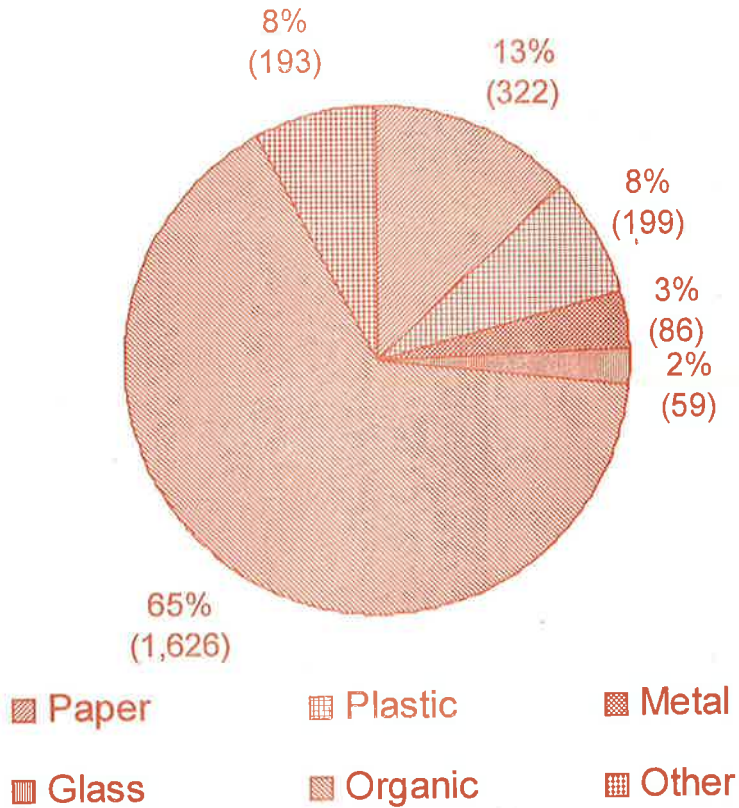




Municipal Solid Waste Statistics 1998

Composition of Solid Waste



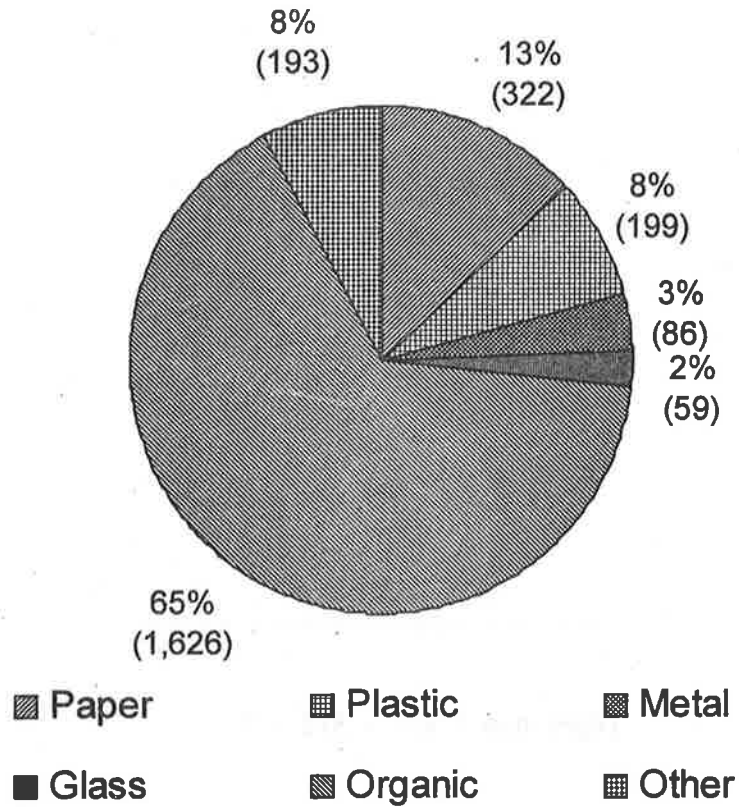
Department of Census and Statistics
Ministry of Finance and Planning

புத்தகம்



Municipal Solid Waste Statistics 1998

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Department of Census and Statistics
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PREFACE

The collection and removal of municipal solid waste has become a serious problem particularly in the urban areas. Local Government Authorities have been adopting various measures to mitigate this problem to a greater extent. These measures include collection of solid waste and dumping them in to the specific yards by the respective local authorities or entrusting the responsibility to the private sector, utilizing the selected types of waste in manufacturing of compost fertilizer or biogas, burning, filling up marshy lands, etc. However, this problem has not been solved satisfactorily yet.

In-order to adopt some long-term measures; the unavailability of accurate statistical information on the municipal waste and related matters has become a serious problem to the policy planners. Therefore, the Department of Census and Statistics decided to undertake a study to make available relevant data on municipal solid waste collection and removal by the Local Government Authorities. The collected information have been disaggregated at Provincial and district levels and presented in this document in tabular forms. I hope that this information would be very useful in the decision making process.

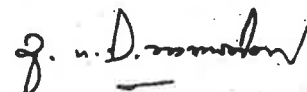
The deliberations of the workshop on Institutional Strengthening & Collection of Environment Statistics program of Asian Development Bank (ADB) held in Colombo – 1996 formed the basis in identifying the data gaps in the field of environmental statistics. This study is an out come of this program. I place on record my appreciation of the officials of ADB executing this program.

I am thankful to Mr. Y. B. Pussadeniya, then Secretary, Mrs. Padma Jayaweera, Additional Secretary, Ministry of Local Governments and Provincial Councils for kind authorization to obtain information from the Local Government Authorities for this study. The response from the Local Governments was commendable. Also, I should thank the Secretaries and relevant Officials in the respective local authorities for extending their support in making this study a success.

I would like to place on record my appreciation of Mr. A. M. U. Dissanayake, Deputy Director, Agriculture and Environmental Statistics Division for planning and monitoring of this study. My appreciation also goes to the team of officials: Mr. A. J. Satharasinghe, Statistician, Mrs. C.D. de Silva, Statistical Officer, Mrs. T. N. Rajapaksha, Mrs. C. M. C. Mendis, Mrs. W.A.P.S. Perera, Mrs. M. Rupasinghe, Mrs. A.K.H. Amarasingha, Mrs. R.Padmasiri, Mr. S. Theivaseelan, Statistical Investigators those who were responsible for data collection, analysis and preparing this document in a useful manner.

I am also thankful to Mr. C. N. Galahitiyawa, Acting Deputy Director - Printing Division, and his staff for printing this publication within a very short period of time.

Department of Census and Statistics
P.O.563,Colombo
01/07/2000
email : censusag@eureka.lk
website : www.statistics.gov.lk



A. G. W. Nanayakkara
Director General

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Municipal Solid Waste Statistics 1998

1. Introduction

The collection and disposal of solid waste has become a widely discussed issue among the public, local politicians as well as planners particularly in the urban areas. An accumulation of large volume of garbage/waste and dispersing them haphazardly along the roads, and other public places have lead to number of problems such as:

- environment pollution, water contamination etc
- increase of epidemic of diseases
- frequent complaints reported to respective local authorities
- disputes among dwellers
- blocking drainage systems
- lack of financial and human resources to the local government authorities to deal with this issue

The municipal solid waste disposal could be handled through number of ways. Unlike in the developed countries the management techniques, machinery/equipment being used in Sri Lanka are not that sophisticated. Burning and dumping of garbage into collection yards are the most common modes of disposal in Sri Lanka. This problem is aggravated day by day particularly in urban areas due to the fragmentation of lands and compact model of dwellings. Therefore this problem needs to be addressed by the local government authorities in a systematic manner. However, this is not that severe in rural areas as the residents have sufficiently large blocks of land to dispose their daily collection of waste. Commercial places including hotels too find this as a serious problem as they need to maintain better hygienic practices in and around their business places.

Local Government Authorities namely: municipal councils, urban councils and pradeshiya sabas are taking many measures to solve the problem of solid wastes. Some of these measures include:

- house to house collection
- collection from dumping sites along roads
- converting into compost fertilizers
- recycling
- provision of waste bags for residents
- keeping solid waste dumping tanks at collection sites along the main roads
- awareness programs, etc.

Colombo the main metropolitan city in the district of Colombo, generates huge volume of solid waste daily. This has become a serious issue in keeping the city clean. In-order to make the garbage management system more efficient, the responsibility of collection and

disposal of garbage of the Colombo city limits has been entrusted to the private sector recently. But in remaining areas of the country, this is still in the hands of respective local authorities.

It is true that most of the local government authorities do collect only a part of the municipal solid waste generation. There are hardly any estimates even on the volume of municipal solid waste generation and collection within their jurisdictions of the local government authorities. However, these statistics are essential for planning and policy making on municipal solid waste management. Some of the important uses of the statistics are given below:

- Planning for man-power requirements,
- Provisions of funds,
- Evaluating of environmental impacts,
- Economic decisions on municipal solid waste, etc.

Not only locally, international agencies also seek these statistics very often. The Department of Census and Statistics (DCS) has identified this area as one of the areas where there is no information, neither collected through a systematic survey covering the whole island nor aggregates are made. In this context the DCS has conducted a mail survey in the aspects of solid waste daily collection and related variables such as labor, expenditure, availability of vehicles/ equipment etc. pertaining to the calendar year 1998.

2. Scope and Content

As described above it is not possible to obtain the total municipal solid waste generation per day in Sri Lanka, an attempt was made to obtain the total municipal solid waste collected per day by the local government authorities. The scope and content of the mail questionnaire sent to all local government authorities are on following aspects.

1. Basic information such as land area, number of occupied housing units/ housing units covered by solid waste collection scheme, etc.
2. Employment related to solid waste disposal
3. Equipment/Vehicles available for municipal solid waste collection/disposal activities
4. Daily collection and composition of waste
5. Solid waste dumping yards
6. Problems related to the solid waste disposal
7. Expenditure on solid waste disposal

Copies of the questionnaire were distributed to the respective Secretaries of Local Government Authorities through the Secretary of the Ministry of Local Government and Provincial Councils and the Chief Secretaries of Provincial Councils. Local Governments were requested to forward the duly perfected questionnaires to the DCS. The specimen of the questionnaire and instructions are given in the Annexure 4.

3. Coverage

Number of Local Government Authorities (LGA) in Sri Lanka is given in Table 1.

Table 1: Number of Local Government Authorities by district

District	No. of Municipal Councils	No. of Urban Councils	No. of Pradeshiya Sabas	Total
Colombo	4	2	6	12
Gampaha	1	6	12	19
Kalutara	-	4	10	14
Ratnapura	1	1	13	15
Kegalle	-	1	10	11
Badulla	1	2	14	17
Monaragala	-	-	10	10
Galle	1	1	15	17
Matara	-	2	12	14
Hambantota	-	2	9	11
Kurunegala	1	1	17	19
Puttalam	-	2	10	12
Anuradhapura	-	1	18	19
Polónnaruwa	-	-	6	6
Kandy	1	4	17	22
Matále	1	-	11	12
Nuwara Eliya	1	2	5	8
Batticaloa	1	1	10	12
Ampara	-	1	15	16
Trincomalee	-	1	10	11
Jaffna	1	3	12	16
Kilinochchi	-	-	3	3
Mannar	-	-	4	4
Vavunia	-	1	4	5
Mullaitivu	-	-	4	4
Total	14	38	257	309

Out of the 309 LGAs, 15 have not responded to the questionnaire and they are listed in Table 2.

Table 2: Distribution of non-responded LGAs by district

District	LGAs Not-responded
Ampara	1. Kalmunai, 3. Samanthurai 2. Padiyathalawa 4. Uhana
Batticaloa	1. Manmunai South
Mullativu	1. Manthai East 2. Maritimpeattu 3. Puthukudiyirippu
Vauniya	1. Vauniya North 2. Vauniya South (Sinhala)
Jaffna	1. Velvetithurai
Killinochchi	1. Punakari
Kalutara	1. Beruwala
Trincomalee	1. Padavi-Siripura
Mannar	1. Manthai West

Out of the 71 LGAs in the North and Eastern provinces, 57 LGAs returned the completed questionnaires. Therefore, as a whole the response could be rated as very satisfactory. All of the Municipal Councils (MC) have responded to the questionnaire while out of 38 Urban Councils (UC) 36 have responded. Out of 257 Pradesheeya Sabas (PS) 244 have responded and the distribution of non-responses is given in Table 3 by provinces.

Table 3: : Distribution of non-responded LGAs by province and type

Province	No. of MC	No. of UC		No. of PS	
		Total	No. non responded	Total	No. non responded
Western	5	12	1	28	
Central	3	6		33	
Southern	1	5		36	
Northern	1	4	1	27	7
Eastern	1	3		35	6
North-Western	1	3		27	
North-Central		1		24	
Uva	1	2		24	
Sabaragamuwa	1	2		23	
Total	14	38	2	257	13

4. Data limitations

A person designated by the Secretary of the respective LGA completed the questionnaire used for the Study. Many questionnaires have been completed satisfactorily. However, it was noted that some questions of the questionnaire were either not responded at all or responses seemed to be questionable. Also, it was found that checking each and every such answer by respective officials was not practicable. As such efforts were made to correct them as far as possible by means of statistical imputations. The responses, which were inconsistent, were replaced/estimated using Hot-deck imputation technique, which means that the values of missing variables were imputed by considering values for those variables of another LGA in the same district which had similar characteristics. These imputed values were scrutinized carefully to check the suitability.

5. Summary of findings

5.1 Units Covered in Solid Waste Collection Programs (SWCP)

Due to the absence of census of population and housing during the last two decades there is no hundred percent accurate count of number of housing units in the country by administrative divisions. However, this would be available by the first quarter of the year 2001 as the listing of all units are scheduled to be completed by Jan/Feb 2001 under the program of Census of population and housing.

In this survey the number of housing units, business establishments, public places and number of units covered by solid waste collection schemes in the respective authorities were based on information available with the LGAs. Most of the LGAs were unable to provide information on the exact number of dwellings in their divisions but they had the knowledge on units paying assessment taxes. According to the survey findings there were about 3,411,253 housing units/dwellings. Average household size had been estimated to be 4.5. The total population was estimated to be about 15,350,638. This is rather consistent with the mid-year population (excluding institutionalized population) estimates of Registrar General Office. Therefore, the statistical information provided in this report could be rated as satisfactory.

On an average, 32% of the housing units in the country are covered by SWCP. This percentage varies vastly among the District. The highest percentage (77%) was reported from the Colombo district (Table 4). The highest coverage of business establishments by SWCP was also reported from the Colombo district and it was estimated to be 94% (Table 4.1).

5.2 Vehicles and equipments used for solid waste collection

From Table 5, it could be seen that most of the equipment/vehicles being used for municipal solid waste collection are reported from the Western province.

The main equipment/vehicles used for municipal solid waste collection were wheelbarrows; compact trucks, four-wheel tractors and carts. According to the

information received from the LGAs, there were about 108 wheelbarrows being used for municipal solid waste removal. Little over one fifth of these wheelbarrows were being used in the North Western province. Compact trucks were the most modern vehicles being used for municipal solid waste collection. In 1998, there were 94 compact trucks being used in the country (Table 5). Out of these 85% of the trucks belonged to the Western province.

Number of four-wheel tractors being used for municipal solid waste collection was 554 during the year 1998 (Table 5). Little over 43% of these tractors belonged to the Western province. Out of the 202 two wheel tractors available, 53 (i.e. 26%) belonged to the Western province.

The most common vehicle used for municipal solid waste collection were carts. There were 1,322 carts available for municipal solid waste collection during the year 1998 (Table 5). Out of these, 417 (i.e. 32%) belonged to the LGAs of the Western province.

5.3 Employment

The total work force of the local government was 40,761 out of which 22,240 employees are attached to municipal councils, 4870 in urban councils and 13,651 in pradeshiya sabas. Out of these 40,761 employees, 10,108 (25%) were involved either directly or indirectly in work related to municipal solid waste collection (Table 6). The percentage of work force that involved in municipal solid waste collection and removal in municipal councils, urban councils and pradeshiya sabas were 19.7%, 46.3% and 25.5% respectively.

Out of the 10,108 employees who involved in municipal solid waste collection and removal, 6,362 (63%) were permanent employees (Table 6.1).

Of the total workforce of 24,038 i.e. 59% were males. Little over 30% of male employees were involved in SWCP. Corresponding percentage for females is 12% (Table 6).

5.4 Composition of solid waste and volume

LGAs collect about 2,484 MT of municipal solid waste daily. Composition of municipal solid waste was analyzed under five categories namely paper, plastic, metal, glass, organic and other. Nearly 65% of the municipal solid waste collected daily was organic materials. The next major constituent was paper (13%). Share of plastic, metal and glass were 8%, 3% and 2% respectively (Table 7).

Volume of solid waste disposal

Per day Metric Tons	Per month Metric Tons	Per year Metric Tons	Average disposal per house hold per day (Kg)	per capita per day (Kg)
2,484	75,555	906,660	0.7	0.16

The highest share of organic materials (70.3%) was found in the municipal solid waste of the Western province. The lowest share (53.9%) was reported from the Southern province. Among provinces the percentage of paper materials in the municipal solid

waste varies from 10.1% of Uva province to 24.8% of North Western province. The highest percentage (15.4%) of plastic materials was reported from the municipal solid waste of Sabaragamuwa province. The share of metal materials was small in amount and varied between 2.1% to 5.3%. Similar to metal, share of glass materials was also small and it varied from 1.6% to 3.7%.

Tables 7.1, 7.2 and 7.3 shows the composition of municipal solid waste collected, by type of local governments. Of the total daily municipal solid waste collection of 2,484 MT, 1,328 MT (i.e. 53%) was collected from the municipal councils. The amount of municipal solid waste collected by urban councils and pradeshiya sabas were 350 MT (14%) and 806 MT (32%) respectively.

Out of 2,484 MT of municipal solid waste collected daily, the highest amount (1,493 MT or 60%) was collected from the Western province. The next highest share was collected from the Central province and the Southern province (9% and 8% from each district). The lowest share of 2.5% was reported from the North Central province.

5.5 Solid waste disposal yards

There were 746 municipal solid waste disposal yards; 398 owned by LGA's, 254 temporarily used and 94 other types of yards in the country (Table 8). Out of 746 municipal solid waste disposal yards, 25 were being used by the municipal councils. The number of yards that were being used by the urban councils and pradeshiya sabas were 66 and 655 yards respectively.

5.6 Problems/Issues in implementing a proper solid waste collection program

The major problems in implementing a proper municipal solid waste collection schemes identified by the local governments were inadequate number of employees, inadequate vehicles/ machines and inadequate financial resources. Little over 84% of the local governments said that inadequate number of employees was the difficulty in having a systematic municipal solid waste collection program. The percentages of LGAs who said that the lack of financial resources and inadequate vehicles were the major constraints were 72.2% and 80.9% respectively. Only little less than 40% of the LGAs identified lack of inadequate dumping yards as an issue in this regard. The problem of inadequate dumping yards seems to be not a critical issue as is lack of other resources namely: employees, money and vehicles/equipment. Analysis of problems in implementing a SWCP program by type of Local Authority is shown in Table 9

5.7 Expenditure on solid waste management

It is difficult to obtain expenditure on waste management directly due to many reasons. Some expenses like salaries for the employees involved in municipal solid waste collection can be computed at least to a considerable level of accuracy. But expenses like purchasing four wheel tractors which are needed both for municipal solid waste management as well as other activities cannot be obtained directly. However it was asked to report the total revenue as well as the expenses on municipal solid waste collection to best of their knowledge for the year 1998. According to the data reported by the local authorities total revenue of all Local Authorities in Sri Lanka was about

Rs. 2,239,699,645. Out of this about 14.3% has been spent on the activities related to the municipal solid waste management (Table 10). This share for municipal, urban councils and pradeshiya sabas were estimated to be 13.6%, 20% and 12.3% respectively.

The share of the total expenditure on municipal solid waste management is 14.3% of the total expenditure on the activities related to the municipal solid waste management. This share for municipal, urban councils and pradeshiya sabas were estimated to be 13.6%, 20% and 12.3% respectively.

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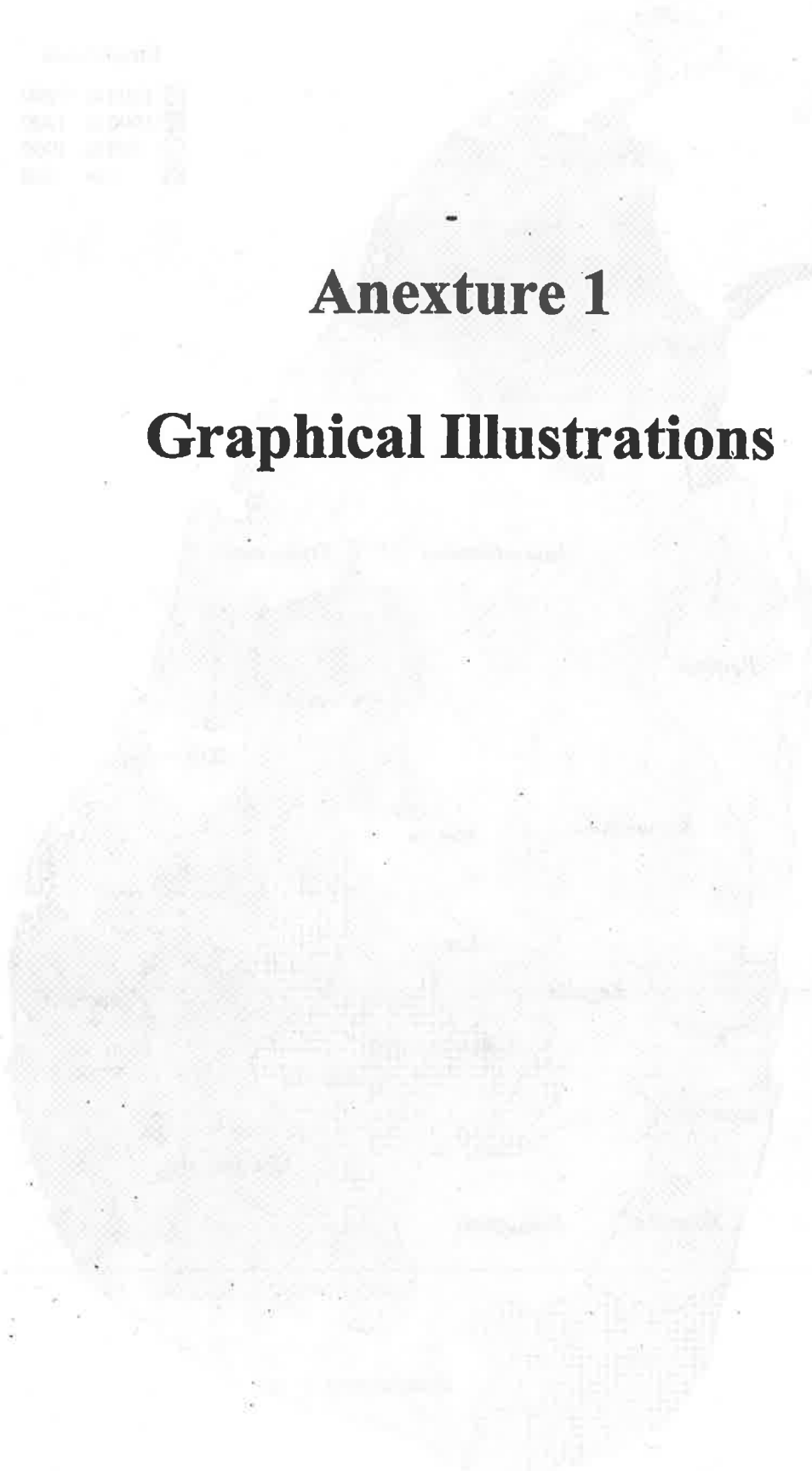
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சென்னை மாநகராட்சி கட்டிடத்துறை, கட்டிடக்கலை அலுவலகம், சென்னை - 600 009

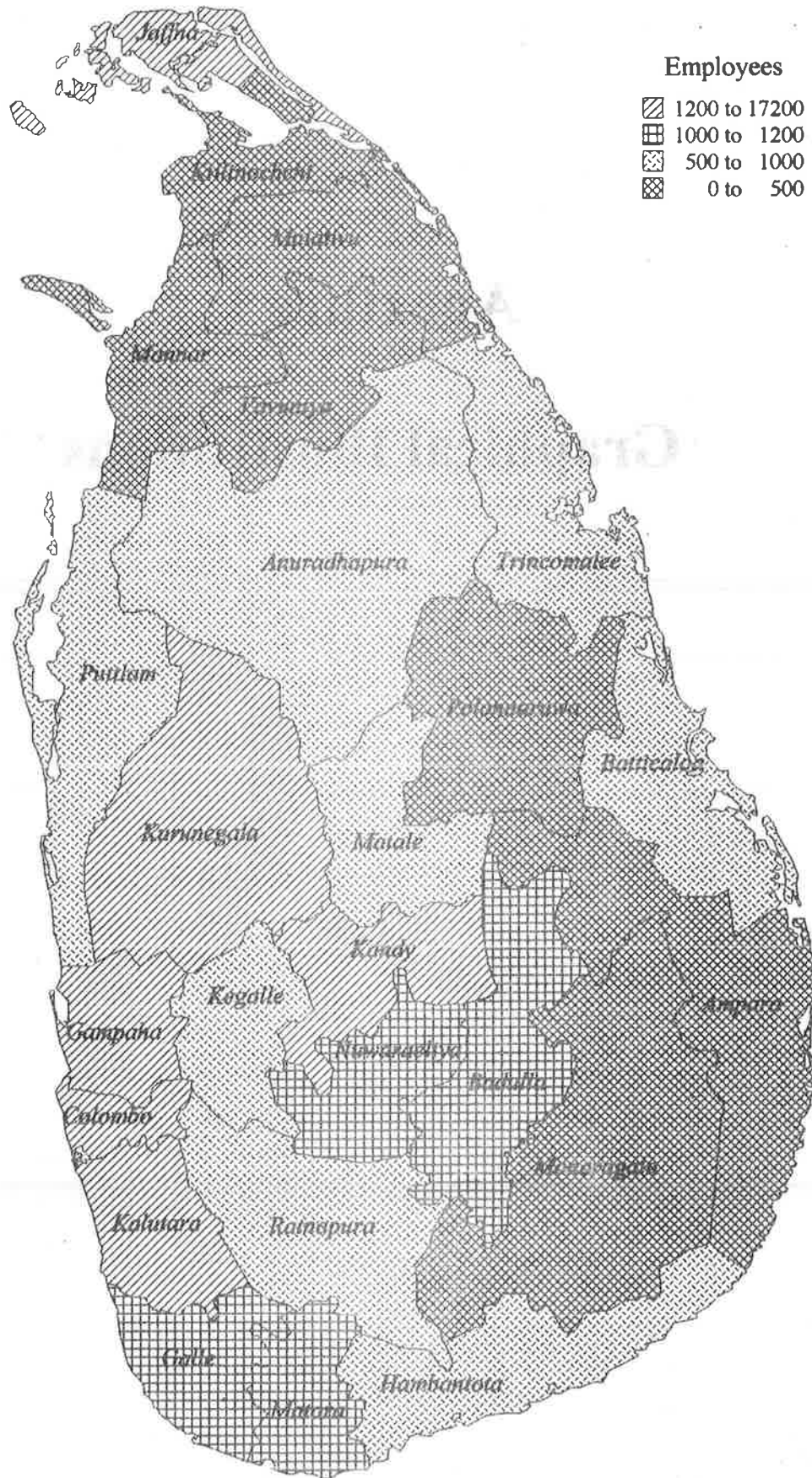
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சென்னை - 600 009

Anexture 1

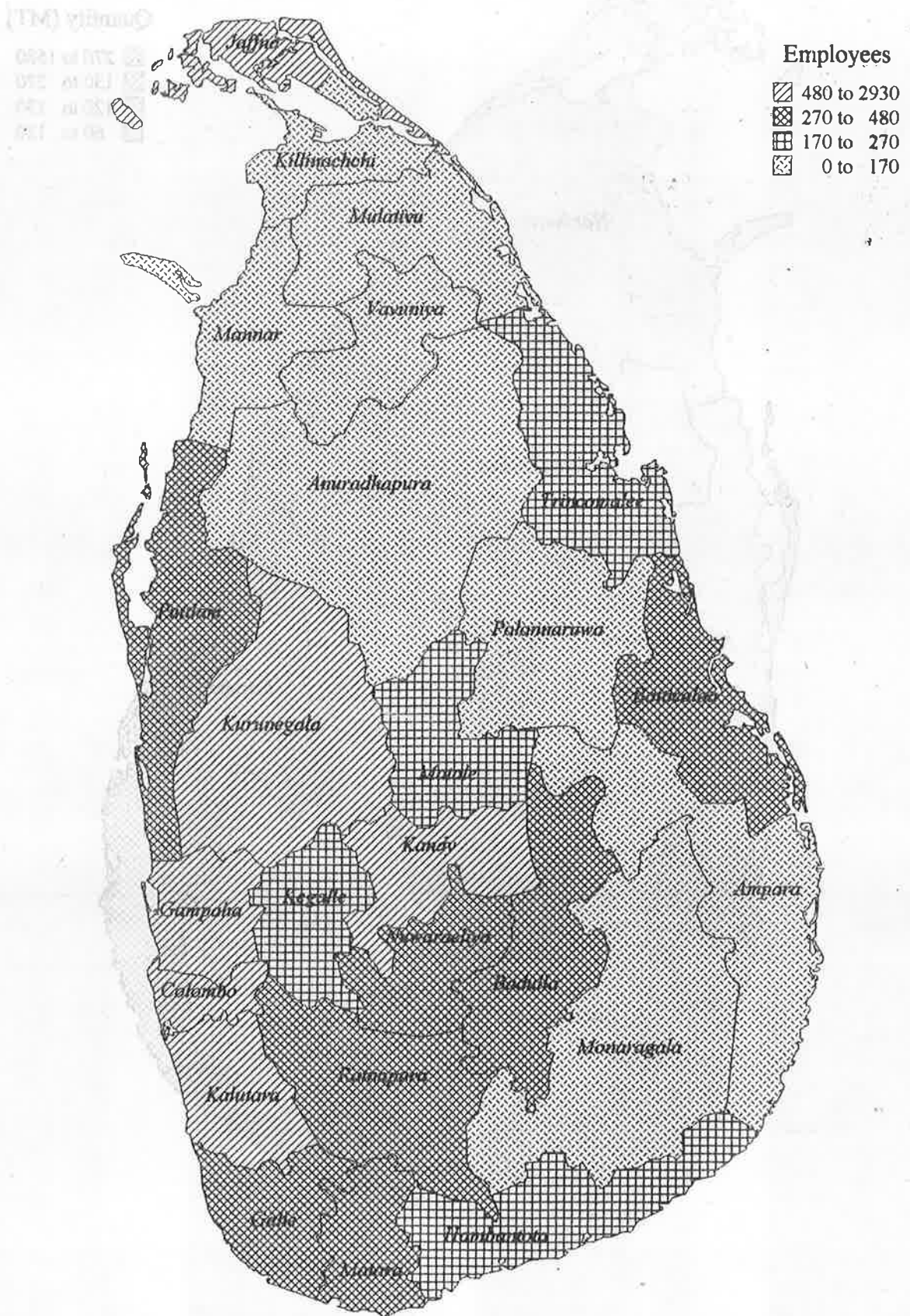
Graphical Illustrations



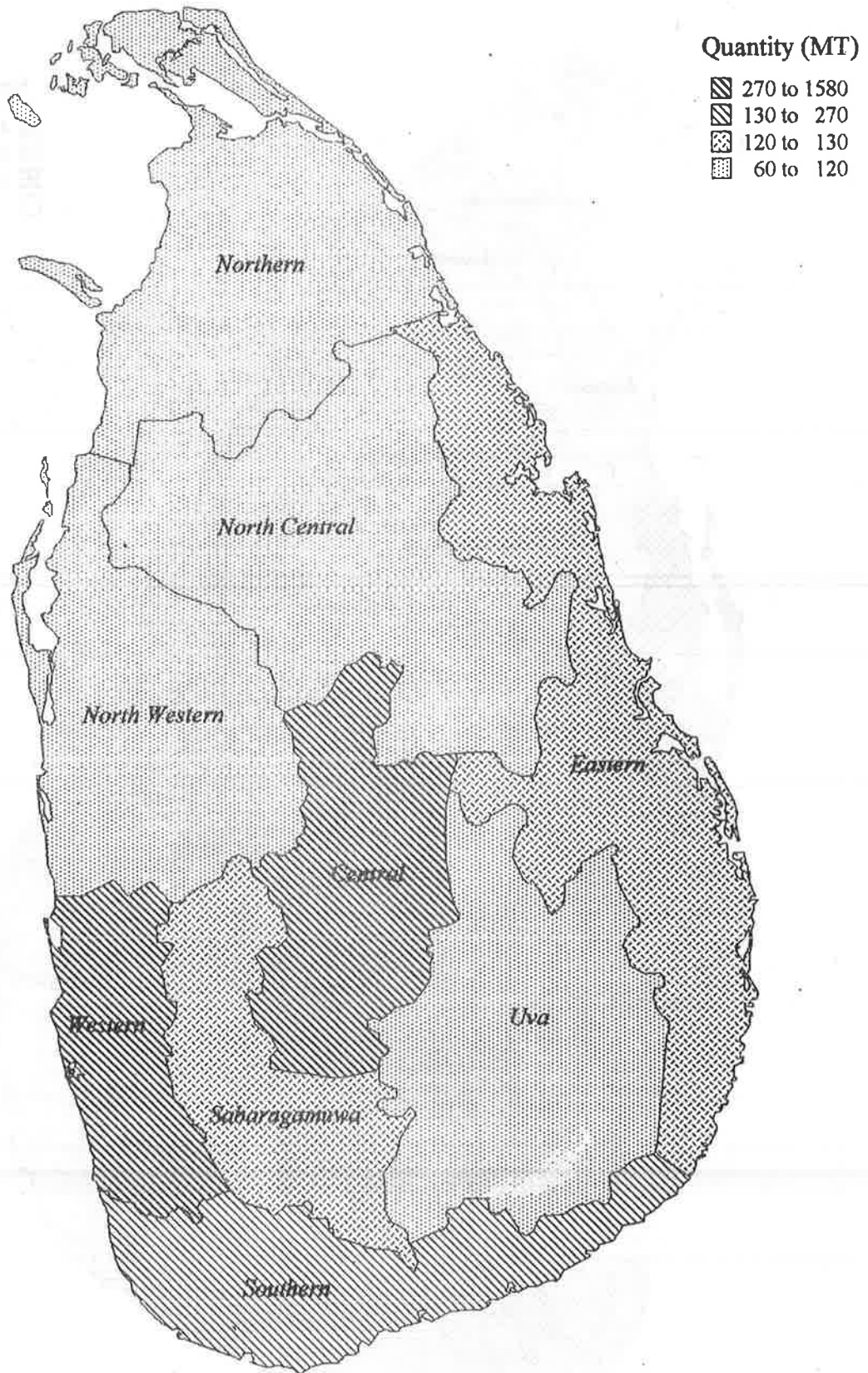
Map 1: Total number of employees in local authorities by district



Map 2: Number of employees involved in solid waste collection



Map 3: Solid waste collection per day by province



Map 4: Composition of solid waste by province

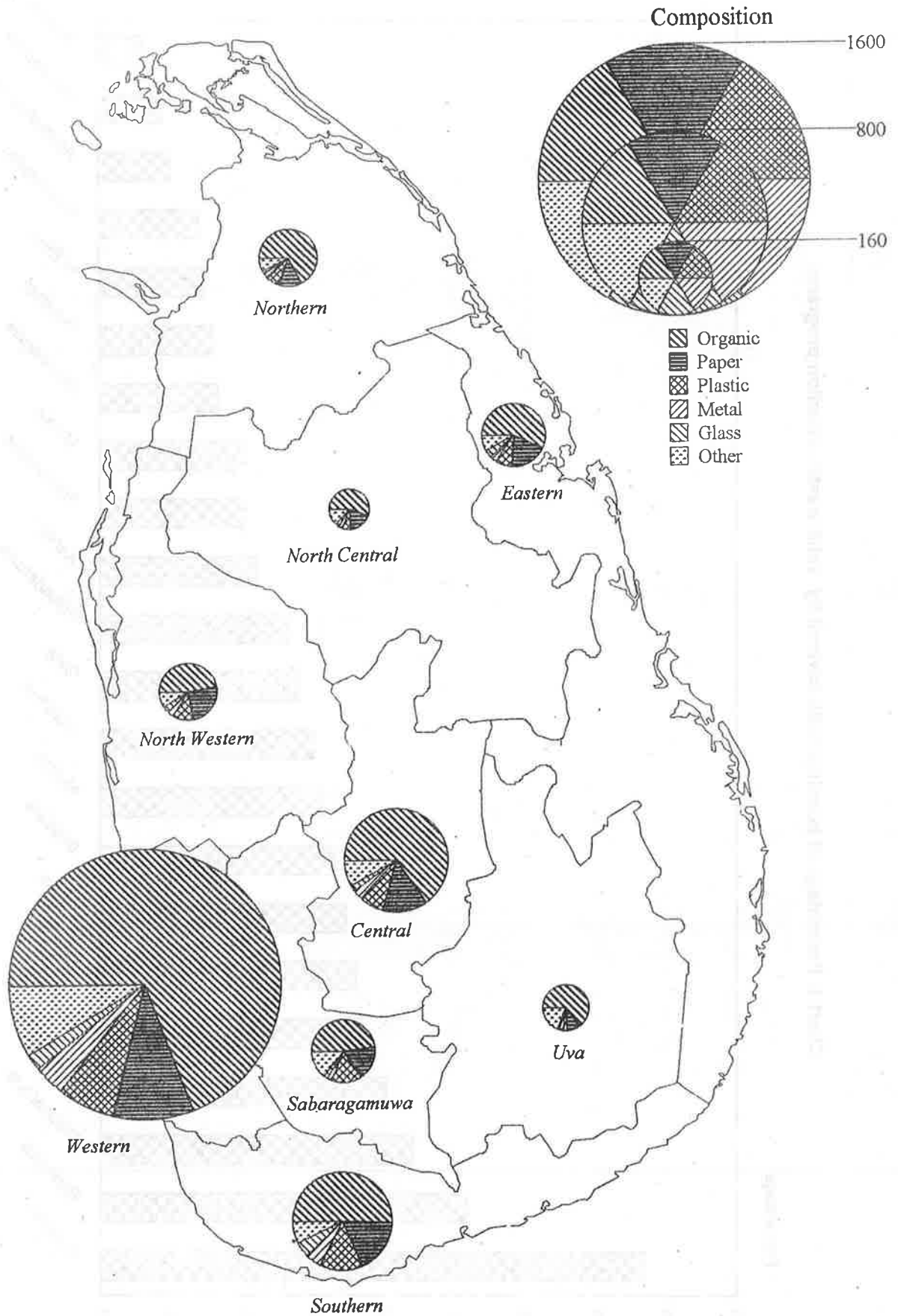


Chart 1: Percentage of housing units covered by solid waste collection programs

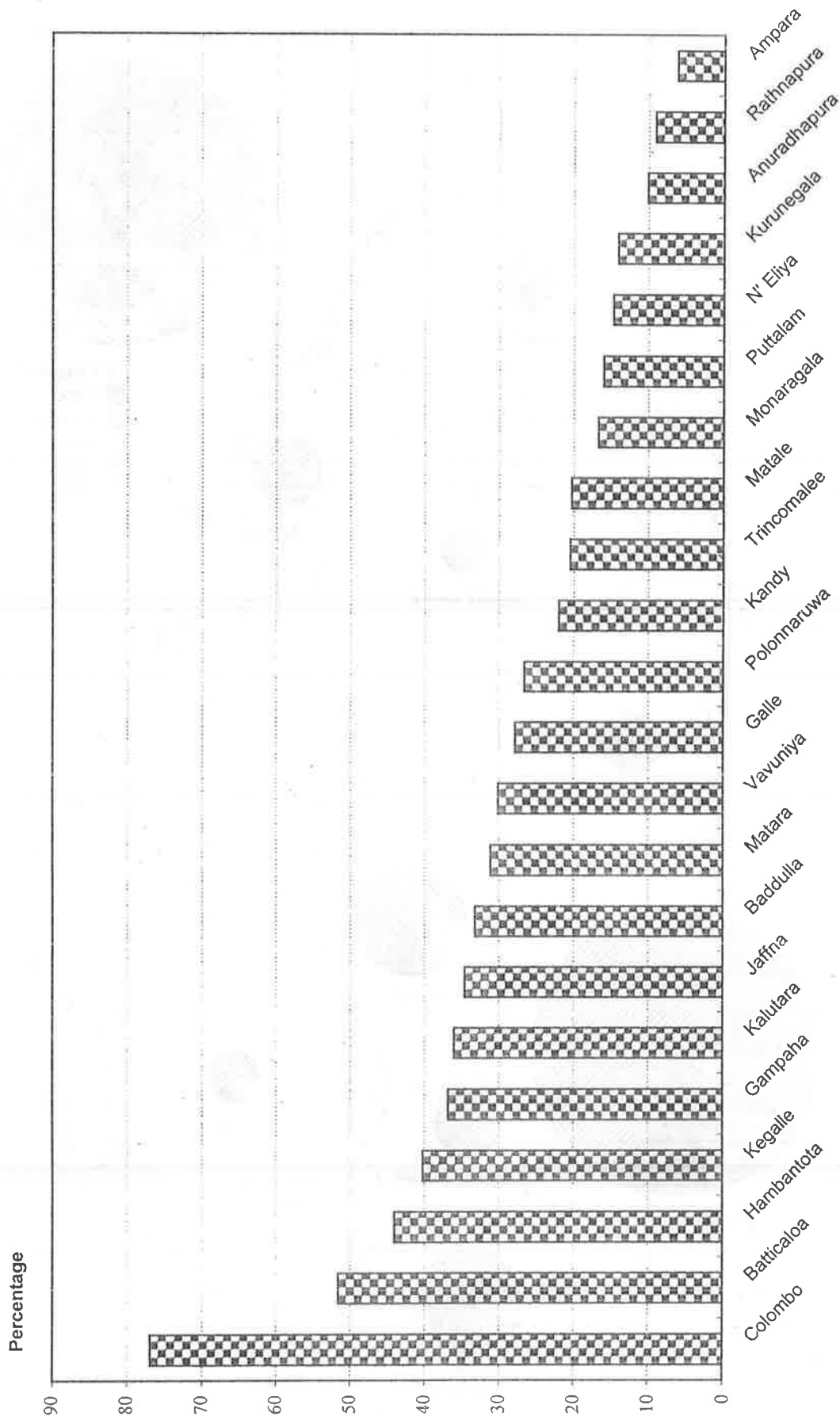
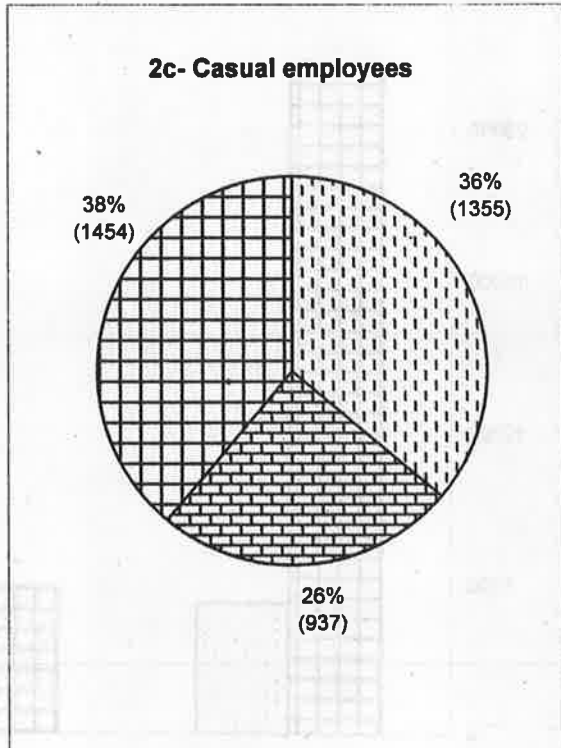
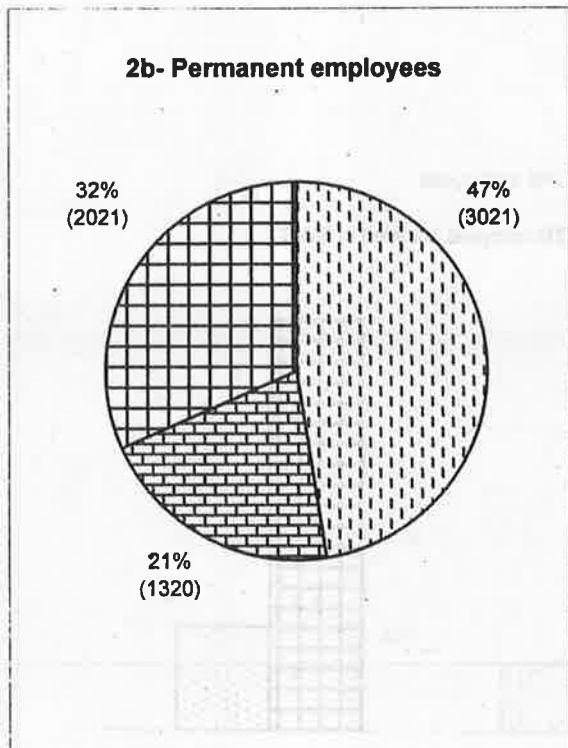
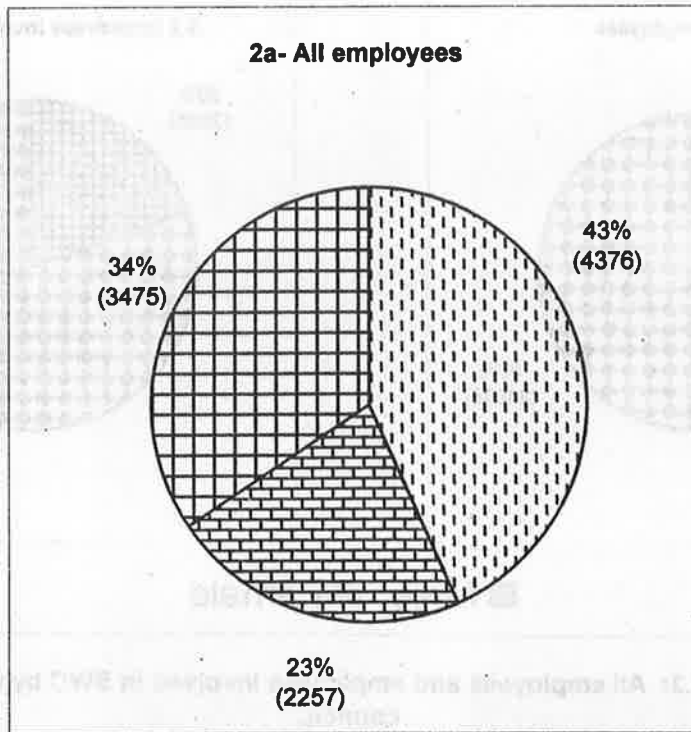


Chart 2. Employees involved in solid waste collection by type of council



■ Municipal Council ■ Urban Council ■ Pradeshiya Saba

Chart 3: All employees and employees involved in Solid waste Collection (SWC) by sex

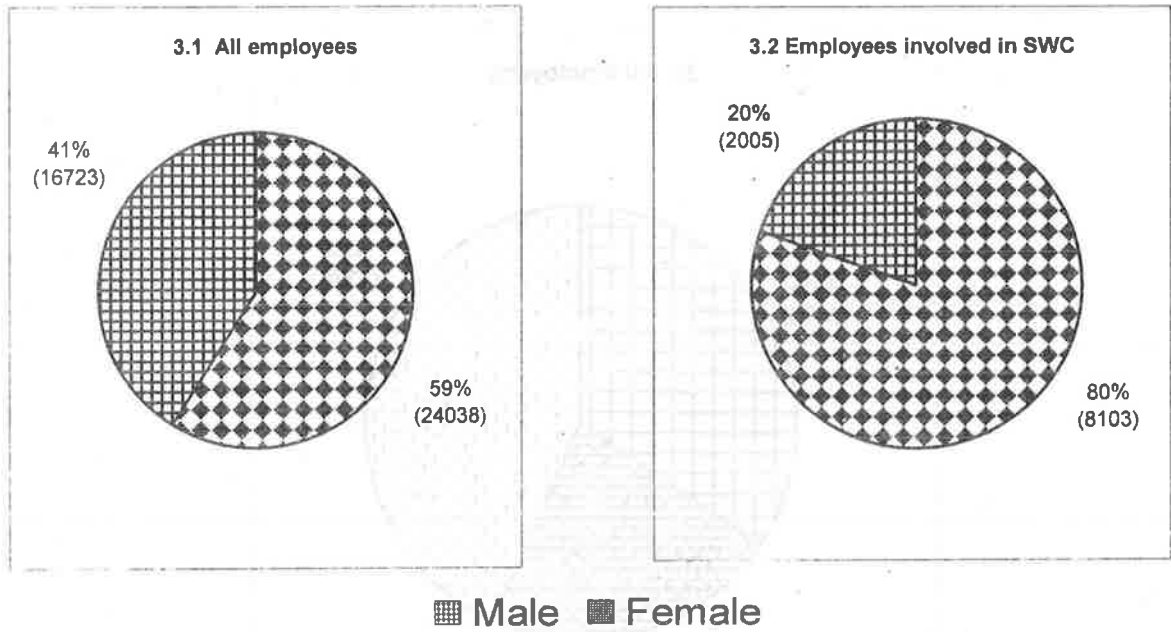


Chart 3.3: All employees and employees involved in SWC by type of council.

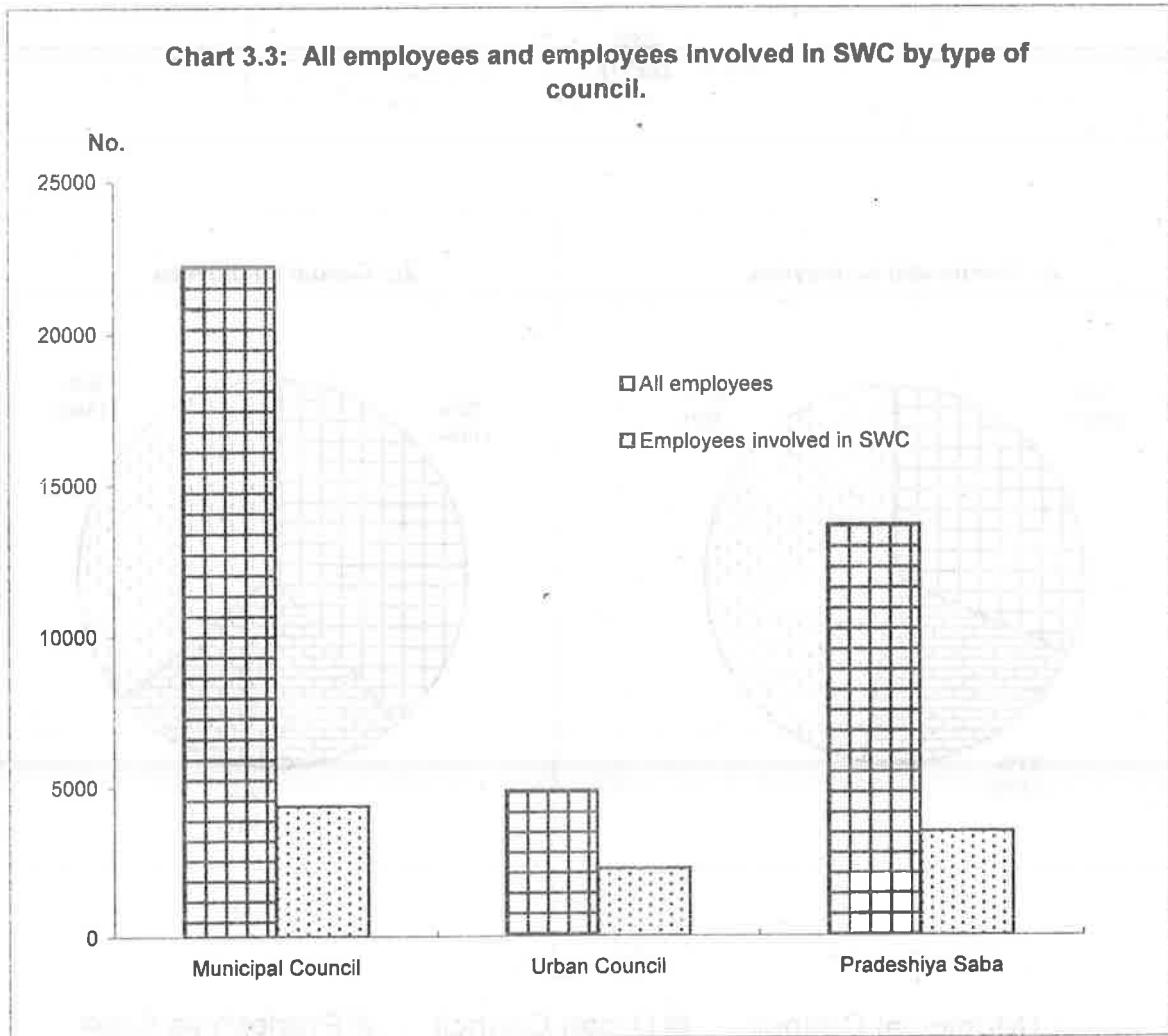
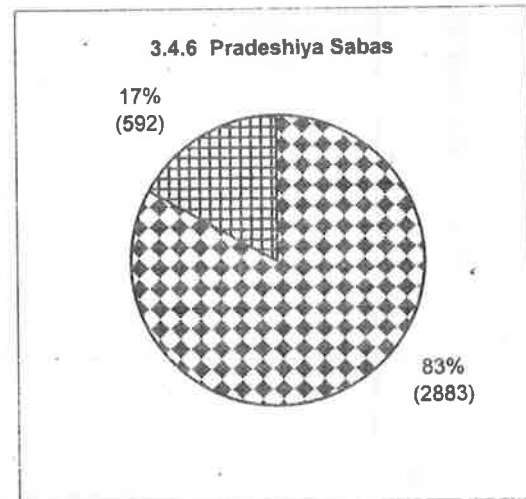
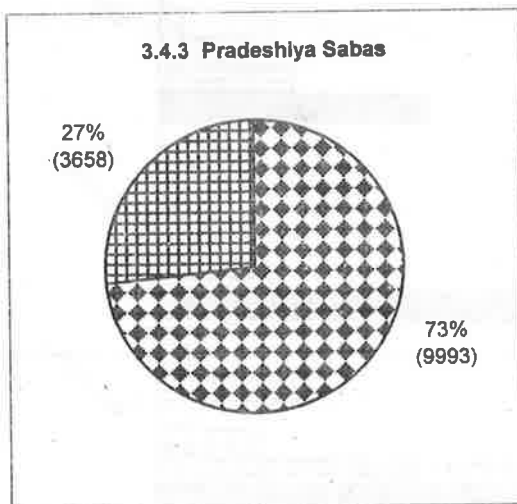
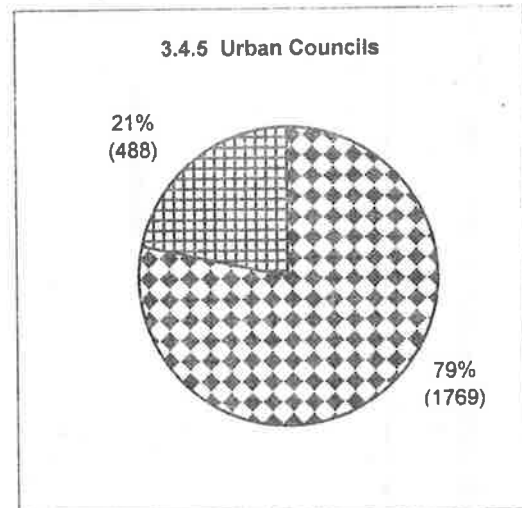
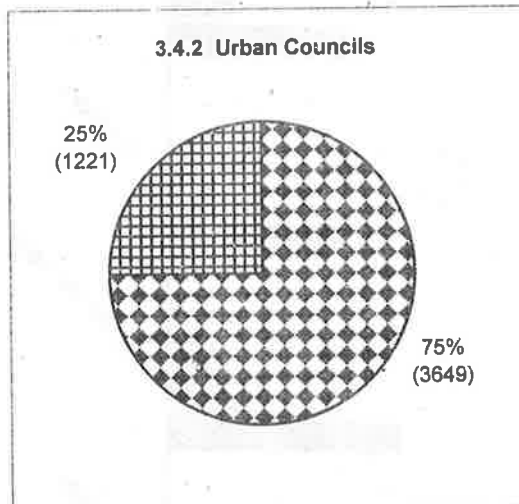
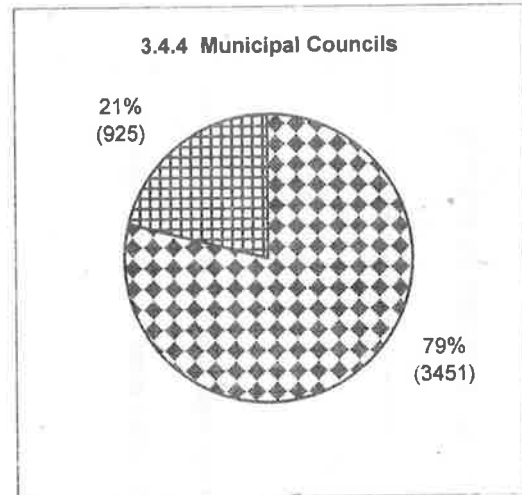
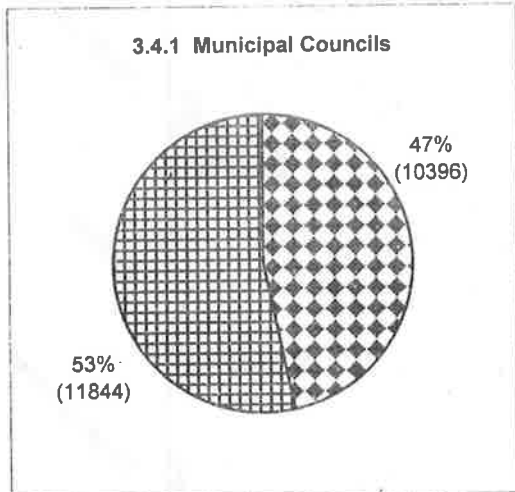


Chart 3.4: All employees and employees involved in Solid Waste Collection (SWC) of local authorities by sex and type of council.

All Employees

Employees involved in (SWC)



■ Male ■ Female

Chart 4: Number of main vehicles/equipments used for solid waste collection by province

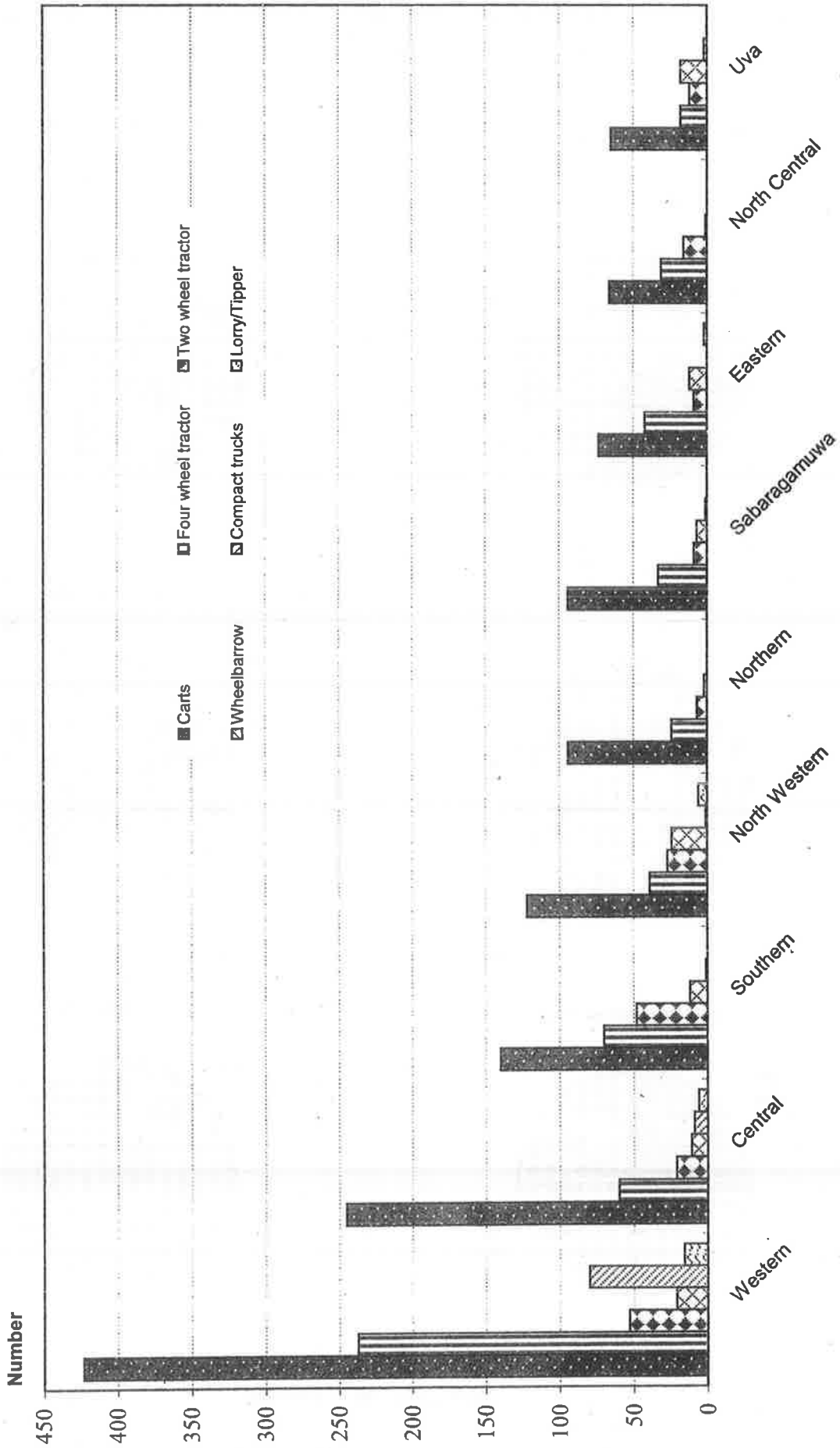
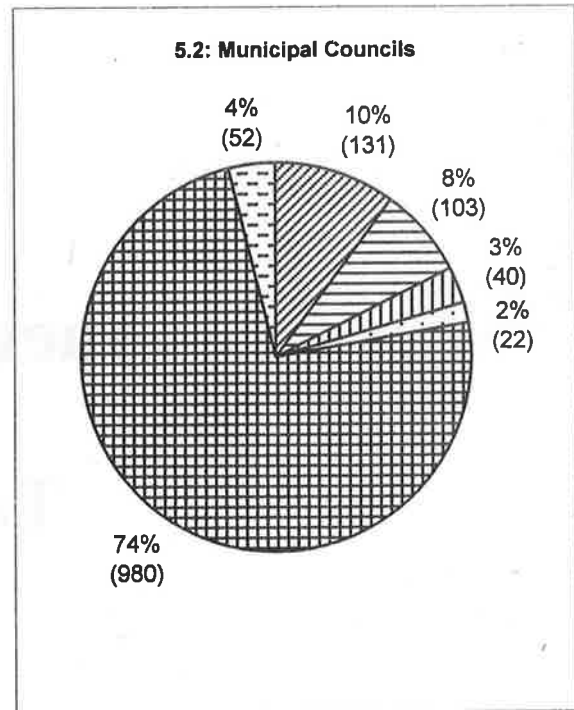
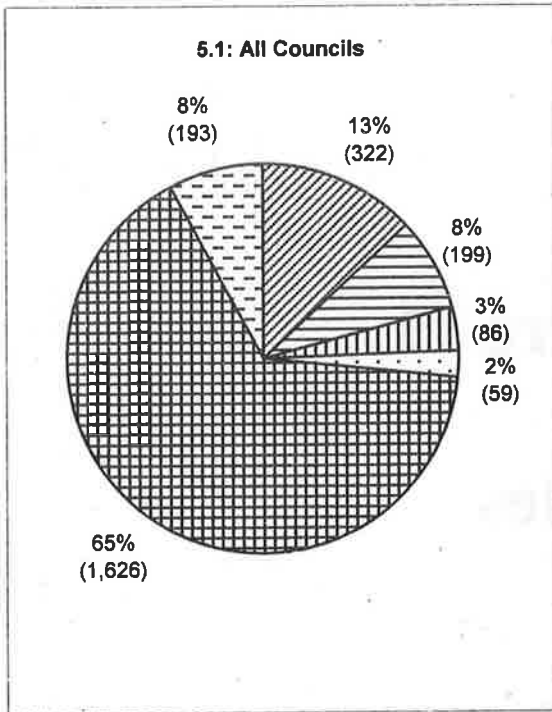
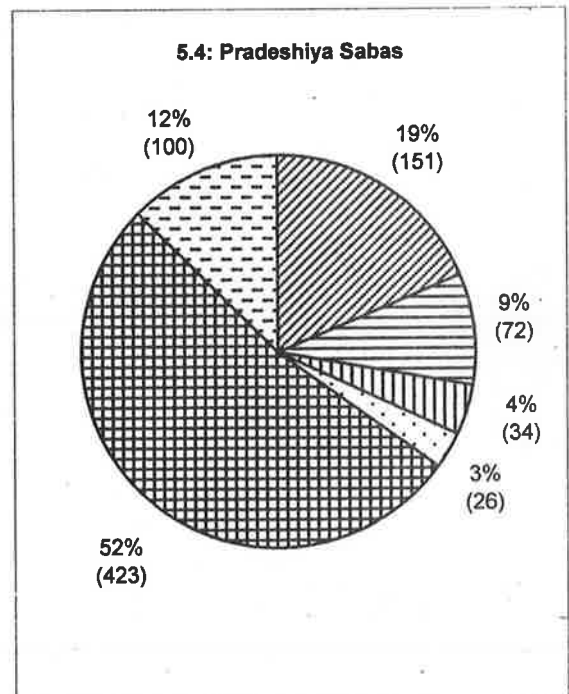
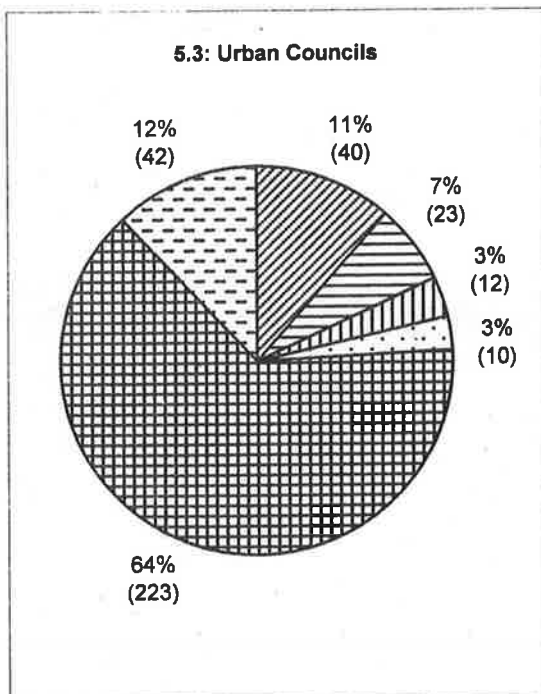


Chart 5: Composition of solid waste



■ Paper ■ Plastic ■ Metal ■ Glass ■ Organic ■ Other



Solid waste collected per day (MT) given in paranthesis.

Anexture 11

Tables

Table 4: Total no. of occupied housing units and housing units covered by a Solid Waste Collection Program (SWCP)

District	Total no. of occupied housing units	No. of housing units covered by a SWCP	Percentage of housing units covered by a SWCP
Colombo	421,881	324,388	77
Gampaha	336,532	123,749	37
Kalutara	197,918	71,206	36
Galle	158,404	44,095	28
Matara	120,514	37,447	31
Ratnapura	182,854	16,575	9
Kegalle	111,181	44,643	40
Kurunegala	256,125	36,012	14
Puttalam	135,961	21,803	16
Kandy	228,771	50,307	22
Matale	46,116	9,364	20
Nuwaraeliya	171,992	25,299	15
Badulla	122,953	40,863	33
Monaragala	76,594	12,766	17
Jaffna	138,015	- 47,774	35
Kilinochchi	1,600	-	-
Vavuniya	21,482	6,467	30
Mullaitivu	2,400	2,400	100
Mannar	20,263	14,022	69
Anuradhapura	172,215	17,422	10
Polonnuruwa	76,965	20,453	27
Trincomalee	64,272	13,148	20
Batticaloa	112,225	57,915	52
Ampara	125,010	7,720	6
Hambantota	109,010	47,949	44
Total	3,411,253	1,093,787	32

Table 4.1: Number of business establishments covered by SWCP

District	Total no. of business establishments	No.of establishments covered by a SWCP	Percentage of establishments covered by a SWCP
Colombo	54,029	50,621	94
Gampaha	34,852	19,199	55
Kalutara	12,013	6,873	57
Galle	17,473	11,020	63
Matara	11,106	5,193	47
Ratnapura	15,153	6,130	40
Kegalle	11,118	7,278	65
Kurunegala	31,400	12,804	41
Puttalam	12,481	4,080	33
Kandy	26,062	10,000	38
Matale	9,415	4,037	43
Nuwaraeliya	5,508	2,591	47
Badulla	11,203	5,204	46
Monaragala	5,361	2,991	56
Jaffna	9,066	6,800	75
Kilinochchi	844	-	-
Vavuniya	1,358	1,033	76
Mullaitivu	40	40	100
Mannar	735	733	100
Anuradhapura	13,552	5,417	40
Polonnuruwa	5,559	2,818	51
Trincomalee	3,492	924	26
Batticaloa	3,552	2,506	71
Ampara	4,604	1,826	40
Hambantota	6,155	4,568	74
Total	306,131	174,686	57

Table 5: Number of vehicles and equipment used for solid waste collection

District	Wheelbarrow	Compact truck	Lorry/Tipper	Four wheel tractor	Two wheel tractor	Cart
Colombo	-	80	16	130	10	150
Gampaha	8	-	-	73	27	163
Kalutara	5	-	-	34	16	104
Galle	12	-	-	30	20	43
Matara	2	1	-	23	23	68
Ratnapura	4	-	-	15	8	57
Kegalle	3	1	-	18	1	37
Kurunegala	3	1	2	26	15	91
Puttalam	21	-	4	13	12	31
Kandy	11	3	2	39	3	152
Matale	-	-	-	6	9	20
Nuwaraeliya	-	6	4	12	9	67
Badulla	16	2	-	15	5	63
Monaragala	2	-	-	6	7	8
Jaffna	2	-	-	7	4	65
Kilinochchi	-	-	-	1	-	3
Vavuniya	-	-	-	13	-	15
Mullaitiyu	-	-	-	-	-	1
Mannar	-	-	-	3	2	9
Anuradhapura	1	-	-	19	8	51
Polonnuruwa	-	-	-	12	8	15
Trincomalee	6	-	1	13	2	33
Batticaloa	5	-	1	15	7	20
Ampara	1	-	-	14	1	21
Hambantota	6	-	-	17	5	35
Total	108	94	30	554	202	1,322

Table 5.1: Number of vehicles and equipment owned by LGAs

District	Wheelbarrow	Compact truck	Lorry/Tipper	Four wheel tractor	Two wheel tractor	Cart
Colombo	-	80	16	94	10	150
Gampaha	8	-	-	73	27	163
Kalutara	5	-	-	30	16	101
Galle	12	-	-	30	20	43
Matara	2	1	-	22	23	68
Ratnapura	4	-	-	14	8	57
Kegalle	3	1	-	17	1	37
Kurunegala	3	1	2	26	15	91
Puttalam	21	-	4	13	12	31
Kandy	11	2	2	38	3	152
Matale	-	-	-	6	9	18
Nuwaraeliya	-	6	4	12	9	67
Badulla	16	2	-	13	3	62
Monaragala	2	-	-	5	6	8
Jaffna	2	-	-	1	2	65
Kilinochchi	-	-	-	0	-	2
Vavuniya	-	-	-	13	-	15
Mullaitivu	-	-	-	-	-	1
Mannar	-	-	-	3	2	9
Anuradhapura	1	-	-	19	8	51
Polonnuruwa	-	-	-	12	8	15
Trincomalee	6	-	1	13	2	33
Batticaloa	5	-	1	12	7	20
Ampara	1	-	-	14	1	21
Hambantota	6	-	-	17	5	35
Total	108	93	30	497	197	1,315

Table 6: Distribution of employees

District	No. of employees		%	Male		%	Female		%
	Total	involved in SWCP		Total	involved in SWCP		Total	involved in SWCP	
	(1)	(2)	(2/1)	(3)	(4)	(4/3)	(5)	(6)	(6/5)
Colombo	17,110	2,929	17	6,248	2,362	38	10,862	567	5
Gampaha	2,715	1,086	40	2,110	936	44	605	150	25
Kalutara	1,620	596	37	1,107	452	41	513	144	28
Galle	1,148	325	28	808	272	34	340	53	16
Matara	1,102	315	29	826	250	30	276	65	24
Ratnapura	977	278	28	678	217	32	299	61	20
Kegalle	876	178	20	621	151	24	255	27	11
Kurunegala	2,148	486	23	1,613	340	21	535	146	27
Puttalam	816	288	35	605	211	35	211	77	36
Kandy	3,523	797	23	2,605	609	23	918	188	20
Matale	839	232	28	610	173	28	229	59	26
Nuwaraeliya	1,008	380	38	756	282	37	252	98	39
Badulla	1,035	292	28	849	239	28	186	53	28
Monaragala	368	122	33	274	78	28	94	44	47
Jaffna	2,092	597	29	1,723	529	31	369	68	18
Kilinochchi	116	32	28	88	32	36	28	-	-
Vavuniya	175	66	38	142	53	37	33	13	39
Mullaitivu	3	2	67	2	2	100	1	-	-
Mannar	102	69	68	95	68	72	7	1	14
Anuradhapura	581	163	28	417	124	30	164	39	24
Polonnuruwa	228	69	30	153	51	33	75	18	24
Trincomalee	503	233	46	438	208	47	65	25	38
Batticaloa	750	286	38	620	260	42	130	26	20
Ampara	351	113	32	299	100	33	52	13	25
Hambantota	575	174	30	351	104	30	224	70	31
Total	40,761	10,108	25	24,038	8,103	34	16,723	2,005	12

Table 6.1: Distribution of employees by status

District	Permanent employees		%	Casual employees		%	Permanent labourers		%	Casual labourers		%
	Total	involved in SWCP		Total	involved in SWCP		Total	involved in SWCP		Total	involved in SWCP	
	(1)	(2)	(2/1)	(3)	(4)	(4/3)	(5)	(6)	(6/5)	(7)	(8)	(8/7)
Colombo	14,876	2,112	14	2,234	817	37	10,306	1,761	17	1,977	786	40
Gampaha	1,815	598	33	900	488	54	888	469	53	733	432	59
Kalutara	1,076	265	25	544	331	61	535	245	46	426	287	67
Galle	897	208	23	251	117	47	492	192	39	163	107	66
Matara	753	193	26	349	122	35	367	173	47	279	110	39
Ratnapura	693	120	17	284	158	56	303	110	36	225	140	62
Kegalle	653	98	15	223	80	36	346	92	27	199	76	38
Kurunegala	1,533	244	16	615	242	39	895	210	23	503	232	46
Puttalam	547	192	35	269	96	36	294	165	56	174	93	53
Kandy	2,599	534	21	924	263	28	1,294	445	34	723	162	22
Matale	661	134	20	178	98	55	348	123	35	152	98	64
Nuwaraeliya	700	181	26	308	199	65	355	155	44	290	199	69
Badulla	768	164	21	267	128	48	308	146	47	245	118	48
Monaragala	184	49	27	184	73	40	79	43	54	152	59	39
Jaffna	1,620	443	27	472	154	33	775	400	52	293	152	52
Kilinochchi	98	25	26	18	7	39	53	22	42	6	4	67
Vavuniya	163	60	37	12	6	50	73	52	71	9	5	56
Mullaitivu	3	2	67	-	-	-	2	2	100	-	-	-
Mannar	73	40	55	29	29	100	47	40	85	29	29	100
Anuradhapura	349	92	26	232	71	31	209	87	42	196	69	35
Polonnuruwa	167	28	17	61	41	67	81	25	31	51	39	76
Trincomalee	370	168	45	133	65	49	212	136	64	108	62	57
Batticaloa	596	228	38	154	58	38	314	206	66	94	52	55
Ampara	281	89	32	70	24	34	128	79	62	32	24	75
Hambantota	404	95	24	171	79	46	179	76	42	112	75	67
Total	31,879	6,362	20	8,882	3,746	42	10,306	1,761	17	7,171	3,410	48

Table 7: Volume of solid waste (MT) collected per day by composition and district

District	Paper		Plastic		Metal		Glass		Organic		Other		Total MT
	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	
Colombo	104	9	69	6	29	2	17	1	897	75	77	6	1,193
Gampaha	29	14	20	10	13	6	9	4	111	54	23	11	205
Kalutara	18	19	8	9	8	8	4	5	42	44	15	15	95
Galle	9	14	11	17	5	8	1	2	38	57	2	3	66
Matara	15	19	12	15	4	4	4	6	37	47	7	9	80
Ratnapura	13	16	13	16	2	2	1	2	45	59	4	5	77
Kegalle	8	25	4	13	1	4	1	4	15	49	2	6	31
Kurunegala	19	22	10	12	3	3	3	4	45	52	6	7	87
Puttalam	8	33	3	12	1	4	1	4	8	32	4	16	26
Kandy	27	17	10	6	7	4	4	2	105	65	9	6	162
Matale	3	17	2	8	1	4	0	2	12	60	2	10	19
Nuwaraeliya	2	5	6	15	1	2	1	2	27	64	5	11	42
Badulla	3	12	1	4	0	2	1	3	14	63	4	16	23
Monaragala	4	14	1	4	1	2	0	1	16	64	4	14	25
Jaffna	9	12	2	3	2	3	1	1	54	73	6	9	74
Kilinochchi	0	23	0	8	0	3	0	8	0	35	0	25	1
Vavuniya	0	2	0	3	0	1	0	1	7	88	0	4	8
Mullaitivu	3	67	1	15	0	2	0	1	1	10	0	5	5
Mannar	2	10	5	25	1	3	0	2	11	55	1	6	20
Anuradhapura	7	15	3	6	2	4	1	3	27	56	7	15	47
Polonnuruwa	4	27	1	9	1	4	1	4	8	54	0	3	14
Trincomalee	7	28	3	10	1	5	1	5	12	46	1	5	25
Batticaloa	10	15	7	10	1	2	2	3	42	62	6	9	69
Ampara	6	22	2	6	1	3	1	3	17	57	3	9	30
Hambantota	11	18	4	7	2	4	2	3	37	61	5	7	61
Total	322	13	199	8	86	3	59	2	1,626	65	193	8	2,484

Table 7.1: Volume of solid waste (MT) collected per day in Municipal Council areas by composition and district

District	Paper		Plastic		Metal		Glass		Organic		Other		Total
	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT
Colombo	85	9	61	6	20	2	12	1	758	78	33	3	970
Gampaha	10	18	9	17	8	15	6	10	14	25	8	15	55
Galle	2	7	8	25	4	13	1	3	16	50	1	3	33
Ratnapura	9	16	10	18	1	2	1	1	35	60	2	3	58
Kurunegala	4	14	5	18	1	2	2	5	18	59	1	2	30
Kandy	10	11	5	6	3	4	0	0	69	77	2	2	90
Matale	1	25	1	15	0	10	0	5	1	40	0	5	4
Nuwaraeliya	1	10	1	11	0	3	0	2	8	70	0	4	12
Badulla	0	20	0	5	0	5	0	6	0	49	0	15	1
Jaffna	5	8	1	1	1	2	1	1	50	83	3	5	60
Batticaloa	3	15	1	7	0	2	0	2	11	64	2	10	17
Total	131	10	103	8	40	3	22	2	980	74	52	4	1,328

Table 7.2: Volume of solid waste (MT) collected per day in Urban Council areas by composition and district

District	Paper		Plastic		Metal		Glass		Organic		Other		Total MT
	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	
Colombo	2	5	2	4	0	1	1	2	28	72	6	16	39
Gampaha	4	8	1	1	0	0	0	0	42	82	4	8	51
Kalutara	7	14	5	8	7	12	4	7	22	41	10	18	54
Galle	4	20	1	5	0	2	0	1	14	70	0	2	20
Matara	3	11	4	13	2	5	1	3	18	60	2	7	31
Ratnapura	1	15	1	18	0	5	0	3	3	56	0	4	5
Kegalle	1	11	0	10	0	6	0	4	3	70			5
Kurunegala	1	12	0	2	0	1	0	1	4	80	0	4	5
Puttalam	1	14	1	11	0	2	0	1	2	31	3	41	7
Kandy	5	24	1	7	0	2	0	3	11	55	2	10	20
Nuwaraeliya	0	5	1	23	0	2	0	2	3	63	0	6	4
Badulla	0	4	0	0	0	1	0	1	4	60	2	35	7
Jaffna	0	10	0	8	0	4	0	4	0	11	3	63	5
Vavuniya	0	2	0	3	0	1	0	1	7	89	0	4	8
Anuradhapura	1	4	1	6	0	2	1	3	10	58	5	27	17
Trincomalee	2	14	2	10	1	5	1	5	10	65	0	1	15
Batticaloa	3	10	3	10	0	1	2	6	16	65	2	8	25
Ampara	2	40	0	2			0	2	2	36	1	20	5
Hambantota	4	12	1	4	0	1	0	1	24	80	1	2	30
Total	40	11	23	7	12	3	10	3	223	64	42	12	350

Table 7.3: Volume of solid waste (MT) collected per day in Pradeshiya Saba areas by composition and district

District	Paper		Plastic		Metal		Glass		Organic		Other		Total
	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT
Colombo	17	9	6	3	9	5	4	2	110	60	38	20	184
Gampaha	15	15	10	10	4	4	3	3	55	56	11	11	98
Kalutara	10	25	4	10	1	3	1	2	20	49	5	12	41
Galle	3	22	2	14	1	4	0	3	7	53	1	4	14
Matara	12	24	8	17	2	4	3	7	19	38	5	10	50
Ratnapura	3	18	1	10	0	3	0	3	8	54	2	12	15
Kegalle	7	28	3	14	1	3	1	4	12	45	2	7	26
Kurunegala	15	28	5	9	2	4	2	3	23	45	5	10	52
Puttalam	7	39	2	12	1	4	1	5	6	33	1	7	19
Kandy	12	23	4	7	4	7	3	6	25	47	6	11	53
Matale	2	15	1	7	0	2	0	2	10	64	2	11	16
Nuwaraeliya	1	4	4	16	1	2	1	2	17	62	4	15	27
Badulla	2	16	1	5	0	2	1	4	10	65	1	8	16
Monaragala	4	14	1	4	1	2	0	1	16	64	4	14	25
Jaffna	3	35	1	10	1	9	0	3	3	35	1	7	9
Kilinochchi	0	23	0	8	0	3	0	8	0	35	0	25	1
Vavuniya	0	20	0	10	0	4	0	4	0	55	0	8	0
Mullaitivu	3	67	1	15	0	2	0	1	1	10	0	5	5
Mannar	2	10	5	25	1	3	0	2	11	55	1	6	20
Anuradhapura	6	21	2	7	2	5	1	3	17	55	3	9	31
Polonnuruwa	4	27	1	9	1	4	1	4	8	54	0	3	14
Trincomalee	5	49	1	11	1	6	1	6	2	18	1	11	10
Batticaloa	5	19	3	11	1	2	0	2	15	57	2	9	27
Ampara	5	18	2	7	1	4	1	3	15	61	2	7	25
Hambantota	8	25	3	10	2	7	1	4	13	42	4	13	31
Total	151	19	72	9	34	4	26	3	423	52	100	12	806

Table 8: Number of solid waste disposal yards according to ownership

District	Municipal Council			Urban Council				Pradeshiya Saba				Total			
	Total	Owned	Private	Total	Owned	Private	Other	Total	Owned	Private	Other	Total	Owned	Private	Other
Colombo	5	3	2	2	2	-	-	18	4	12	2	25	9	14	2
Gampaha	1	-	1	8	3	4	1	32	6	26	-	41	9	31	1
Kalutara	-	-	-	4	1	3	-	22	10	10	2	26	11	13	2
Galle	2	-	2	2	2	-	-	29	18	9	2	33	20	11	2
Matara	-	-	-	4	2	2	-	35	17	18	-	39	19	20	-
Ratnapura	2	2	-	1	1	-	-	33	15	7	11	36	18	7	11
Kegalle	-	-	-	1	1	-	-	24	8	15	1	25	9	15	1
Kurunegala	1	1	-	1	1	-	-	68	40	24	4	70	42	24	4
Puttalam	-	-	-	10	3	5	2	28	14	14	-	38	17	19	2
Kandy	1	1	-	7	3	3	1	30	17	7	6	38	21	10	7
Matale	1	1	-	-	-	-	-	14	13	-	1	15	14	-	1
Nuwaraeliya	1	1	-	2	2	-	-	14	8	1	5	17	11	1	5
Badulla	1	1	-	2	2	-	-	29	23	2	4	32	26	2	4
Monaragala	-	-	-	-	-	-	-	21	9	2	10	21	9	2	10
Jaffna	7	1	6	9	6	3	-	33	18	6	9	49	25	15	9
Kilinochchi	-	-	-	-	-	-	-	49	8	27	14	49	8	27	14
Vavuniya	-	-	-	1	1	-	-	6	6	-	-	7	7	-	-
Mullaitivu	-	-	-	-	-	-	-	2	2	-	-	2	2	-	-
Mannar	-	-	-	-	-	-	-	3	2	1	-	3	2	1	-
Anuradhapura	-	-	-	5	1	-	4	32	23	5	4	37	24	5	8
Polonnuruwa	-	-	-	-	-	-	-	11	11	-	-	11	11	-	-
Trincomalee	-	-	-	1	1	-	-	15	7	3	5	16	8	3	5
Batticaloa	3	1	2	3	2	1	-	78	53	20	5	84	56	23	5
Ampara	-	-	-	1	1	-	-	15	12	3	-	16	13	3	-
Hambantota	-	-	-	2	1	1	-	14	6	7	1	16	7	8	1
Total	25	12	13	66	36	22	8	655	350	219	86	746	398	254	94

Table 9: Number of LGAs by opinion to solid waste disposal

District	Inadequate number of employees	Inadequate financial resources	Inadequate vehicles and machinaries	Inadequate dumping yards and public protest
Colombo	10	8	9	6
Gampaha	19	11	15	6
Kalutara	13	10	8	8
Galle	15	13	13	5
Matara	13	11	9	7
Ratnapura	12	7	13	6
Kegalle	9	6	6	7
Kurunegala	16	14	15	9
Puttalam	11	7	12	4
Kandy	10	7	13	9
Matale	9	8	7	7
Nuwaraeliya	5	4	7	5
Badulla	13	14	11	7
Monaragala	7	10	5	4
Jaffna	12	12	13	-
Kilinochchi	1	1	2	-
Vavuniya	3	3	3	-
Mullaitivu	1	1	1	-
Mannar	2	3	3	-
Anuradhapura	16	13	13	6
Polonnuruwa	3	3	5	-
Trincomalee	8	8	11	-
Batticaloa	9	9	11	1
Ampara	7	8	10	-
Hambantota	10	9	9	7
Total	234	200	224	104

Table 9 (contd.): Number of LGAs by opinion to solid waste disposal

District	Inadequate number of employees			Inadequate financial resources			Inadequate vehicles and machinaries			Inadequate dumping yards and public protest		
	MC	UC	PS	MC	UC	PS	MC	UC	PS	MC	UC	PS
Colombo	3	2	5	4	1	3	2	2	5	3	-	3
Gampaha	1	5	13	-	2	9	1	3	11	-	3	3
Kalutara	-	2	11	-	1	9	-	2	6	-	1	7
Galle	1	2	12	1	1	11	1	1	11	1	-	4
Matara	-	2	11	-	1	10	-	-	9	-	-	7
Ratnapura	1	-	11	1	-	6	2	1	10	-	-	6
Kegalle	-	1	8	-	-	6	-	1	5	-	-	7
Kurunegala	1	1	14	1	-	13	1	-	14	-	-	9
Puttalam	-	2	9	-	2	5	-	2	10	-	1	3
Kandy	1	1	8	-	-	7	-	2	11	-	3	6
Matale	1	-	8	1	-	7	-	-	7	1	-	6
Nuwaraeliya	1	1	3	-	1	3	1	2	4	-	1	4
Badulla	1	1	11	1	-	13	1	-	10	-	1	6
Monaragala	-	-	7	-	-	10	-	-	5	-	-	4
Jaffna	1	1	10	1	1	10	1	1	11	-	-	-
Kilinochchi	-	-	1	-	-	1	-	-	2	-	-	-
Vavuniya	-	1	2	-	1	2	-	1	2	-	-	-
Mullaitivu	-	-	1	-	-	1	-	-	1	-	-	-
Mannar	-	-	2	-	-	3	-	-	3	-	-	-
Anuradhapura	-	1	15	-	-	13	-	-	13	-	-	6
Polonnuruwa	-	-	3	-	-	3	-	-	5	-	-	-
Trincomalee	-	1	7	-	1	7	-	1	10	-	-	-
Batticaloa	1	1	7	1	1	7	1	2	8	-	-	1
Ampara	-	-	7	-	1	7	-	-	10	-	-	-
Hambantota	-	3	7	-	1	8	-	1	8	-	1	6
Total	13	28	193	11	15	174	11	22	191	5	11	88

Table 10: Revenue and expenditure on solid waste management - 1998

(Rupees)

Province	Municipal Council			Urban Council			Pradeshhiya saba			All types		
	Total Revenue	Expenditure on garbage removal	Expenditure on garbage removal as a percentage of total revenue	Total Revenue	Expenditure on garbage removal	Expenditure on garbage removal as a percentage of total revenue	Total revenue	Expenditure on garbage removal	Expenditure on garbage removal as a percentage of total revenue	Total revenue	Expenditure on garbage removal	Expenditure on garbage removal as a percentage of total revenue
Western	537,992,362	59,831,777	11.1	155,973,942	34,745,957	22.3	427,060,519	45,948,322	10.8	1,121,026,823	140,526,056	12.5
Central	43,198,927	12,314,000	28.5	42,206,787	7,868,482	18.6	50,739,735	4,350,922	8.6	136,145,449	24,533,404	18.0
Southern	117,495,464	14,162,933	12.1	87,261,043	18,797,860	21.5	138,329,424	13,827,643	10.0	343,085,931	46,788,436	13.6
Northern	95,981,296	19,963,592	20.8	36,779,632	6,035,550	16.4	92,059,821	18,044,800	19.6	224,820,749	44,043,942	19.6
Eastern	1,726,392	307,298	17.8	35,317,216	14,416,295	40.8	50,020,908	8,735,447	17.5	87,064,516	23,459,040	26.9
North-Western	7,395,646	1,316,425	17.8	47,723,960	6,992,000	14.7	62,406,172	9,011,728	14.4	117,525,778	17,320,153	14.7
North-Central	-	-	-	44,988,913	1,548,230	3.4	40,295,637	5,985,988	14.9	85,284,550	7,534,218	8.8
Uva	6,118,488	784,015	12.8	-	-	-	35,122,847	4,482,874	12.8	41,241,335	5,266,889	12.8
Sabaragamuwa	22,712,909	4,504,400	19.8	8,786,153	1,601,671	18.2	52,005,452	5,797,111	11.1	83,504,514	11,903,183	14.3
Total	832,621,484	113,184,440	13.6	459,037,646	92,006,045	20.0	948,040,515	116,184,835	12.3	2,239,699,645	321,375,321	14.3

Some key statistics on Municipal Waste disposal by local authority

Province	District	Type	Name	Area (Sq.km)	Estimated no. of occupied housing units	Weight of daily waste (MT)	
Central	Kandy	MC	Kandy	25.8	19,584	90.0	
		UC	Gampola	5.2	-	9.0	
		UC	Nawalapitiya	2.6	2,848	6.0	
		UC	Kadugannawa	0.1	360	3.0	
		UC	Wattegama	2.6	1,597	1.5	
		PS	Akurana	32.0	-	2.0	
		PS	Ganga Ihala Korale	103.0	506	0.4	
		PS	Harispattuwa	68.6	8,830	1.0	
		PS	Kandy Four Gravets & Gangawata	76.2	29,940	8.1	
		PS	Kundasale	83.2	21,352	7.5	
		PS	Medadumbara	165.1	15,113	5.0	
		PS	Minipe	242.0	950	1.0	
		PS	Pasbage Korale	128.6	1,190	2.0	
		PS	Pathadumbara	45.1	15,700	10.0	
		PS	Pathahewaheta	128.0	12,600	-	
		PS	Poojapitiya	54.0	11,564	0.5	
		PS	Panvila	96.8	5,000	2.0	
		PS	Thumpane	109.2	16,739	1.0	
		PS	Udawalatha	180.3	22,030	3.0	
		PS	Ududumbara	283.5	5,373	1.0	
	PS	Udunuwara	66.0	17,937	7.5		
	PS	Yatinuwara	70.0	19,326	0.5		
		Matale	MC	Matale	8.6	6,795	3.6
			PS	Ambanganga Korale	52.3	3,922	0.0
			PS	Dambulla	469.0	725	7.0
			PS	Galewela	192.0	375	1.5
			PS	Laggala-Pallegama	386.0	-	0.2
			PS	Matale	61.3	-	0.5
			PS	Na-Ula	250.1	6,741	0.5
			PS	Pallepola	80.5	6,892	2.0
			PS	Rattota	92.7	11,768	1.0
			PS	Ukuwela	87.7	-	1.0
		Nuwaraeliya	PS	Wilgamuwa	262.1	6,392	2.0
			PS	Yatawatta	67.1	2,204	0.1
			MC	Nuwara Eliya	12.4	1,200	11.5
			UC	Hatton-Dikoya	4.1	8,276	2.5
	UC		Thalawakele-Lindula	1.9	1,098	1.5	
	PS		Ambagamuwa	470.0	41,425	15.0	
	PS		Hanguranketha	236.0	21,952	3.5	
	PS		Kothmale	211.9	25,100	0.4	
	PS	Nuwara Eliya	457.0	44,610	3.0		
	PS	Walapane	303.3	28,331	5.0		

36 not reported

Some key statistics on Municipal Waste disposal by local authority

Province	District	Type	Name	Area (Sq.km)	Estimated no. of occupied housing units	Weight of daily waste (MT)	
Eastern	Ampara	UC	Ampara	24.7	4,383	4.5	
		PS	Karunkodithivu	65.4	8,144	6.0	
		PS	Thirukkovil	212.1	6,492	0.2	
		PS	Alayadivembu	107.9	2,500	1.5	
		PS	Addalachena	94.5	8,014	0.2	
		PS	Damana*	234.0	-	2.0	
		PS	Dehiattakandiya	400.0	13,000	1.0	
		PS	Lahugala	690.0	2,094	0.5	
		PS	Mahaoya	697.8	-	0.5	
		PS	Ninthavur	66.0	9,237	12.5	
		PS	Pothuvil	269.0	71,001	1.1	
		PS	Namaloya	-	-	0	
		PS	Kalmunai	-	-	-	
		PS	Padiyathalawa	-	-	-	
		PS	Samanthurai	-	-	-	
		PS	Uhana	-	-	-	
		Batticaloa	MC	Batticaloa	16.6	16,270	17.0
			UC	Kathankudi	6.5	8,000	25.0
			PS	Manmunai West	292.7	5,636	0.0
	PS		Eravur town	42.5	6,500	8.0	
	PS		Eravurpattu	583.2	15,176	3.0	
	PS		Koralaipattu	242.0	15,905	2.0	
	PS		Koralaipattu West	25.0	15,000	10.0	
	PS		Koralaipattu North	645.0	6,000	0.0	
	PS		Manmunai	21.5	6,786	3.5	
	PS		Manmunai south West	12.0	5,782	0.0	
	Trincomalee	PS	Porathivu	180.3	11,170	0.1	
		PS	Manmunai Soth	-	-	-	
		UC	Trincomalee	7.5	13,838	15.0	
		PS	Gomarankadawala	269.0	1,786	0.0	
		PS	Kanthale	250.0	9,859	5.0	
		PS	Kinniya	283.0	7,114	2.0	
		PS	Kuchchaveli	333.0	2,079	0.0	
		PS	Morawewa	160.0	1,089	0.0	
		PS	Muthur	179.1	10,000	0.0	
		PS	Seruvila	377.0	6,214	0.2	
	North-central	Anuradhapura	PS	Thampalagamam	244.0	6,277	0.2
			PS	Trincomalee & Four Gravets	140.2	6,016	3.0
			PS	Padavi-Siripura	217.1	-	-
UC			Anuradhapura	36.3	8,899	16.7	
PS			Galenbindunuwewa	342.6	864	1.0	
PS			Galnewa	250.0	7,715	2.7	
PS			Horowpathana	845.0	800	1.0	

- not reported

Some key statistics on Municipal Waste disposal by local authority

Province	District	Type	Name	Area (Sq.km)	Estimated no. of occupied housing units	Weight of daily waste (MT)		
North-central	Anuradhapura	PS	Ipalogama	125.9	9,802	0.6		
		PS	Kahatagasdigiliya	343.7	7,651	1.6		
		PS	Kebithigollewa	385.0	5,201	1.4		
		PS	Kekirawa	236.0	13,690	5.0		
		PS	Medawachchiya	418.8	1,172	6.9		
		PS	Mihinthale	256.0	5,465	0.3		
		PS	Nochchiyagama	967.0	7,000	4.0		
		PS	Nuwaragam Palatha Central	462.8	20,193	0.0		
		PS	Nuwaragam Palatha East	148.0	10,350	1.0		
		PS	Padaviya	125.0	5,000	1.0		
		PS	Palagala	208.4	6,500	0.0		
		PS	Rajanganaya	102.9	8,297	1.0		
		PS	Rambewa	305.1	12,000	0.1		
		PS	Thalawa	398.3	41,602	2.0		
		PS	Thirappane	394.0	-	0.5		
			Polonnaruwa	PS	Dimbulagala	1,217.0	27,826	1.0
				PS	Elahera	372.3	10,116	0.3
				PS	Hingurakgoda	401.0	13,107	5.4
PS	Lankapura			219.6	7,666	0.3		
PS	Medirigiriya			835.0	560	1.5		
PS	Thamankaduwa			600.0	17,500	5.6		
Northern	Jaffna	MC	Jaffna	20.2	21,840	60.0		
		UC	Chavakachcheri	19.5	3,550	1.5		
		UC	Point Pedro	11.7	3,000	3.0		
		PS	Chavakachcheri	197.1	17,463	3.5		
		PS	Delft	54.0	1,663	0.5		
		PS	Kaits	64.5	4,518	0.2		
		PS	Nallur	20.5	7,595	10.0		
		PS	Point Pedro	200.0	6,308	0.0		
		PS	Vadamarachchi South West	66.0	15,055	0.2		
		PS	Valikamam East	12.5	17,205	0.5		
		PS	Valikamam North	58.1	3,001	0.5		
		PS	Valikamam South	33.3	5,817	0.3		
		PS	Valikamam South West	48.0	23,500	3.0		
		PS	Valikamam West	47.3	7,500	0.5		
		PS	Velanai	178.8	-	0.1		
PS	Velvetithurai	7.3	-	-				
	Kilinochchi	PS	Pachchilaipallai	167.9	1,600	0.3		
		PS	Karachchi	647.3	-	0.3		
		PS	Punakari	520.0	-	-		
	Mannar	PS	Musali	474.0	475	0.1		
		PS	Nanattan	256.1	3,788	0.1		
		PS	Mannar	263.0	13,000	20.0		
		PS	Manthai West	1,038.7	-	-		
		PS	Thunnukkai	388.5	2,400	5.0		

Some key statistics on Municipal Waste disposal by local authority

Province	District	Type	Name	Area (Sq.km)	Estimated no. of occupied housing units	Weight of daily waste (MT)
Northern	Mullaitivu	PS	Manthai East	494.0	-	-
		PS	Pudukudirippu	977.6	-	-
		PS	Maritimepattu	719.0	-	-
	Vavuniya	UC	Vavuniya	22.3	5,900	8.0
		PS	Vavuniya south (Tamil)	156.0	12,067	0.1
		PS	Vengalcheddikulam	450.0	3,515	0.1
		PS	Vavuniya North	769.6	-	-
		PS	Vavuniya South (Sinhala)	188.5	-	-
	North-western	Kurunegala	MC	Kurunegala	11.3	5,000
UC			Kuliyapitiya	3.8	1,944	5.0
Puttalam		PS	Alawwa	238.7	8,158	8.0
		PS	Bingiriya	902.2	25,000	0.2
		PS	Galgamuwa	448.4	185	4.0
		PS	Giribawa	121.1	6,000	1.0
		PS	Ibbagamuwa	136.0	23,595	3.8
		PS	Kobeigane	126.0	6,800	0.1
		PS	Kuliyapitiya	220.4	1,096	2.5
		PS	Kurunegala	327.0	31,730	1.0
		PS	Mawathagama	104.6	12,404	1.0
		PS	Maho	260.7	21,546	9.0
		PS	Nikaweratiya	466.7	20,920	0.8
		PS	Panduwasnuwara	404.5	19,075	2.0
		PS	Pannala	291.4	1,295	2.3
		PS	Polgahawela	244.1	17,600	8.0
		PS	Polpithigama	379.3	16,127	2.3
		PS	Rideegama	207.2	19,250	3.5
		PS	Wariyapola	195.0	18,400	2.0
		Puttalam	UC	Chilaw	6.4	4,200
UC			Puttalam	25.2	6,711	3.0
PS			Anamaduwa	423.5	25,000	1.5
PS			Arachchikattuwa	134.6	9,985	0.1
PS	Chilaw		176.1	22,528	4.5	
PS	Kalpitiya		272.0	18,000	4.5	
PS	Karuwalagaswewa		523.7	4,023	0.1	
PS	Nattandiya		150.1	14,000	4.0	
PS	Nawagattegama		126.9	3,486	0.0	
PS	Puttalam		300.0	972	0.5	
PS	Wanathavilluwa	710.4	1,600	0.1		
PS	Wennappuwa	121.7	25,456	3.5		

- not reported

Some key statistics on Municipal Waste disposal by local authority

Province	District	Type	Name	Area (Sq.km)	Estimated no. of occupied housing units	Weight of daily waste (MT)		
Sabaragamuwa	Kegalle	UC	Kegalle	6.5		5.0		
		PS	Aranayaka	95.5	8,000	0.5		
		PS	Dehiovita	230.5	17,323	1.0		
		PS	Deraniyagala	217.6	11,088	2.5		
		PS	Galigamuwa	147.8	17,406	1.2		
		PS	Kegalle	95.6	19,370	1.5		
		PS	Mawanella	114.0	3,437	9.0		
		PS	Rambukkana	160.6	13,580	5.0		
		PS	Ruwanwella	170.0	11,900	2.0		
		PS	Warakapola	181.2	1,120	4.0		
		PS	Yatiantota	317.2	1,950	1.0		
			Ratnapura	MC	Rathnapura	20.1	11,530	57.7
				UC	Balangoda	6.5	2,275	4.5
		PS		Atakalanpanna	422.5	26,235	3.0	
		PS		Ayagama	122.0	6,275	2.0	
		PS		Balangoda	137.0	14,266	1.0	
		PS		Ehaliyagoda	139.5	15,079	2.0	
		PS		Embilipitiya	159.5	15,000	2.0	
		PS		Imbulpe	231.4	7,019	0.3	
		PS		Kalawana	257.6		0.5	
		PS		Kolonna	556.1	5,638	0.3	
		PS		Kuruwita	263.1	643	1.0	
		PS		Nivithigala	169.1		1.4	
		PS		Pelmadulla	168.3	1,963	2.0	
		PS		Rathnapura	155.4	75,000	0.0	
		PS		Weligepola	290.9	1,681	0.5	
	Southern	Galle		MC	Galle	16.8	15,249	32.5
				UC	Ambalangoda	7.1	4,226	20.0
				PS	Akmeemana	67.6	10,335	
				PS	Ambalangoda	32.0		0.5
			PS	Baddegama	130.0	9,235	1.6	
			PS	Balapitiya	56.2	5,617	0.5	
PS			Bentota	65.0	10,617	1.0		
PS			Bope-Poddala	40.4	6,500	0.5		
PS			Elpitiya	51.0	4,810	1.0		
PS			Habaradoowa	106.2	20,000	1.8		
PS			Hikkaduwa	77.7	12,485	1.7		
PS			Karandeniya	163.8	14,896	1.5		
PS			Niyagama	135.0	10,200	2.0		
PS			Netuwa	153.4	5,305	1.5		

- not reported

Some key statistics on Municipal Waste disposal by local authority

Province	District	Type	Name	Area (Sq.km)	Estimated no. of occupied housing units	Weight of daily waste (MT)
Southern	Galle	PS	Thawalama	188.8	6,850	0.0
		PS	Yakkalamulla	107.0	9,882	0.1
		PS	Nagoda	54.4	12,197	0.1
	Hambantota	UC	Hambantota	5.7	2,737	20.0
		UC	Tangalle	2.6	2,336	30.0
		PS	Ambalantota	152.0	13,049	3.0
		PS	Angunakolapelessa	110.0	9,760	0.8
		PS	Beliatta	90.0	13,258	9.0
		PS	Hambantota	477.0	16,170	1.0
		PS	Katuwana	169.0	15,000	6.0
		PS	Lunugamvehera	170.0	-	0.5
		PS	Tangalle	153.8	7,500	0.5
		PS	Thissamaharama	839.3	15,500	8.0
	PS	Weeraketiya	205.1	13,700	6.0	
	Matara	UC	Matara	8.2	13,000	25.0
		UC	Weligama	5.3	3,823	5.5
		PS	Mulatiyana	114.7	12,345	0.5
		PS	Akuressa	2.6	18,027	3.0
		PS	Devinuwara	39.2	2,594	12.0
		PS	Dikwella	105.0	3,835	5.0
		PS	Hakmana	45.0	-	10.5
PS		Kamburupitiya	101.0	-	2.0	
PS		Kotapola	322.4	22,769	5.0	
PS		Malimboda	36.3	7,116	1.0	
PS		Matara	60.3	16,000	12.0	
PS		Pasgoda	149.5	10,748	1.0	
PS	Thihagoda	52.8	8,497	2.0		
PS	Weligama	167.0	1,760	2.0		
Nuvra	Badulla	MC	Badulla	10.4	12,500	0.5
		UC	Bandarawela	1.7	825	4.5
		UC	Haputale	2.3	1,200	2.0
	PS	Badulla	42.2	6,084	0.0	
	PS	Bandarawela	66.0	10,000	0.1	
	PS	Ella	127.1	7,300	0.3	
	PS	Haldummulla	442.5	8,775	1.0	
	PS	Haliela	169.5	12,000	2.0	
	PS	Haputale	47.0	480	0.5	
	PS	Kandaketiya	164.2	-	0.3	
	PS	Mahiyanganaya	629.4	14,808	5.2	
	PS	Meegahakivula	124.3	4,500	1.0	
PS	Passara	269.1	17,823	2.0		

- not reported

Some key statistics on Municipal Waste disposal by local authority

Province	District	Type	Name	Area (Sq.km)	Estimated no. of occupied housing units	Weight of daily waste (MT)
Uva	Badulla	PS	Rideemaliyadda	370.6	9,597	0.1
		PS	Soranatota	80.0	-	0.1
		PS	Uva-Paranagama	131.3	17,061	1.0
		PS	Welimada	187.0	-	2.0
	Monaragala	PS	Badalkumbura	220.0	8,573	0.3
		PS	Bibila	469.0	8,055	0.8
		PS	Buttala	715.0	9,624	1.0
		PS	Kataragama	586.8	805	6.0
		PS	Madulla	676.5	5,700	0.0
		PS	Medagama	191.1	6,880	1.5
		PS	Moneragala	301.1	7,751	4.0
		PS	Siyambalanduwa	950.0	-	4.0
		PS	Thanamalvila	1,359.7	14,206	4.7
		PS	Wellawaya	591.6	15,000	2.5
Western	Colombo	MC	Dehiwala-MountLavinia	21.2	52,047	85.0
		MC	Moratuwa	23.3	35,000	135.0
		MC	Sri Jayawardhanapura-Kotte	17.1	24,499	100.0
		MC	Colombo	37.2	83,200	650.0
	Gampaha	UC	Kolonnawa	10.1	13,000	31.8
		UC	Seethawakapura	19.4	3,701	7.5
		PS	Homagama	140.8	31,295	8.0
		PS	Kaduwela	87.1	35,400	110.0
		PS	Kesbewa	55.0	43,200	11.5
		PS	Kotikawatta-Mulleriyawa	29.6	45,000	8.0
		PS	Maharagama	21.9	32,821	43.0
		PS	Seethawaka	208.0	22,718	3.0
		MC	Negambo	33.0	21,030	55.0
		UC	Minuwangoda	4.2	2,460	3.0
		UC	Wattala-Mabole	4.4	5,081	10.0
		UC	Ja-Ela	7.7	7,022	5.8
		UC	Katunayaka-Seeduwa	21.8	8,000	17.0
		UC	Peliyagoda	2.8	6,768	7.5
		UC	Gampaha	2.6	1,956	8.0
		PS	Aththanagalla	151.1	24,829	1.5
PS	Biyagama	64.0	28,560	5.0		
PS	Divulapitiya	220.2	2,401	5.0		
PS	Dompe	178.3	5,000	4.0		
PS	Gampaha	134.1	32,931	3.5		
PS	Ja-Ela	63.8	32,025	20.1		
PS	Katana	65.0	29,020	2.0		
PS	Kelaniya	22.0	25,396	37.0		

- not reported

Some key statistics on Municipal Waste disposal by local authority

Province	District	Type	Name	Area (Sq.km)	Estimated no. of occupied housing units	Weight of daily waste (MT)		
Western	Gampaha	PS	Mahara	98.8	33,500	1.0		
		PS	Meerigama	186.6	3,450	4.9		
		PS	Minuwangoda	135.0	38,200	1.0		
		PS	Wattala-Mabole	60.0	28,903	13.4		
	Kalutara	UC	Horana	4.5	2,005	13.0		
		UC	Panadura	7.0	8,852	25.0		
		UC	Kalutara	8.5	6,278	16.0		
		UC	Beruwala	4.4	-	-		
		PS	Beruwala	65.8	12,774	10.0		
		PS	Agalawatta	361.0	20,460	2.0		
		PS	Bandaragama	241.3	1,969	4.0		
		PS	Bulathsinhala	276.2	25,662	3.0		
		PS	Dodangoda	115.0	10,977	1.8		
		PS	Horana	90.6	25,361	4.0		
		PS	Kalutara	38.0	25,000	1.0		
		PS	Mathugama	286.2	32,220	5.0		
		PS	Panadura	60.2	13,632	8.0		
		PS	Walallavita	210.6	12,728	2.5		
		Total				62,381.0	3,411,253	2484.3

- not reported

Anexture iv

Questionnaire & instructions

Survey on Garbage Disposal in Municipal Councils/Urban Councils and Pradeshiya Sabhas 1999

Instructions on completing the questionnaire

Objective

Accumulation of garbage and dispose them in a haphazard manner has been increasing over the years as a result of increasing density of population, urbanization, fragmentation of lands etc. Hence, it has become necessary to take immediate action to deal with this issue. Also to take proper planning decisions, the data on the volume of garbage collection per day, human and capital resources utilized, expenditure, etc; are essential inputs. The objective of this survey is to collect these information through the enclosed questionnaire. Information collected through the survey will be processed to compile statistical indicators which will facilitate decision making on this issue, and those will be made available to data users. This will be a very useful for you as well. Therefore, please read the instructions carefully and complete the questionnaire and post it to the address given in the attached letter on or before 24th April 1999.

1. Identification information

Provide the information to identify your institution in 1.1 and 1.2. Give the area coming under your authority's jurisdiction and state clearly whether it is given in square kilometers or square miles.

2. Housing units, commercial establishments etc. within the area

Here the information need to be provided on the housing units, commercial establishment etc. which are the sources of garbage disposal. The total number of units should be reported in the first column while number of units in area(s) where a proper programme of garbage collection is in operation should be reported in the second column. If there are any other such places that are not stated in 2.1 through 2.4, those should be stated under the 'other' and state number of such places.

3. Employment

Information of all employees of the institution and employees whose duties are related to the garbage disposal activities should be provided here. All employees who are not permanent are considered as casual / temporary employees.

All employees who are not in the grade of labourer are considered here as non labourer grades. Information on all employees who are either directly or indirectly involved in garbage disposal activities should be provided in 3.2 while information all employees should be provided in 3.1.

4. Machinery and vehicles

Information on machinery and vehicles that are used for activities related to garbage disposal should be provided here. These machineries and equipment are broadly

categorised on the basis of whether they belong to the institution or not. Within those categories they are again according to categorised whether these equipment and machineries are used for garbage disposal activities on full time basis or part time basis. Record the total number of such machineries and vehicles by type in 4.1 and 4.2 respectively.

5. Garbage collection per day

The estimated weight of garbage (in metric tons) disposed to the permanent and ultimate garbage disposal yard per day should be recorded here. You may be not aware of this weight exactly. If this is the case please provide the best estimate considering the following

- Type of vehicle
- Capacity of vehicle
- Number of trips made for garbage collection per day
- Method of garbage collection (every day / every other day / once a week etc.)

For an example assume that the total quantity of the garbage, disposed to the permanent and ultimate disposal yards is 3000 metric tons. Irrespective of collection methods, garbage collected per day is computed by dividing 3000 metric tons by 30 days.

6. Composition of garbage

Average composition of garbage according to type viz: paper, plastic, metal etc. should be recorded here.

If the composition is graded or specified in another way please state it and record the corresponding percentages.

7. Number of Sites to which garbage is ultimately disposed

Record number of sites against the type.

8. Problems related to garbage disposal

Tick against the problems that are most common to your institution.

9. Revenue of the institution and expenditure on garbage disposal

All types of recurrent expenditure connected either directly or indirectly to the garbage disposal activities should be reported in 9.1.

Particulars on revenue (i.e source and the amount) of the institution should be recorded in 9.1. If the institution receives revenue from sources other than those stated in 9.2, please state the source and the amount clearly under "other". Particulars on income and expenditure should be provided for the years 1997 and 1998. If the accounts have not been finalised yet for the year 1998 please provide a best possible estimate.

If the space provided in the questionnaire is not sufficient to provide the requested information, please use a separate sheet of paper to provide requested information and state the question number clearly.

**Survey on Garbage Disposal in Municipal Council/Urban
Council/and Pradeshiya Sabha Areas: 1998**

Department of Census and Statistics, Agriculture & Environmental Statistics Division,
30, Asoka Gardens, Colombo 04.

If not otherwise specified, please provide the details as at December 31, 1998

(1) Identification details

1.1 Name of the local authority:-

1.2 Address :-

1.3 Total area of the local authority sq.
miles/sq. km:-

2. Details about housing units and business establishments etc. in the area coming under the authority

	Total	Number of units in the area where a proper garbage collection programme is in operation
2.1 Number of occupied housing units		
2.2 Business establishments (hotels, shops, industries etc.)		
2.3 Non residential units (hospitals, religious places, schools etc.)		
2.4 Public places like parks, main bus stands etc.		
2.5 Other (please specify)		

3) Employment**(3.1) Total number of employees in the local authority**

Permanent				Casual / temporary				Total
Male		Female		Male		Female		
Non labour grades	Labourers	Non labour grades	Labourers	Non labour grades	Labourers	Non labour grades	Labourers	

(3.2) Employees those who are involved in the activities related to the collection of garbage

Permanent				Casual / temporary				Total
Male		Female		Male		Female		
Non labour grades	Labourers	Non labour grades	Labourers	Non labour grades	Labourers	Non labour grades	Labourers	

(4) Vehicles and machineries (used for removal of garbage)**4.1 Number of vehicles used for removal of garbage
(as at 98-12-31)**

Type	Owned by the authority		Operated by rental / leased basis	
	Full time	Part time	Full time	Part time
a) Compact trucks				
b) Lorry/tipper				
c) Four wheel tractor				
d) Two wheel tractor				
e) Carts				
f) Other (specify)				
1.				
2.				
3.				
4.				

4.2 Number of machineries
(as at 98-12-01)

Type	Owned by the authority		Operated by rental / leased basis	
	Full time	Part time	Full time	Part time
a) Caterpillar / dozer				
b) Other (specify)				
1.				
2.				
3.				

(5) Volume of garbage collection per day

In general average amount of garbage disposal to the yards per day

Metric tons:-

(please provide a best possible estimate)

(6) Composition of garbage

	Revenue for 1997		Revenue for 1998		% (percentage)
a) Paper					
b) Plastic					
c) Metal					
d) Glass					
e) Organic					
f) Other					

(7) Number of garbage disposal yards

- a) Lands owned by Government/Urban Council/Pradeshiya Sabas
- b) Private place (temporarily used)
- c) Other (please specify)

Numbers

(8) Problems of garbage removal

- a) Inadequate number of employees
- b) Inadequate financial resources
- c) Inadequate vehicles and machineries
- d) Other (please specify)

(9) Revenue and expenditure on garbage removal

9.1 Expenditure on garbage removal

Expenditure details	Expenditure for 1998 in Rupees	Expenditure for 1997 in Rupees
a) Salaries, wages and overtime payments		
b) Repair of vehicles and fuel		
c) Other (please specify)		

9.2 Revenue from all sources for all activities

Source of income	Revenue for 1998 in Rupees	Revenue for 1997 in Rupees
a) Taxes		
b) From Provincial Council		
c) From non governmental organisations		
d) Private (please specify)		
e) Other		

I hereby certify that the particulars given by me/my institution is correct and accurate to the best of my knowledge

Name:-

Signature:-

Designation:-

Date:-

මහ නගර සභා නගර සභා ප්‍රාදේශීය සභා බල ප්‍රදේශ තුළ කුණු කසල ඉවත් කිරීම පිළිබඳ සමීක්ෂණය-1998: ආකෘති පත්‍රය පිරවීම සඳහා උපදෙස්

අරමුණ:

ජන සංඛ්‍යාවේ වර්ධනය හා ආර්ථික සංවර්ධන ක්‍රියාවලිය හේතුවෙන් ජන ඝනත්වයේ වර්ධනය, ඉඩම කැබැලිවීම, නාගරීකරනය ආදී කරුණු කෙරෙහි ඇතිවූ බලපෑම නිසා දිනෙන් දිනම වර්ධනය වන කුණු කසල පරිමාවන් හා ආශ්‍රිතව පැනතැගී ඇති විවිධ ප්‍රශ්නත් ඊට පිළියම යෙදීමේ අවශ්‍යතාවයන් පැනතැගෙමින් පවතී. කුණු කසල නිසා ඇතිවී ඇති පාරිසරික බලපෑම අවම කිරීම සඳහා සැලසුම් සහගත ලෙස තීරණ ගැනීම හා ක්‍රියාකිරීම පිළිබඳව දෛනිකව ඉවත් කෙරෙන කුණු කසල පරිමාවන් ඒ සඳහා යොදා ඇති සම්පත් (මානව හා ප්‍රාග්ධන) පිරිවැය ආදිය පිළිබඳව වඩාත් නිවැරදි දත්ත අවශ්‍ය වේ. එබැවින් මෙම දත්ත ලබාගැනීම සඳහා දිවයිනේ සියළුම පලාත් පාලන ආයතන ආවරණය වනපරිදි තොරතුරු රැස් කිරීම මෙම ප්‍රශ්නාවලියේ අපේක්ෂිත අරමුණකි. මෙසේ රැස්කරනු ලබන දත්ත විශ්ලේෂණය කොට සැලසුම් සඳහා අවශ්‍ය ආකාරයේ වගු හා දර්ශක සකස් කිරීමෙන් පසුව සියළුම අන්දමේ දත්ත පරිහරනය කරන්නන් සඳහා මෙම සංඛ්‍යාති ඉදිරිපත් කරනු ඇත. ඔබටද ඒවා ප්‍රයෝජනවත් වනු නිසැකය. එබැවින් මෙම ප්‍රශ්නමාලාව සම්බන්ධව දී ඇති උපදෙස් කියවා තේරුම ගැනීමෙන් පසු ප්‍රශ්න මාලාව විධිමත් ලෙස සම්පූර්ණ කොට 1999 අප්‍රේල් 24 දිනට ප්‍රථම මීට අමුණා ඇති ලිපියෙහි දැක්වෙන ලිපිනයට කරුණාකර යොමු කරන්න.

(1) හඳුනා ගැනීමේ තොරතුරු

ඔබ ආයතනය පැහැදිලිව හඳුනා ගැනීම පිණිස 1.1 හා 1.2 ට අදාළ තොරතුරු පැහැදිලිව දක්වන්න. 1.3 හි බල ප්‍රදේශයේ වර්ග ප්‍රමාණය දක්වා එය වර්ග කිලෝ මීටර හෝ වර්ග සැතපුම් ද යන්න පැහැදිලි ලෙස දක්වන්න.

(2) බල ප්‍රදේශය තුළ ඇති නිවාස වෙළඳ ආයතන ආදිය

මෙහිදී ඔබ ආයතනයෙන් පාලනය වන හුම් ප්‍රමාණය තුළ ඇති කුණු කසල බැහැරලන ස්ථාන/ඒකක පිළිබඳව ගණන් ගැනීමක් සිදුකෙරේ. තවද මෙහි පළමු තීරුව තුළ අදාළ මුළු ඒකක සංඛ්‍යාවත්, දෙවන තීරුව තුළ ඔබ ප්‍රදේශය තුළ විධිමත් ලෙස කුණු කසල ඉවත් කිරීමේ වැඩ පිළිවෙල ක්‍රියාත්මක වන ප්‍රදේශයේ ඇති ඒකක ගණනත් දක්වන්න.

2.1, සිට 2.4 දක්වා කරුණු යටතේ ආවරණය නොවූණු වෙනත් ස්ථාන ඔබ බල ප්‍රදේශය තුළ ඇත්තේ නම් එවැනි ස්ථාන මොනවාද යන්නත් එම සංඛ්‍යාවත් 2.5 හි සඳහන් කරන්න.

(3) සේවක සංඛ්‍යාව

ඔබ ආයතනයේ සේවය කරන මුළු සේවක සංඛ්‍යාවත් එයින් කුණු කසල ඉවත් කිරීම හා සම්බන්ධව කටයුතු කරන සේවක සංඛ්‍යාව පිළිබඳවත් විස්තර මෙහිදී සැපයිය යුතුය.

අනියම්/තාවකාලික සේවකයින් ලෙස අදහස් කරන්නේ ස්ථිර නොවන අතිකුත් සියළුම සේවක සේවිකාවන්ය.

කමකරු නොවන යනුවෙන් අදහස් කරන්නේ කමකරු ශ්‍රේණිවලට ඇතුළත් නොවන අතිකුත් සියළුම මට්ටම වල සේවක සේවිකාවන්ය.

3.1 මෙම වගුව සම්පූර්ණ කළයුත්තේ ඔබ ආයතනයේ සේවය කරන සියළුම සේවක සේවිකාවන් සම්බන්ධයෙනි.

3.2 මෙම වගුව සම්පූර්ණ කළයුත්තේ කුණු කසල ඉවත් කිරීමට කවර ආකාරයකින් හෝ සම්බන්ධ වන සියළුම සේවක සේවිකාවන් පිළිබඳවය.

(4) වාහන හා යන්ත්‍රෝපකරණ

4. 1 හා 4. 2 කොටස් වලින් කුණු කසල ඉවත් කිරීම සඳහා භාවිතා කරන යන්ත්‍ර උපකරණ හා වාහන පිළිබඳ තොරතුරු රැස් කෙරේ. මෙම වාහන හා යන්ත්‍රෝපකරණ මූලික වශයෙන් ආයතනය සතු හා ආයතනය සතු නොවන (කුලියට/අතියම් පදනමක් මත) වශයෙන් වර්ගීකරණය කළයුතුය. පසුව එය නැවත වාහන/ යන්ත්‍රෝපකරණ යොදා ගන්නේ පුර්ණකාලීනවද අර්ධකාලීනවද යන්න අනුව වර්ගීකරණය කළ යුතුය. ඉහත වර්ගීකරණ අනුව යන්ත්‍රෝපකරණ සහ වාහන අදාළ වර්ගය ඉදිරියෙන් පිළිවෙලින් 4.1වගුවෙහි සහ 4.2 වගුවෙහි සටහන් කළයුතුය.

(5) දිනකට එකතු කරන කුණු කසල ප්‍රමාණය

අවසාන වශයෙන් කුණු කසල බැහැර කරන ස්ථානයට/ස්ථාන වලට එක් දිනකට ගෙන ගොස් බැහැරලන කුණු කසලවල පරිමාව මෙවුක් ටොන් වලින් මෙහිදී දැක්විය යුතුය. ඇතැම් විට දිනකට මෙසේ ඉවත ලන කුණු කසලවල පරිමාව නිශ්චිත වශයෙන් ඔබ තොරතුරුවා විය හැකිය, එවැනි අවස්ථාවකදී පහත දැක්වෙන කරුණු සැලකිල්ලට ගෙන සාමාන්‍යයෙන් එක් දිනකට ඇස්තමේන්තු කොට මෙහි දැක්වීම ප්‍රමාණවත් වේ. වාහන වර්ගය, වාහන වල ධාරිතාවන්, දිනකට රැගෙන යන වාර ගණන, කුණු ඉවත් කරන ක්‍රමය(දිනපතා සතියට දින කීපයක් ආදී වශයෙන්). උදාහරණයක් ලෙස ඔබ බල ප්‍රදේශය තුළ කවර ආකාරයේ හෝ වාහන භාවිතා කොට මාසය තුළදී අවසන් වශයෙන් ඉවත් කල මුළු කුණු කසල ප්‍රමාණය මෙවුක් ටොන් 3000 ක් නම් එය කවර ආකාරයකට ඉවත් කලද පොදුවේ ගත් කල දිනකට ඉවත් කරන කුණු ප්‍රමාණය වන්නේ මුළු ප්‍රමාණය දින 30 න් බෙදූවිට ලැබෙන පිළිතුරයි. සතියකට ඉවත් කල මුළු ප්‍රමාණය දන්නේ නම් දිනකට ඇස්තමේන්තු කර දක්වන්න.

(6) කුණු කසල වල සංයුතිය පිළිබඳව විස්තර මෙහි දැක්විය යුතුය.

කුණු කසල වල ප්‍රතිශතය කඩදාසි හා කාඩ්බෝඩ්, ජලාස්වික්, ලෝහමය, වීදුරු, ඓක්‍රියමය කුණුකසල, හා වෙනත් වශයෙන් දන්නේ නම් එය සඳහන් කරන්න. මට වඩා වෙනස් ආකාරයක වර්ගීකරණයක් පිළිබඳ තොරතුරු ඇත්නම් අදාළ වර්ගීකරණයද ප්‍රතිශතය ද දක්වන්න.

(7) කුණු කසල අවසාන වශයෙන් බැහැර කරන ස්ථාන සංඛ්‍යාව

අදාළ ස්ථාන වලට අනුරූපව ඒ ඒ සංඛ්‍යාවන් සඳහන් කරන්න.

(8) කුණු කසල ඉවත් කිරීම සම්බන්ධ ප්‍රධාන ගැටළු

අදාළ පිළිතුර ඉදිරියේ ඇති කොටුවේ කතිරයක් ගසන්න

(9) ආයතනයට ලැබෙන ආදායම සහ කුණු කසල ඉවත් කිරීම සම්බන්ධ වියදම්

9.1 කුණු කසල ඉවත් කිරීම හා අදාළව කවර ආකාරයක හෝ වූ පුනරාවර්තන වියදම මෙම වගුවෙහි විමසා ඇති කරුණු ඉදිරියේ සඳහන් කරන්න. එම වියදම් වලට අමතරව දරන ලද වියදම්(උදා කුණු බැහැර කරනු ලබන ඉඩම් බද්දට /කුලියට ගැනීම සඳහා වූ වියදම්) වෙනත් යටතේ සඳහන් කොට ඒවා ඉදිරියෙන් ලියන්න.

9.2 ඔබ ආයතනයට සියළුම ප්‍රභවයන් ගෙන් ලැබෙන ආදායම, විමසා ඇති කරුණු ඉදිරියේ සටහන් කරන්න. ඊට අමතර ප්‍රභවයකින් ආධාර ලැබෙන්නේ නම් ඒ ප්‍රභවයන් ඉන් ලැබෙන ආදායමක් වෙතත් යටතේ සඳහන් කරන්න. 9.1හා 9.2 සඳහා තොරතුරු 1997 හා 1998 වර්ෂ සඳහා ලබා දිය යුතුය. යම් හේතුවකින් 1998 වර්ෂය සඳහා සංඛ්‍යාතික් මෙතෙක් පිළියෙල කර නොමැති නම් 1998 වර්ෂය සඳහා ඇස්තමේන්තු කළ සංඛ්‍යාති ඉදිරිපත් කිරීම ප්‍රමාණවත් වේ.

විමසා ඇති තොරතුරු සැපයීමට ප්‍රශ්නාවලියේ ලබා දී ඇති ඉඩ කඩ ප්‍රමාණවත් නොවන අවස්ථාවලදී එවා පැහැදිලිව ප්‍රශ්න අංකය සඳහන් කොට වෙනත් කඩදාසියක සඳහන් කරන්න.

**මහ නගර සභා / නගර සභා / ප්‍රාදේශීය සභා බල ප්‍රදේශ තුළ කුණු කසල
ඉවත් කිරීම පිළිබඳ සම්බන්ධතා - 1998**

ජනලේඛන හා සංඛ්‍යා ලේඛන දෙපාර්තමේන්තුව, කෘෂිකර්ම හා පාරිසරික සංඛ්‍යා ලේඛන අංශය,
නො 30, අශෝක උද්‍යානය, කොළඹ 04

විශේෂයෙන් සඳහන් කොට නොමැති විටකදී මෙහි විමසා ඇති තොරතුරු 1998 දෙසැම්බර් 31 වන දිනට අදාළ වන පරිදි සටහන් කරන්න

(1) හඳුනා ගැනීමේ තොරතුරු

- 1.1 පළාත් පාලන ආයතනයේ නම :-
- 1.2 ලිපිනය
- 1.3 ආයතනයේ පාලනය වන භූමි ප්‍රමාණය වර්ග සැතපුම්/වර්ග කිලෝ මීටර්:-

2. බල ප්‍රදේශය තුළ ඇති නිවාස වෙළඳ ආයතන ආදිය

	නිවස වෙළඳ ආයතන	බල ආයතන විසින් විවිධ වර්ගයේ කුණු කසල ඉවත් කිරීමේ පද්ධති පිළිබඳ ක්‍රියාත්මක කරන ප්‍රදේශය තුළ ඇති ජනගහණ
(1)		(2)
2.1	පදිංචි නිවාස ගණන	
2.2	වෙළඳ ආයතන(ආපනශාලා වෙළඳසැල් කර්මාන්තශාලා ආදිය)	
2.3	නිවාස නොවන වාසස්ථාන(ආරෝග්‍යශාලා ආගමික ස්ථාන පාඨශාලා ආදිය)	
2.4	මිනිසුන් ගැටසෙන උද්‍යාන ප්‍රධාන බස් නැවතුම් පොළවල් වැනි පොදු ස්ථාන	
2.5	වෙනත්:-	

(3) සේවක සංඛ්‍යාව

(3.1) ආයතනයේ මුළු සේවක සංඛ්‍යාව

ස්ථිර				අතියම්/තාවකාලික				මුළු එකතුව
පිරිමි		ගැහැණු		පිරිමි		ගැහැණු		
කමකරු නොවන	කමකරු	කමකරු නොවන	කමකරු	කමකරු නොවන	කමකරු	කමකරු නොවන	කමකරු	

(3.2) කුණු කසල ඉවත් කිරීමට අදාළව කටයුතු කරන මුළු සේවක සංඛ්‍යාව

ස්ථිර				අතියම්/තාවකාලික				එකතුව
පිරිමි		ගැහැණු		පිරිමි		ගැහැණු		
කමකරු නොවන	කමකරු	කමකරු නොවන	කමකරු	කමකරු නොවන	කමකරු	කමකරු නොවන	කමකරු	

(4) වාහන හා යන්ත්‍රෝපකරණ (කුණු කසල ඉවත් කිරීමට භාවිතාවන)

4.1 කුණු කසල ඉවත් කිරීම සඳහා යොදවා ඇති වාහන සංඛ්‍යාව
(08 -12- 01 දිනට ක්‍රියාත්මකව පැවති)

වර්ගය	ආයතනය සතු		ආයතනය සතු නොවන කුලියට/අතියම් පදනම මත	
	පූර්ණ කාලීන	අර්ධ කාලීන	පූර්ණ කාලීන	අර්ධ කාලීන
a) සංකෝචන ට්‍රැක්ටර්				
b) ලොරි/ටපර්				
c) ට්‍රැක්ටර් රෝද 4				
d) ට්‍රැක්ටර් රෝද 2				
e) අත් කරන්න 'කරන්න				
f) වෙනත් (සඳහන් කරන්න)				
1.				
2.				
3.				
4.				

4.2 කුණු කසල ඉවත් කිරීම සඳහා යොදවා ඇති යන්ත්‍රෝපකරණ සංඛ්‍යාව

(98 -12- 31 දිනට ක්‍රියාත්මකව පැවති)

වර්ගය	ආයතනය සතු		ආයතනය සතු නොවන කුලියට/අතියම් පදනම මත	
	පුරුණ කාලීන	අර්ධ කාලීන	පුරුණ කාලීන	අර්ධ කාලීන
a) කැටපිලර්/ඩෝසර් යන්ත්‍ර				
b) වෙනත් (සඳහන් කරන්න)				
1.				
2.				
3.				

(5) දිනකට එකතු කරන කුණු කසල ප්‍රමාණය

පොදුවේ ගත් කල සාමාන්‍යයෙන් දිනකට එක්රැස් කරන කුණු කසල ප්‍රමාණය

මෙට්‍රික් ටොන් ගණන:-

(ඇස්තමේන්තු කොට දක්වන්න)

(6) කුණු කසල සංයුතිය හා එහි ප්‍රතිශතය

- a) කඩදාසි හා කාඩ්බෝඩ් (paper)
- b) ප්ලාස්ටික් (plastic)
- c) ලෝහමය (metal)
- d) වීදුරු (glass)
- e) ඓන්ද්‍රියමය කුණුකසල (organic)
- f) වෙනත් (other)

%(ප්‍රතිශතය)

(7) කුණු කසල අවසාන වශයෙන් බැහැර කරන ස්ථාන සංඛ්‍යාව

- a) රජයට/ නගර සභාවට/ ප්‍රාදේශීය සභාවට අයත් ඉඩම්
- b) පෞද්ගලික ඉඩම් (භාවකාලිකව පරිහරණය කරනු ලබන)
- c) වෙනත්(සඳහන් කරන්න)

ගණන

(8) කුණු කසල ඉවත් කිරීම සම්බන්ධ ප්‍රධාන ගැටළු

- a) සේවක සංඛ්‍යාව ප්‍රමාණවත් නොවීම
- b) මූල්‍යමය සම්පත් ප්‍රමාණවත් නොවීම
- c) වාහන යන්ත්‍රෝපකරණ ප්‍රමාණවත් නොවීම
- d) වෙනත් (සඳහන් කරන්න)

(9) කුණු කසල ඉවත්ලාම සම්බන්ධ වියදම

9.1 කුණු කසල ඉවත්ලාම සම්බන්ධ වියදම

වියදම ප්‍රභවය	1998 සඳහා වියදම-රුපියල්	1997 වියදම-රුපියල
a) සේවක වැටුප් වෙනත සම්බන්ධ (අතිකාල) දීමනා		
b) වාහන අලුත්වැඩියා කටයුතු ඉන්ධන		
c) වෙනත් (සඳහන් කරන්න)		

9.2 ආදායම් ප්‍රතිපාදන ප්‍රදාන ආදිය

ආදායම් ප්‍රභවය	1998 සඳහා ආදායම-රුපියල්	1997 ආදායම-රුපියල්
a) වරිපතම් බදු ආදායම		
b) පළාත් සභා වෙතින්		
c) රාජ්‍ය නොවන ආයතන වෙතින්		
d) පෞද්ගලික ප්‍රදාන (සඳහන් කරන්න)		
e) වෙනත්		

ඉහත තොරතුරු මගේ/ ආයතනයේ දැනුම අනුව සත්‍ය බව ප්‍රකාශ කරමි.

නම:-

අත්සන:-

තනතුර:-

දිනය:-

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