3.33		
Rubber & Leather	0	0	0	0	0	0	0	0.00		
Textiles	1,020	1,640	1,240	1,640	1,300	1,020	3,900	0.51		
Yard Waste	450	0	2,610	2,610	1,020	0	3,060	0.40		
Wood	0	0	2,500	2,500	833	0	2,500	0.33		
Other Org. Waste	0	0	2,500	2,500	833	0	2,500	0.33		
Organic Waste Total	112,810	190,800	411,990	411,990	238,533	112,810	715,600	93.42		
In-organic Waste										
Glass	1,500	400	1,490	1,500	1,130	400	3,290	0.44		
Broken Glass	5,130	1,780	6,150	6,150	4,360	1,780	13,080	1.71		
Bottle	6,650	2,180	7,640	7,640	5,490	2,180	16,470	2.15		
Subtotal	7,800	6,680	7,830	7,830	7,437	6,680	22,310	2.91		
Tin Cans (Steel Cans)	950	250	1,230	1,230	803	250	2,410	0.31		
Aluminum cans	6,680	0	1,950	6,680	2,877	0	8,630	1.13		
Other Metals	0	0	0	0	0	0	0	0.00		
Dirt, Ash, Sand	22,060	9,110	18,650	22,060	16,607	9,110	49,820	6.50		
In-organic Waste Total										
Hazardous Waste										
Hazardous Waste (Batteries)	0	0	380	380	127	0	380	0.05		
Other Hazardous Waste	0	0	220	220	73	0	220	0.03		
Hazardous Waste Total	0	0	600	600	200	0	600	0.08		
Total Weight (kg)	134,870	199,910	431,240	431,240	255,340	134,870	766,020	100.00		
Total Waste Volume (lit.)	560	560	960	960	693	560	2,080			
Bulk Density (kg/lit.)	0.241	0.357	0.449	0.449	0.349	0.241	0.368			

Record Sheets (Male Municipality) ( Sheet No. 31 / 39 )

Survey Date : 29 August  
 Generation Source : ( E )  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code P-3 G I-3  
 Generation Sources Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (g)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	2,420	28,500	1,350	24,500	1,350	27,000	25,230	36,700			86,330	64.02
Paper	1,350	2,860	1,350	4,520							4,680	3.47
Cardboard	0	2,940	0	2,820	0	1,100					6,960	5.09
Subtotal	1,350	5,800	1,350	7,340	0	1,100	0	0	0	0	11,540	8.56
Plastics	1,350	6,500	1,350	2,700	1,350	3,900					9,050	6.71
Bottle & Others	1,350	4,600									3,250	2.41
PET	1,350	2,500									1,150	0.85
Subtotal	4,050	13,600	1,350	2,700	1,350	3,900	0	0	0	0	23,450	9.97
Rubber & Leather		0									0	0.00
Textiles	0	1,020									1,020	0.76
Yard Waste	0	450									450	0.33
Wood	0	0									0	0.00
Other Org. Waste	0	0									0	0.00
Organic Waste Total	7,820	49,370	4,050	34,540	2,700	32,000	25,250	36,700	0	0	112,810	83.64
<b>In-organic Waste</b>												
Glass	0	1,500									1,500	1.11
Broken Glass	1,350	6,500									5,150	3.82
Bottle	1,350	8,000	0	0	0	0	0	0	0	0	6,650	4.93
Subtotal	1,350	5,000	1,350	5,000	0	500					7,800	5.78
Tin Cans (Steel Cans)	1,350	2,280									980	0.69
Aluminum cans	0	1,700	0	4,980							6,680	4.95
Other Metals	0	0									0	0.00
Dir. Ash, Sand	4,050	16,980	1,350	9,980	0	500	0	0	0	0	22,060	16.36
In-organic Waste Total												
Hazardous Waste												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	0									0	0.00
Hazardous Waste Total	0	0	0	0	0	0	0	0	0	0	0	0.00
Total Weight (kg) :	11,870	66,350	5,400	44,520	2,700	32,500	25,250	36,700	0	0	134,870	100.00
Total Waste Volume (lit.) :											560	
Bulk Density (kg/lit.) :											0.241	

**Record Sheets (Male Municipality) ( Sheet No. 32 / 39 )**

Survey Date : 30 August  
 Generation Source : (E)  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruit Market & Parts Restaurant & Hotels  
 Code F-3 G I-3  
 Generation Source Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (R)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	14,870	189,500									174,630	87.35
Paper	1,350	2,000	1,350	4,520							3,820	1.91
Cardboard	0	2,840	0	2,300	0	940	0	940			7,030	3.51
Subtotal	1,350	4,840	1,350	6,820	0	940	0	940	0	0	10,840	5.42
Plastics	1,350	3,400	0	400							2,450	1.23
Bottle & Others	1,350	2,300									950	0.48
PET	1,350	1,640									290	0.15
Subtotal	4,050	7,340	0	400	0	0	0	0	0	0	3,690	1.85
Rubber & Leather		0									0	0.00
Textiles	0	1,140	0	500							1,640	0.82
Yard Waste	0	0									0	0.00
Wood	0	0									0	0.00
Other Org. Waste	0	0									0	0.00
Organic Waste Total	20,270	202,820	1,350	7,720	0	940	0	940	0	0	190,800	95.44
<b>In-organic Waste</b>												
Glass	0	400									400	0.20
Broken Glass												
Bottle	0	1,780									1,780	0.89
Subtotal	0	2,180	0	0	0	0	0	0	0	0	2,180	1.09
Tin Cans (Steel Cans)	2,320	9,000									6,680	3.34
Aluminum cans	1,350	1,600									250	0.13
Other Metals	0	0									0	0.00
Dirt, Ash, Sand	0	0									0	0.00
In-organic Waste Total	3,670	12,780	0	0	0	0	0	0	0	0	9,110	4.56
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	0									0	0.00
Hazardous Waste Total	0	0	0	0	0	0	0	0	0	0	0	0.00
Total Weight (kg) :	23,940	215,600	1,350	7,720	0	940	0	940	0	0	199,910	100.00
Total Waste Volume (lit) :											560	
Bulk Density (kg/lit) :											0.357	

Record Sheets (Male Municipality) ( Sheet No. 33 / 39 )

Survey Date : 1 September  
 Generation Source : ( E )  
 Weather : Cloudy  
 Name of Surveyor : Mr. Ameen

Code A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt. Office)

Code C-2  
 D  
 E

Generation Sources Building (Office & Shops)  
 Fruits Market & Parks  
 Restaurant & Hotels

Code F-3  
 G  
 I-3

Generation Source Home Industry (Others)  
 School  
 Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (t)	Ratio (%)
<b>Organic Waste</b>												
Food Waste	1,350	2,000	1,350	12,500	20,170	383,000					374,630	86.87
Paper	1,980	5,500									3,520	0.82
Cardboard	1,350	6,000	0	7,000	0	5,000					16,650	3.86
Subtotal	3,330	11,500	0	7,000	0	5,000	0	0	0	0	20,170	4.68
Plastics	1,350	4,100	1,350	3,280							4,680	1.09
Bottle & Others	1,350	3,980									2,630	0.61
PET	1,350	2,380									1,030	0.24
Subtotal	4,050	10,460	1,350	3,280	0	0	0	0	0	0	8,340	1.93
Rubber & Leather		0									0	0.00
Textiles	0	1,240									1,240	0.29
Yard Waste	1,350	3,960									2,610	0.61
Wood	0	2,500									2,500	0.58
Other Org. Waste	1,350	3,850									2,500	0.58
Organic Waste Total	11,430	35,510	2,700	22,780	20,170	388,000	0	0	0	0	411,990	95.54
<b>In-organic Waste</b>												
Glass	1,350	2,840									1,490	0.35
Broken Glass												
Bottle	1,350	7,500									6,150	1.43
Subtotal	2,700	10,340	0	0	0	0	0	0	0	0	7,640	1.77
Tin Cans (Steel Cans)	2,320	7,500	1,350	4,000							7,830	1.82
Aluminum cans	1,350	2,580									1,230	0.29
Other Metals	0	1,950									1,950	0.45
Dir. Ash, Sand	0	0									0	0.00
In-organic Waste Total	6,370	22,370	1,350	4,000	0	0	0	0	0	0	18,650	4.32
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	380									380	0.09
Other Hazardous Waste	0	220									220	0.05
Hazardous Waste Total	0	600	0	0	0	0	0	0	0	0	600	0.14
Total Weight (kg) :	17,800	58,480	4,050	26,780	20,170	388,000	0	0	0	0	431,240	100.00
Total Waste Volume (lit.) :												960
Bulk Density (kg/lit.) :												0.449



(8) Schools

Result of Waste Composition Survey in Male' School

Sample No.	31			Max.	Avg.	Min.	Total	Ratio (%)
	29 Aug.	32	33					
Sampling Date, 1998	30 Aug.	30 Aug.	1 Sep.	(unit : grams)				
<b>Organic Waste</b>								
Food Waste	10,660	6,790	7,150	10,650	8,197	6,790	24,590	20.40
Paper	6,040	6,940	6,190	6,940	6,390	6,040	19,170	15.91
Cardboard	6,440	5,260	6,270	6,440	5,990	5,260	17,970	14.91
Subtotal	12,480	12,200	12,460	12,480	12,380	12,200	37,140	30.82
Plastics	1,350	2,500	1,750	2,500	1,867	1,350	5,600	4.65
Bottle & Others	450	1,350	450	1,850	917	450	2,750	2.28
PET	200	400	300	400	300	200	900	0.75
Subtotal	2,000	4,750	2,500	4,750	3,083	2,000	9,250	7.68
Rubber & Leather	0	0	0	0	0	0	0	0.00
Textiles	0	1,640	0	1,640	547	0	1,640	1.36
Yard Waste	3,430	4,140	2,750	4,140	3,437	2,750	10,310	8.55
Wood	900	1,120	700	1,120	907	700	2,720	2.26
Other Org. Waste	2,200	4,300	2,500	4,300	3,017	2,200	9,050	7.51
Organic Waste Total	31,650	34,940	28,110	34,940	31,567	28,110	94,700	78.58
<b>In-organic Waste</b>								
Glass	650	150	550	650	450	150	1,350	1.12
Broken Glass								
Bottle	350	500	1,300	1,300	717	350	2,150	1.78
Subtotal	1,000	650	1,850	1,850	1,167	650	3,500	2.90
Tin Cans (Steel Cans)	4,150	530	5,300	5,300	3,327	530	9,980	8.28
Aluminum cans	2,050	300	1,550	2,050	1,300	300	3,900	3.24
Other Metals	500	0	1,950	1,950	817	0	2,450	2.03
Dirt, Ash, Sand	450	2,050	3,250	3,250	1,917	450	5,750	4.77
In-organic Waste Total	8,150	3,530	13,900	13,900	8,527	3,530	25,580	21.22
<b>Hazardous Waste</b>								
Hazardous Waste (Batteries)	150	0	90	150	80	0	240	0.20
Other Hazardous Waste	0	0	0	0	0	0	0	0.00
Hazardous Waste Total	150	0	90	150	80	0	240	0.20
Total Weight (kg)	39,950	38,470	42,100	42,100	40,173	38,470	120,520	100.00
Total Waste Volume (lit.)	280	260	320	320	287	260	860	
Bulk Density (kg/lit.)	0.143	0.148	0.132	0.148	0.141	0.132	0.140	

Record Sheets (Male Municipality) ( Sheet No. 34 / 39 )

Survey Date : 22 September  
 Generation Source : ( G )  
 Weather : Cloudy  
 Name of Surveyor : Mr. Ameen

Code  
 A Residential Area  
 B-1 Commercial Area (General)  
 C-1 Buildings (Govt. Office)

Code  
 C-2 Building (Office & Shops)  
 D Fruit Market & Parks  
 E Restaurant & Hotels

Code  
 F-3 Home Industry (Others)  
 G School  
 I-3 Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Net Weight Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	12,000									10,650	26.66
Paper	1,980	4,900	1,980	5,100							6,040	15.12
Cardboard	1,980	5,500	1,980	4,900							6,440	16.12
Subtotal	3,960	10,400	3,960	10,000							12,480	31.24
Plastics	1,350	2,100	1,350	1,950							1,350	3.38
Film	1,350	1,800									450	1.13
Bottle & Others	1,350	1,800									200	0.50
PET	1,350	1,550									2,000	5.01
Subtotal	4,050	5,450	1,350	1,950							0	0.00
Rubber & Leather											0	0.00
Textiles											0	0.00
Yard Waste	1,980	5,400									3,420	8.56
Wood	0	900									900	2.25
Other Org. Waste	1,350	3,550									2,200	5.51
<b>Organic Waste Total</b>	<b>12,690</b>	<b>37,700</b>	<b>5,310</b>	<b>11,950</b>							<b>31,650</b>	<b>79.22</b>
<b>In-organic Waste</b>												
Glass	1,350	2,000									650	1.63
Broken Glass	1,350	1,700									350	0.88
Bottle	2,700	3,700	0	0							1,000	2.50
Subtotal	1,350	5,500									4,150	10.39
Tin Cans (Steel Cans)	1,350	3,400									2,050	5.13
Aluminum cans	0	500									500	1.25
Other Metals	1,350	1,800									450	1.13
Dir. Ash, Sand	6,750	14,900	0	0							8,150	20.40
<b>In-organic Waste Total</b>	<b>6,750</b>	<b>14,900</b>	<b>0</b>	<b>0</b>							<b>8,150</b>	<b>20.40</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	150									150	0.38
Other Hazardous Waste	0	0									0	0.00
<b>Hazardous Waste Total</b>	<b>0</b>	<b>150</b>	<b>0</b>	<b>0</b>							<b>150</b>	<b>0.38</b>
<b>Total Weight (kg) :</b>	<b>19,440</b>	<b>52,750</b>	<b>5,310</b>	<b>11,950</b>							<b>39,950</b>	<b>100.00</b>
<b>Total Waste Volume (lit.) :</b>												<b>280</b>
<b>Bulk Density (kg/lt.) :</b>												<b>0.143</b>

**Record Sheets (Male Municipality) ( Sheet No. 35 / 39 )**

Survey Date : 22 September  
 Generation Source : (G)  
 Weather : Fine  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Offices)  
 Code C-2 D E  
 Generation Sources Building (Offices & Shops) Fruits Market & Parks Restaurant & Hotels  
 Code F-3 G I-3  
 Generation Sources Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (Kg)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1.980	7.500	1.980	3.250							6.790	17.65
Paper	1.980	6.400	1.980	4.500							6.940	18.04
Cardboard	1.980	3.350	0	1.700	0	1.250	0	940			5.260	13.67
Subtotal	3.960	9.750	1.980	6.200	0	1.250	0	940	0	0	12.200	31.71
Plastics	1.350	3.220	1.350	1.980							2.500	6.50
Bottle & Others	1.350	3.200									1.850	4.81
PET	1.350	1.750									400	1.04
Subtotal	4.050	8.170	1.350	1.980	0	0	0	0	0	0	4.750	12.35
Rubber & Leather		0									0	0.00
Textiles	0	1.140	0	500							1.640	4.26
Yard Waste	1.980	6.120									4.140	10.76
Wood	0	1.120									1.120	2.91
Other Org. Waste	1.350	5.650									4.300	11.18
Organic Waste Total	13.320	39.450	5.310	11.930	0	1.250	0	940	0	0	34.940	90.82
<b>In-organic Waste</b>												
Glass	0	150									150	0.39
Broken Glass												
Bottle	0	500									500	1.30
Subtotal	0	650	0	0	0	0	0	0	0	0	650	1.69
Tin Cans (Steel Cans)	1.350	1.880									590	1.38
Aluminum cans	1.350	1.650									300	0.78
Other Metals	0	0									0	0.00
Dirt, Ash, Sand	1.350	3.400									2.050	5.33
In-organic Waste Total	4.050	7.580	0	0	0	0	0	0	0	0	3.530	9.18
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	0									0	0.00
Other Hazardous Waste	0	0									0	0.00
Hazardous Waste Total	0	0	0	0	0	0	0	0	0	0	0	0.00
Total Weight (kg) :	17.370	47.030	5.310	11.930	0	1.250	0	940	0	0	38.470	100.00
Total Waste Volume (lit) :											260	260
Bulk Density (kg/lit.) :												0.148

Record Sheets (Male Municipality) ( Sheet No. 36 / 39 )

Survey Date : 22 September  
 Generation Source : ( G )  
 Weather : Cloudy  
 Name of Surveyor : Mr. Ameen

Code A B-1 C-1  
 Generation Sources Residential Area Commercial Area (General) Buildings (Govt. Office)  
 Code C-2 D E  
 Generation Sources Building (Office & Shops) Fruit Market & Parks Restaurant & Hotels  
 Code F-3 G I-3  
 Generation Sources Home Industry (Others) School Const. Waste (Mixed)

Type of Waste	Container Weight 1	Gross Weight 1	Container Weight 2	Gross Weight 2	Container Weight 3	Gross Weight 3	Container Weight 4	Gross Weight 4	Container Weight 5	Gross Weight 5	Net Weight (kg)	Ratio(%)
<b>Organic Waste</b>												
Food Waste	1,350	8,500									7,150	16.98
Paper	1,980	4,750	1,980	5,400							6,390	14.70
Cardboard	1,980	5,050	0	3,200							6,270	14.89
Subtotal	3,960	9,800	1,980	8,600							12,460	29.60
Plastics	1,350	2,500	1,350	1,950							1,750	4.16
Film	1,350	1,800									450	1.07
Bottle & Others	1,350	1,800									300	0.71
PET	1,350	1,650									2,500	5.94
Subtotal	4,050	5,950	1,350	1,950							0	0.00
Rubber & Leather											0	0.00
Textiles											0	0.00
Yard Waste	1,350	4,100									2,750	6.53
Wood	0	700									700	1.66
Other Org. Waste	1,350	3,900									2,550	6.06
<b>Organic Waste Total</b>	<b>12,060</b>	<b>32,950</b>	<b>3,330</b>	<b>10,550</b>							<b>28,110</b>	<b>66.77</b>
<b>In-organic Waste</b>												
Glass	0	550									550	1.31
Broken Glass	0	1,300									1,300	3.09
Bottle	0	1,850	0	0							1,850	4.39
Subtotal	1,350	4,000	1,350	4,000							5,300	12.59
Tin Cans (Steel Cans)	1,350	2,900									1,550	3.68
Aluminum cans	0	1,950									1,950	4.63
Other Metals	1,350	4,600									3,250	7.72
Dir. Ash. Sand	4,050	15,300	1,350	4,000							13,900	33.02
<b>In-organic Waste Total</b>	<b>4,050</b>	<b>15,300</b>	<b>1,350</b>	<b>4,000</b>							<b>13,900</b>	<b>33.02</b>
<b>Hazardous Waste</b>												
Hazardous Waste (Batteries)	0	90									90	0.21
Other Hazardous Waste	0	0									0	0.00
<b>Hazardous Waste Total</b>	<b>0</b>	<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>90</b>	<b>0.21</b>
<b>Total Weight (kg) :</b>	<b>16,110</b>	<b>48,340</b>	<b>4,680</b>	<b>14,550</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42,100</b>	<b>100.00</b>
<b>Total Waste Volume (lit.) :</b>											<b>320</b>	<b>0.132</b>
<b>Bulk Density (kg/lit.) :</b>												