

1.0 Introduction

Urban Development Area of Maharagama is situated 16 kilometers away towards Southeast of the city of Colombo. Both population wise and physical development wise Maharagama is a high growth area. As it is centered among developed towns like Dehiwala, Kotte, Nugegoda and Piliyandala it has very high development potential. The high level road that runs through the Maharagama city connects it to the Capital city of Colombo as well as to Sabaragamuwa and Uva provinces and also to other main cities.

In 1963, this Local Authority, was a Town council with an area of operation of only 5 square kilometers. In 1988, it has been reconstituted as a Pradesiya Sabha expanding its area of operation includes 21 square kilometers. On April 18, 2002 it was upgraded as an Urban Council re-demarcating its area of operation includes 39.4 square kilometers. As the boundaries of this Urban Council it has Kesbewa Pradesiya Sabha in the South and Southeast, Kotte Municipal Council and Kaduwela Pradesiya Sabha, in the North and Northwest, Homagama Pradesiya Sabha in the East and again Kotte Municipal Council in the West. (Vide Map No.1). Maharagama Divisional Secretary's area consists of 41 Grama Niladhari Divisions. The area of operations of the Maharagama Urban Council has been demarcated to include all these 41 Grama Niladhari Divisions.

The annual average rainfall of the city, is in between 2,500 to 3,000 mm., which belongs to the low country wet zone. There are large number low-lying lands within this area, and their maximum heights are about 30 meters above MSL. The area is comprised of semi-marshy and marshy plains. The existing drainage system is linked to the Dutch canal through a network of small canals like Kalu-Ela and Kimbula Ela.

The projected population of this city by 2021 A.D. will be 253,047. The city has been identified as a densely populated commercial and residential center. According to the Mega Polis Development Plan, when the Colombo city becomes the financial and commercial hub of the South-East Asia, Maharagama, which is located closer to Colombo, contains high potentials to become a major commercial center.

The city of Maharagma is located in between the city of Colombo and the city of Homagama which are identified as two main growth centers under the Western Province Mega Polis Development Plan. Due to the impact of these two growth centers located one in the West and the other in the East, the city of Maharagama could be developed as a main residential city.

1.1 Zonal Setting

Maharagama city is coming under the Core Area of the Western Province Mega Polis Development Plan. The other areas coming under this development plan are: (Map 2)

- Colombo Municipal Council Area
- Dehiwala-Mt.Lavinia Municipal Council Area
- Sri Jayawardenapura Kotte Municipal Council
- Moratuwa Municipal Council Area
- Kolonnawa Urban Council Area
- Borelesgamuwa Urban Council
- Kaduwela Pradesiya Sabha Area
- Kotikawatta-Mulleriyawa Pradesiya Sabha Area
- Few Grama Niladhari Divisions of the Homagama Pradesiya Sabha

The main objective of the Western Province Mega Polis Development Plan is to develop Colombo city as the financial and commercial hub and the other areas as administrative centers. It is expected that Maharagama Development will include Residential, Institutional and Commercial activities. Maharagama Development Plan has been prepared up to the year 2018, Based on the concepts of this Core Area Development Plan.

1.2 Zonal Relationships and Scope of Activities

In comparison to the urban activities taking place in the Western Province, Maharagama city can be identified as a tertiary level developing town. This city is tertiary linked to Colombo, Capital City of Jayawardenapura, Dehiwala town and Piliyandala town by the High Level road, Pamunuwa road, Maharagama – Dehiwala road and Kottawa – Mt. Lavinia road respectively. The Kottawa – Mt. Lavinia road terminates on Galle road. Maharagama is bordering Kotte and Dehiwala-Mt.Lavinia municipalities. The developments of these municipalities are having a direct impacts on Maharagama.

Maharagama plays a significant role in regional and national activities. The existence of the following national level health and educational establishments in and around Maharagama bears evidence for its significant role.

- Cancer Hospital
- Sri Jayewardenapura Hospital
- Ayurvedha Research Institute
- University of Sri Jayewardenapura
- National Institute of Education
- Dental Nurses Training School
- Centre for Banking Studies
- Training Centre for Muslim Religion
- National Youth Centre

This city has become a satellite city having an important development potential within the Colombo infrastructure development plan. The following are contributory factors for this:

- Inclusion of a part of Maharagama Urban Council Area within the administrative capital of Sri Lanka (Grama Niladhari Divisions of Thalpathpitiya, Madiwela, Mirihana, Thalawathugoda West, Thalawathugoda East, and Kalalgoda)
- Close proximity to commercial capital and International harbour
- A record daily floating population between 100,000 to 150,000

1.3 Planning Units

For the convenience of collecting and analyzing information, the urban council area has been classified into 18 planning units (MAP NO.3-Annexure1)

01. Mirihana
02. Madiwela
03. Udahamulla
04. Gangodawila
05. Navinna
06. Pamunuwa
07. Depanama
08. Maharagama
09. Pannipitiya
10. Godigamuwa
11. Thalawathugoda
12. Kalalgoda
13. Kottawa A
14. Kottawa B
15. Liyangoda
16. Ruckmale
17. Malapalla
18. Makumbura

2.0 Population and Housing

2.1 Population and Its Growth

The following table presents the population and its growth of Maharagama Urban Council Area during the last two decades

Table 01

Population and Population Growth
Maharagama Urban Council (1981-2001)

Year	Population	Average Growth Rate
1981	122,942	
1991	145,097	1.8
2001	180,112	2.4

Source: Department of Census and Statistics

As the above Table shows the population of 122,942 in 1981 has increased to 145,097 in 1991. This was about 1.8 % increase per year and a slight increase compared to the national average growth rate of 1.7 % for the period concerned. According to the census carried out by the Department of Census and Statistics in 2001 the annual population growth in the Maharagama Town during the decade 1991-2001 had been 2.4 % per year and the population as at 2001 had been 180,112. This is relatively a slow growth rate when it is compared with the population growth rates of bordering towns Kesbewa and Homagama.

2.1.1 Composition of Population

Maharagama urban area has a population of 180,112. Of this population 49.05% or 88,358 are male, whilst 50.05% or 91,754 are female.

Table 02

Population by Age-Group (1981-2001)

Maharagama Urban Council

Age (Years)	1981		2001	
	Population	Percentage	Population	Percentage
Below 1	2,212	1.8	1,801	1.0
1-4	7,868	6.4	6,844	3.8
5-9	11,064	9.0	11,707	6.5
10-14	12,294	10.0	12,968	7.2
15-19	12,785	10.4	18,192	10.1
20-24	14,998	12.2	32,060	17.8
25-44	39,218	31.9	58,717	32.6
45-64	16,474	13.4	24,495	13.6
Above 65	6,029	4.9	13,328	7.4
Total	122,942	100	180,112	100

Source: Department of Census and Statistics

Population by age group is a direct indicator helps to compute school going population, labor force and dependents. The population included in the age group 5-19 is 42,867. This is 23.8% of the total population of the area. The facilities available in the schools in Maharagama are not adequate for the school going population.

Table 03

**Distribution of Population by Planning Units (Grama Niladhari Division)
(1981-2001)**

Grama Niladhari Division	1981	1991	2001
1. Mirihana	8,077	9,533	11,834
2. Madiwela	7,866	9,284	11,524
3. Udahamulla	10,729	12,661	15,717
4. Gangodawila	10,285	12,139	15,069
5. Navinna	11,852	13,988	17,363
6. Pamunuwa	6,249	7,376	9,156
7. Depanama	6,180	7,293	9,053
8. Maharagama	4,112	4,852	6,024
9. Pannipitiya	3,992	4,711	5,848
10. Godigamuwa	16,295	19,231	23,872
11. Talawathugoda	6,970	8,226	10,211
12. Kalalgoda	2,516	2,969	3,685
13. Kottawa A	9,690	11,437	14,196
14. Kottawa B	4,148	4,896	6,077
15. Liyangoda	2,390	2,821	3,502
16. Ruckmale	4,874	5,752	7,139
17. Malapalla	3,504	4,135	5,133
18. Makumbura	3,214	3,793	4,709
Total	122,942	14,5097	180,112

Source: Department of Census and Statistics

2.1.2 Population Density

The population density of the Maharagama urban area during the last three decades and the projections for the next two decades are given in the Table No.4 and Chart No.1

Table No.4

Existing and Projected Population Density

Year	Population	Population Density Persons per Hectare.
1971	100909	26
1981	122942	31
1991	14547	37
2001	180112	46
2011	213487	54*
2021	253047	64*

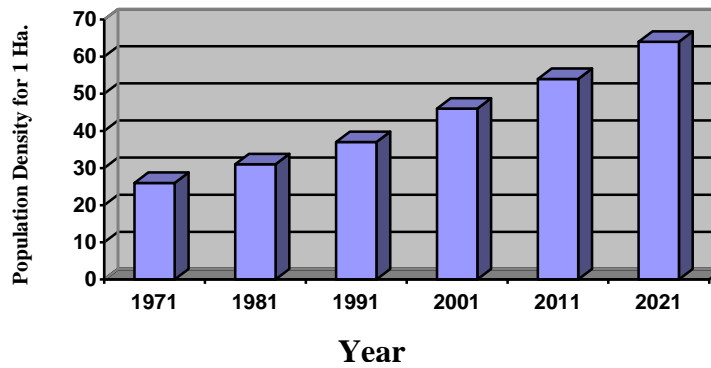
- Projections

Source: Department of Census and Statistics Population
Forecast: Urban Development Authority

Chart 01

Existing and Projected Population Density

Population Density: No.of Persons per Ha.



According to the above Table the population density in Maharagama Town has gradually increased and by 2001 it has come to a point of 46 persons per hectare. From 1971 to 2001, the population density has been doubled. Within the next decade it has the potentiality to increase further.

When considering the regional distribution of population although Godigamuwa Planning Zone with 8.3 % of the total land area has the highest population of 13%, yet its population density is relatively low. (73 persons per Ha), Mirihana region with 120 persons per hectare has the highest population density. 6.5% of the total population occupies only a small portion of 2.4% of the total land use. The main contributory factors for this highest concentration can be attributed to its proximity to the Parliamentary complex and easy accessibility to Colombo city and also the attractiveness of the Nugegoda town as a commercial center. Eventhough the population density is high, the size of each residential block of land in Mirihana area is about 375 square meters (15 perches). This is about 700 and 421 square meters (28 & 19 perches) in Godigamuwa and Madiwela areas respectively.

Kalalgoda, Liyangaoda, Kottawa and Makumbura are the places with the least population density in the region. These places consist of 22% of the total land area, but the population density, is 10% of the total population density of the region and it, is less than 30 persons per hectare (Map No.4). The average size of a residential block is 80 perches (1/2 acre). Because of this low density the tendency of converting these agricultural land for other development purposes is low.

2.1.3 Population Forecast

The projected population for Maharagama has been estimated based on the following factors.

1. Maharagama urban area has been identified as one of the highly populated density areas proposed under the Western Province Mega-Polis Development Plan. Accordingly population could be increased from 45 to 65 per hectare.
2. Maharagama town comes under the Core area of the Colombo Mega-Polis Development Plan. Accordingly it is assumed that that Maharagama town will maintain the same annual 2.7% population growth rate projected for the core area.
3. When Colombo city is elevated to an international commercial hub, residential facilities for immigrants could be provided in Maharagama town.
4. The population growth rate within Maharagama urban area during 1991-2001 decade was very fast and it is about 2.4%

According to the Western Province Mega-Polis Regional structure Plan Maharagama urban area has been identified as a high-density population area. It has also been identified as a first level commercial center situated within the core area of the Mega-Polis Development plan. Based on the above factors population distribution within the Maharagama Urban Council area has been classified as low, medium and high. Accordingly the projected population for Maharagama town in 2021 will be 253,047. (Table No.05).

Table 05

Projected Population Growth-2021

(Maharagama Urban Council)

Growth Category	Annual Growth Rate	Population
1. Low	1.50	219,989
2. Medium	1.70	253,047
3. High	2.00	268,695

Source: Urban Development authority

2.2 Housing

2.2.1 Existing Housing Facilities

In 2001, there were 34,603 housing units within Maharagama Urban council. From 1990-1994, the housing units in Maharagama had been increased at the rate of 3.4% per annum. This was a relatively higher growth rate in comparison to the rate of growth experienced by the other bordering cities. Maharagama is having about 725 square meters (29 perches) of land per housing unit. This suggests that the availability of lands within Maharagama urban area will be sufficient to provide additional housing requirement of the town for another 10 to 15 years. Table 6 depicts the demand for houses in Maharagama town.

Table 6

Demand for Houses 1990-2001
Maharagama Urban Council

Year	No. of Building Applications	No Applications for Re-division of blocks Of land	No. of divided Plots
1990	1120	610	1028
1991	1176	678	1210
1992	1130	756	1253
1993	1121	778	1315
1994	1240	810	1418
1995	1302	842	1526
1996	1400	858	1538
1997	1490	910	1620
1998	1510	966	1721
1999	1672	1102	2670
2000	1678	1448	2828
2001	1714	1516	2943

Source: Maharagama Urban Council

According to the latest data available (1990 – 2001) 97% of the housing stock in Maharagama Urban Council area is in a condition. The balance 3% needs improvement (Table 7). Most of these houses that need improvement which are unauthorized constructions on marshy lands and reservations owned by public institutions like Urban Development authority and Department of Railway. Besides these housing units, about 6% of the total housing stock need improved infrastructure facilities developments. Main housing schemes are located at places like Mirihana and Madiwela. These are low-income housing projects. Eg. Rahulapura, Pragathipura, Nivanthipura and Welsirpura.

Table 7

Classification of Houses according to Status-2001

Status	No. Of Houses	%
Permanent	33,719	97
Semi-Permanent	534	1.5
Slums	350	1.5
Total	34,603	100

Source : Maharagama Provincial Office

According to the latest data available (2001) the density of houses in each planning unit is given in Table 8. Mirihana and Madiwela planning areas have the highest density, whilst the lowest density is reported from Kalalgoda, Kottawa B, Liyangoda and Makumbura areas. (Map No.05)

Table 8

**Housing Density by Planning Units
Maharagama Urban Council**

Planning Unit	No. of Houses	Extend of Land (Hectare)	Density (No. Per Hectare)
Mirihana	2274	98	24
Madiwela	2214	122	19
Udahamulla	3019	318	10
Gangodawila	2895	206	15
Navinna	3336	248	14
Pamunuwa	1759	282	7
Depanama	1739	178	10
Maharagama	1157	122	10
Pannipitiya	1124	124	10
Godigamuwa	4596	329	14
Talawathugoda	1961	303	7
Kalalgoda	708	199	4
Kottawa A	2727	403	7
Kottawa B	1168	296	4
Liyangoda	673	176	4
Ruckmale	1372	173	8
Malapalla	986	162	7
Makumbura	905	211	5
Total	34603	3950	

Source : Dept. of Census and Statistics, UDA

More than 350 unauthorized houses have been built in the marshy lands coming under the property of Urban Development Authority. Further 2,000 low-income houses are available within the Maharagama town. Another 136 unauthorized houses have been built in crown lands. These are Railway Department reservations at Welsiripura, Udahamulla, Navinna and Pannipitiya. Increasing land prices and job opportunities available in the town are the main contributory factors for these shanty settlements. However, they have created many social and environmental problems for the area.

Settlements in Crown Lands;

Prominent Area	No. of Families
Welsiripura (Reservations under ownership of Urban Development Authority:	76
Railway Dept. Reservations at Udahamulla, Navinna and Pannipitiya:	<u>36</u>
Total	<u>112</u>

2.2.2 Housing Need

a. Housing need for 2001

Population	180,112
Family size	4.76
Housing units needed	37,840

b. Shortage of Houses for 2001

Required No. Of Houses	37,840
Houses available	34,603
Shortage (Approximately)	3,237
Houses to be improved	534
Houses to be re-constructed	<u>350</u>
Total shortage	4,121

Shortage as a percentage of available houses:11%

Source : Census & Statistic Report - 2001

2.2.3 Identified Problems relating to Housing

The following are the main problems relevant to housing :

- Lands available for residential plots are being used for agricultural purposes
- Existence of low lands and marshy lands

3.0 Land Use

3.1 Current Land Use Pattern

Maharagama Urban Council area consists of 3,949.8 hectares (Sq.K.M 39.48) of lands.

Table 9

Current Land Use Pattern - 2002

Land Use Pattern	Extent (Hectare)		As a Percentage of Total	
1. Residential		2612.3		66.1
2. Commercial		74.4		1.9
3. Industrial		32.3		0.8
4. Public and Institutional		137.5		3.4
(a) Health	25.3		0.6	
(b) Education	55.7		1.5	
(c) Religious	33.4		0.8	
(d) Public Institution	11.1		0.2	
(e) Parks and Playgrounds	3.8		0.1	
(f) Cemeteries/ Burial Grounds	8.2		0.1	
5. Roads		293.0		7.4
6. Agricultural Land		705.7		18.0
(a) Paddy	567.7		14.6	
(b) Coconut	82.8		2.1	
(c) Rubber	55.2		1.4	
7. Undeveloped Lands		94.6		2.4
(a) Water bodies	11.8		0.3	
(b) Marshy lands	82.8		2.1	
Total		3949.8		100

Source: Urban Development Authority
(Remote Sensing Mapping & Field Survey Section)

According to the above Table land use pattern in the area is mainly for residential purposes (66%). About 18% and 7% have been respectively used for agricultural and approach road purposes respectively. This confirms the demand for land for residential purposes.

Urban land use pattern shows a larger extent of lands has been used for public and institutional purposes, whilst, only around 2% have been used for commercial purposes.

Waterways and marshy lands constitute of 2.4% out of this a large extent of marshy lands are associated with Diyawannawa Oya and Borelesgamuwa Weva

3.1.1 Residential Land Use

The lands used for residential purposes are 2,612.2 hectares. This is 66% of the total land area and 83.14% of the developed lands.

The population density is higher at Gangodawila, Godigamuwa, Mirihana, Madiwela, Navinna and Depanama areas. It is over 50 people per hectare. The easy access and the proximity to Colombo City are the main contributory in addition to the Sri Jayewardenapura University, Cancer Hospital and RPICO factory are the major contributory factors for the higher population density within Gangodawila and Godigamuwa area. At present the land available in these areas are about 135 square meters or 5.4 perches. In Mirihana and Madiwela areas this is only 80 and 105 sq.m. (3.5 and 4.2 perches) respectively. The establishment of the housing complexes like Welsiripura, Senadilankaragama and regularization of unauthorized occupations of UDA lands are the contributory factor for this higher population density.

The population density at areas like Kalalgoda, Liyangoda and Kottawa North is less than 30 persons per hectare. Because these areas are still under agricultural, activities such as rubber, coconut and other agricultural crops extending to 2 to 4 hectares (5-10 acres)

Residential lands have increased from 1,134.3 in 1984 to 2612.3 in 2002. This is a 61% increase. About 2% of additional lands have been identified for residential purposes by blocking out rubber, coconut lands and filling of paddy fields.

3.1.2 Commercial Land Use

In Maharagama town a linear commercial development has found to be developed along the access roads. New commercial developments located on high level road has expanded and concentrated at Kottawa junction. The sub service centers have spring up into existence at Thalawatugoda, Pannipitiya and Vidyala junction.

Of the total land use 1.9% (74.4 hectares) has been used for commercial purposes. This is 2.2% of the total developed lands.

The fair, other retail business, textile, electrical items and other curios and related business establishments have been concentrated along Maharagama Dehiwala road. Further banks, financial institutions, public institutions, furniture business, and business in electrical equipments are located along the high level road. Cut-pieces textile business in mainly located in the Old road and Pamunuwa road. Now there is a tendency for this business to spread along the railway line.

The availability of common amenities and facilities along main roads attracts the general public to the business centers located along the main road. These are the main factors for linear development of commercial activities in Maharagama town.

Although Pamunuwa cut pieces textile business is an informal commercial activity it performs around Rs. 2 to 4 million worth of economic transactions a day. It has expanded from the town center to the Pamunuwa junction. This business has encroached on the Pavement on the Pamunuwa road. It has been transformed into a wholesale business center for cut pieces textiles. There are 862 business outlets here. But 62% percent of these outlets are being operated in temporary buildings. Traffic congestions and garbage accumulation caused by the activities of this business acts as a constraint for other development activities of the area. Local authorities can get an additional revenue by formalizing these informal commercial activities.

Kottawa town has become a second level commercial center, even though the business activities have been concentrated within a smaller area. Banks, financial institutions, hotels and eating-houses are the main commercial activities in Kottawa town. They are located along the high level road. The high population densities in Maththegoda housing scheme, areas around Piliyandala town and Palenwaththa can be considered as the contributory factors for the Kottawa town to develop along Kottawa-Piliyandala road. Parallel to this there is a requirement to expand the town development along Athurugiriya road towards the railway station.

3.1.3 Land use for Industries

Land use for industries in the area is only 1% out of the developed lands. Wattegedera road and Dehiwela road can be identified as two main industrial zones. Richard Pieris factory found closer to Wattegedera junction is the main industry. This is a major employment generating industry in the area. Hidramany Factory, A.P.S. and two garment factories are found in Dehiwala road industrial zone. The employments generated by these factories have considerably helped for development of Maharagama town. Number of small-scale service industries is spread all over the Maharagama area. The location of these industries has an impact on the infrastructure facilities in the town. Infrastructure facilities have been concentrated in association with these industries. This can be witnessed when electricity distribution pattern is examined.

Table 10

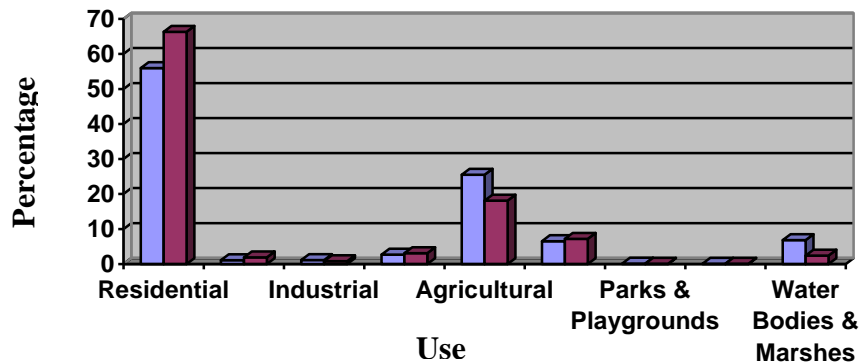
Changes in Land Use Pattern (1984/2002)

Usage	Extent Hectare 1984	Percentage	Extent Hectare 2002	Percentage
1. Residential	1134.3	55.96	2612.3	66.3
2. Commercial	22.3	1.10	74.4	1.9
3. Industrial	23.3	1.15	32.3	0.8
4. Public Institutions	54.9	2.71	125.5	3.1
5. Agricultural	516.5	25.48	714.7	18.1
6. Roads	132.6	6.54	284.0	7.2
7. Parks & Playgrounds	2.6	0.13	3.5	0.1
8. Cemeteries & Burial Grounds	2.0	0.10	3.5	0.1
9. Waterways & Marshy Lands	138.4	6.83	94.6	2.4
Total	2026.9	100.00	3949.8	100.0

Source: Urban Development Authority - Remote Sensing and Field Survey

Chart 02

Changes in Landuse Pattern (1984/2002)



Source : Urban Development Authority – Remote Sensing and Field Surveys

3.1.4 Problems relevant to Land Use Pattern

The following are main issues relevant to land use

- I. Although it is a regional level commercial center the land use for commercial activities has been confined only to 1.9%
- II. Land use for recreational purposes is relatively low (0.1 %) in relation to the population increase.
- III. As there are no alternative commercial centers, for all the commercial requirements people have to come to the town center, causing a high traffic congestion in the town.
- IV. Establishments of national institutions have been haphazardly located in various places in the town, there by the town is not receiving the optimum benefits.
- V. The area in between old road and high level road have been haphazardly improved.
- VI. Haphazardly development improved either side of the Pamunuwa Road.

4.0 Land Value

The field survey conducted in the area revealed that the value of 25 square meters (1 Perch) of land in the town center is in a range from Rs.700,000 to Rs1,000,000. This indicates the lands in the town center has the highest value. The land values in areas like Pamunuwa, Navinna and Kottawa are low. However, in case of lands closer to the main roads these values are higher. This is a predominant feature along the high level road. The maximum value of 25 square meters (1 perch) of land in areas like Depanama, Polwaththa and Liyangoda is less than Rs.60, 000. This is due to rural characteristics and poor infrastructure facilities available in these areas. The land values in the Godigamuwa area are relatively low because of the location of Cancer Hospital. The lands in areas like Weeramawatha, Depanama and Godigamuwa are valued at lesser prices as Rs.30, 000 per 25 square meters (1 perch). This indicates the uneven distribution of the infrastructure facilities in these areas.

5.0 Economic Structure

5.1 Economic Situation in the town

Maharagama town's developed mainly as a residential area. Currently it is developing as a commercial center and a center for providing institutional services.

According to the Records available at the Divisional Secretariat, Maharagama, 27016 persons or 24 % of the total labour force was unemployed in 2001. The number of employed persons within the area is 84,168. Most of them are government servants or employees of the institutions affiliated to the government (Table 11. Chart 03)

Table 11

Employment-2001

Employee Category	Number
1. Skilled Labor	9124
2. Vocationaly Trained and having certificates	71498
3. Foreign Employment	3546
Total	84168

Source: Divisional Secretariat - Maharagama

Chart 03

Employment - 2001



Source : Divisional Secretariat, Maharagama.

5.2 Trades and Commerce

According to the Urban Land Use Survey carried out in 2003, 1.9% of the total land area is used for commercial activities. Most of these commercial enterprises are concentrated in the town center. In comparison to the total population. The percentage involved in commercial activities is very low. Remnant pieces textile business carried along the Pamunuwa Road is a business with very special characteristics within the Maharagama Urban Council area.

There are large number of businesses have concentrated within the heart of the town. The major constraint in maintaining the economic balance of the town is not only due to the concentration of large number of businesses in the heart of the town, but also the presence of business activities within the small towns such as; Polwatta, Depanama, Madiwela, Thalpathpitiya, Godigamuwa, Neelammahara and Kalalgoda which are located in rural areas.

Along the main road, there is a linear commercial development. The main factor for this situation is the concentration of most of the common amenities along the main road and towards the heart of the town. The consumer population are also attracted to shops situated along the main road.

5.2.1 Cut-pieces textile business at Pamunuwa

This is an informal commercial center, but its daily turnover exceeds Rs.2 to 4 million. This has informally and rapidly expanded from town center towards Pamunuwa junction and has become a national level commercial activities. Pamunuwa Remnant pieces textile center has now developed as a wholesale business. The remnant pieces textile vendors are now operating all over the country. Remnant pieces textile business also can be considered as one of the many national level service providing centers situated in Maharagama. This business has encroached on the pavements of both sides of the Pamunuwa Road and now has extended along the railway line also. The sales outlets in this location can be classified into 3 main groups.

1. Informal sales outlets are normally under temporary stalls (Has been constructed using temporary raw materials like polythene, pieces of sheets etc.)
2. Formal shops (This includes permanent constructions and building complexes)
3. Middle level shopping complex (This includes all established business centers having permanent shops with adequate space, facilities and trading stocks. This classification is explained in the following Table 12.

Table 12

Category of Pamunuwa Cut Piece Textile Shops

Group	Number	Percentage
Informal Sales Outlets	537	62.3
Formal Sales Outlets	321	37.2
Middle Level Shopping Complex	04	0.461
Total	862	100

Source: Field Survey 2000, UDA

In addition to remnant pieces textile business the raw materials like cloths, threads, buttons etc required for dressmaking are the main items available for sale in these shops. Ready-made garments are also available there, for retail or wholesale business. Drugs, perfumes, Electrical goods and footwear are the other items of merchandise available in these shops.

This is an area, which has been expanded as a major business zone providing some national level services. However, these services had caused traffic congestions and garbage accumulation creating environmental problems for the Urban Council. Even though, the activities carried out here have the revenue earning potential, it has not been properly tapped due to haphazard development.

6.0 Infrastructure Facilities

6.1 Physical Infrastructure Facilities

6.1.1 Transport

Passenger transport services available in this area can be classified into the following categories according to the mode of transport used

1. Highway Passenger Transport
 - Peoplised Transport Service
 - Road Passenger Transport Authority
2. Railway Passenger Transport Service

6.1.1.1 Highway Passenger Transport

Long distance travel services that operate through the city have an important significance. There are large number of buses operate daily from the Maharagama Town to the destinations like Badulla, Embilipitiya, Ratnapura and Avissawella. In addition to this an important regional road network had been also developed centering Maharagama.

These transport services render a highly valuable service to the people living in Maharagama. In addition about 100,000 to 150,000 floating population traveling to Maharagama daily for obtaining various services. Both Peoplised Transport Services and Private Transport Services operate around 800 busses a day along 36 routes (Table 13 to Table 17).

The other transport facilities used for transport are private vehicles and three wheelers. Three wheeler services are available all over the city. This facility can be obtained at main junctions.

Table 13

**Bus Routes
Peoplised Transport Service**

Route No	From	Via	To
112	Maharagama	Dickmon Road	Kotahena
112	Maharagama	Dickmon Road	Fort
119	Maharagama	Bellanwila	Dehiwala
119	Maharagama	Jubilee Post	Nugegoda
123	Maharagama	Rukmale	Athurugiriya
131	Maharagama	Borella	Wellampitiya
138	Maharagama	Pettah	Mahabage
212	Maharagama	Pannipitiya	Arawwala (Not inoperation)
212	Maharagama	Pamunuwa	New Hospital
280	Maharagama	Kottawa	Kiriwattuduwa
341	Maharagama	Arawwala	Makuluduwa, Piliyandala
341/1	Maharagama	Arawwala	Bokundara
577	Maharagama	Malapalla	Homagama
993	Maharagama	Malabe	Kaduwela
994	Maharagama	Kalalgoda	Hokandara
995	Maharagama	Polwatta	Borella
341/2	Maharagama	Neelammahara	Katuwawela

Source: Peoplised Transport Service - Maharagama

Table 14

Peoplised Transport Service Via Maharagama area

Route No	From	Via	To
153	Talapatpitiya	Pitakotte	Borella
259	Talapathpitiya	Ambuldeniya	Nugegoda
119	Nugegoda	Maharagama	Dehiwela

Source: Divisional Secretariat - Maharagama

Table 15

Private Buses starting from Maharagama Junction

Route No	From	Via	To
138	Maharagama		Pettah
112	Maharagama		Kotahena
131	Maharagama		Kolonnawa
124	Maharagama		Ihala Bope
125	Maharagama		Padukka/Ingiriya
996	Maharagama		Kaduwela
203	Maharagama		Horana
203	Maharagama		Horagala
299	Maharagama		Nawalamull
299/1	Maharagama		Meegodadeniya
119	Maharagama		Dehiwela
345	Maharagama		Katuwawela
341	Maharagama		Piliyandala
341/2	Maharagama		Bokundara
192	Maharagama		Moratuwa
119	Maharagama		Nugegoda
212	Maharagama		New Hospital

Source: Peoplised Transport Service - Maharagama

Table No. 16

Buses Starting from Kottawa Junction

Route No.	From	Via	To
255	Kottawa	Piliyandala	Galkissa
336	Kottawa		Malabe
342	Kottawa	Gorakapitiya	Piliyandala
296	Kottawa	Mattegoda	Piliyandala
128	Kottawa		Kiriwattuduwa
174	Kottawa	Battaramulla	Borell
138	Kottaw	Maharagama	Pettah

Source : Peoplised Transport Service - Maharagama

Table 17

Private Bus Routes under the Control of Provincial Transport Authority

Route No	From-To
122	Colombo-Avissawella
122	Kaluaggala-Colombo
125	Padukka-Pettah
125	Ingiriya-Pettah
136	Rukmalgama-Pettah
138	Mattegoda-Pettah
99	Colombo-Badulla
99	Colombo-Balangoda
122	Colombo-Ratnapura
122	Colombo-Ambilipitiya
99	Colombo-Bandarawela

Source : Peoplised Transport Service - Maharagama

6.1.1.2 Railway Transport

Kelaniweli Railway line passes through Maharagama urban area. Six railway stations along this Railway line are situated within the Maharagama Urban area. Around 5,000 commuters are using these railway stations per day. (Table 18)

Table 18

Railway Transport –2001

Railway Station	Season Tickets Monthly	Tickets-Monthly	Tickets Daily	AV. No. of Commuters per Day	Railway Stops	Express
Udahamulla	170	9706	325	1000	18	6
Navinna	100	400	200	300	18	6
Maharagama	500	10,000	500	1000	22	
Pannipitiya	484	9,000	425	925	20	
Kottawa	515	9,400	465	1000	22	
Malapalla	88	3,060	128	250	18	
Total	1857		2043	4475		

Source : Government Railway Department

Kelaniweli Railway line has been improved by providing a wider track from Colombo to Avissawella. About 11 trains are operated on this route per day, out of which, 3 trains are express. They stop at Maharagama and Kottawa railway stations. 95 % of railway commuters travel direct up to Colombo. However, this railway line is not utilized to its full capacity.

Railway timetables have been prepared mainly targeting the daily traveling needs of working population from Colombo, Homagama, Padukka and Avissawella towns.

According to the number of vehicle movements per hour, vehicles from Kottawa record the maximum average number of movements, Nugegoda takes the second place whilst, the lowest vehicle movement is recorded in Boralessgamuwa.

Accordingly, every 2 seconds a vehicle passes through the town center.

6.1.1.3 Transport Problems

The following are the transport sector problems

- The availability of number vehicle turning places are close to each other (Close to bo-tree and police junction) is causing interruptions to the speed of vehicles passing through the town and also creating traffic congestions.
- Traffic congestions are caused due to parking vehicles at about 8 places in the town in a haphazard manner
- Buildings on the island like place at the point where Old Road intersects the High-level road are causing obstacles to smooth flow of the vehicles passing the through town center.
- As the road is not separated from the pavement with an iron fence, pedestrians are crossing the road haphazardly causing obstacles to vehicles passing the town
- Preserved of whole sale business centers along the Old Road, loading and unloading goods and parking vehicles along the road sides are also another factor for causing vehicle congestions.
- Encroachment of places set a part for vehicle parking by pavement hawkers
- Parking of three wheel vehicles haphazardly along the road

6.1.1.4 Road network

Colombo-Ratnapura road passes through the town centers of Maharagama and Kottawa. The networks of other roads that have been connected to this road are being used for transporting goods and services required by the people as well as for passenger transport. Along these roads daily about 30,000 to 32,000 vehicles are passing to Colombo. The number of vehicles passing through Borelessgamuwa, Piliyandala and Borella is about 20,000 per day respectively.

In Maharagama buses are operating along 36 routes, out of which the following routes have high volume of operation.

1. High level Road
2. Maharagama-Piliyandala Road
3. Maharagama-Dehiwela Road
4. Maharagama-Pamunuwa Road
5. Kottawa-Piliyandala Road
6. Kottawa-Borella Road
7. Kottawa-Athurugiriya Road

The ownership of the road network within Maharagama town vested with the following Authorities ;

1. Road Development Authority- 41 KM (Grade “A”/ Grade “B”)
2. Provincial Road Development Authority 25 KM. (Grade “B”/Grade “C”)
3. Urban Council Roads 170 KM
4. Private Roads

6.1.1.5 The identified problems relating to road network

- The width of 78 % of the roads is less than 15 feet. These narrow roads are a hindrance for development. It also causes problems in constructing side drains for smooth flow of storm water.
- **Un-planned road junction within the town center**

As the intersections of Old Road, Pamunuwa Road, Dehiwela Road, High Level Road, Piliyandala Road, Borella Road and Athurugiriya Road have not been properly planned, it causes transport problems and continuous congestions.

- **Improperly Planned Alternative Roads:**

Railway Station, Vidyakara Mawatha, Alhena Road, Library Road and Mahamega Road are the roads that can be used as an alternative road to Highlevel Road. But they have not been adequately developed.

- Road network has not been properly maintained.

6.1.2 Electricity

Electricity is supplied to the entire urban council area. The Lanka Electrical Company Ltd distributes electricity in the area. 95 percent of households have electricity and the Urban Council is responsible for the street lighting.

The electricity network which spreads over 78 K. M has a capacity of 7800 kilowatts and is capable of supplying electricity for the entire urban council area. There are two types of electricity lines. They are;

1. Distribution lines
2. Service lines

The distribution lines are used to supply electricity to industries and domestic uses, whilst service lines provide streetlights and other services. (Table 19). This project includes the development of 28 substations and has been planned for 20-year period.

Table 19

**DISTRIBUTION OF ELECTRICITY
MAHARAGAMA URBAN COUNCIL AREA**

Year	No. of Houses	Units	Public Institutions	Units	Business Establishments	Units
1995	14673	20612	103	636	1680	10433
1996	15260	22261	105	721	1737	11933
1997	15797	24264	110	853	1825	13612
1998	16738	20516	126	997	1979	15619
1999	17494	27763	136	1117	2144	17510
2000	18365	30053	142	1162	2254	18450

Source: Lanka Electricity (PVT) Co. Ltd

In addition to the Lanka Electricity Company, the Ceylon Electricity Board also supplies electricity to this area. In 1999 the Ceylon Electricity Board has supplied electricity to 26,608 houses.

6.1.3 Water Supply

The 4 sub-stations of the National Water Supply and Drainage Board is carrying out the main functions such as distribution of water to the domestic consumers and the maintenance of the water supply services within the Maharagama Urban Council area. These water distribution services are connected to the water supply main systems from Kalatuwawa to Dehiwala and Ambathale to Colombo.

Pipe-born water services are available for about 80% of the urban council area. (MAP No.10). It is expected that the Greater Colombo Water Distribution Project commenced in 1995 to take over the water distribution services of the entire area. In designing this project consideration has been given to provide water supply services to the projected population for 2010. Even though the ground water only is found in the entire area, only about 70% of the population are still depends on well water supply.

6.1.3.1 Identified Problems

- Water supply services are not available for low-income areas. In addition, the main problem that has been identified, that the supply of drinking water in the area is acute shortage.

6.1.4 Telephone Facilities

Sri Lanka Telecom is responsible for extension, maintenance and management of telephone services for the entire area. Short wave systems with a capacity of sub units 3058 attached to Havelock town telephone exchange provide telephone services. The special telecommunication services implemented by the Sumitomo institute of Japan is having the capacity to provide all telephone connections to cater the demand in the area. This is a project executed by the Department of Telecommunication with the assistance of the OECF aid. (Map No.11). Now there are 4000 customers in the waiting list for telephones. Under the OECF project it is expected to provide 11000 new telephone connections by the end of 2001. This will be supplemented by the connections that will be provided by the private telephone companies.

6.1.5 Storm Water Drain System

There is no proper storm water drainage system within the urban council area. Borelesgamuwa Lake is situated on the western side of the town whilst, Diyawanna Oya is on the northern side. In addition existing paddy lands, natural waterways and marshy lands serve as water retention places. There is a cement constructed drainage system extending to about 4500 meters only in the city center. In the other areas the natural geo physical features provide drainage facilities for storm water. Due to unauthorized land fillings, Madiwela, Mirihana, and areas along Parana Kesbewa road have become vulnerable areas to floods.

6.1.5.1 Problems

Issues relating to storm water drainage are as follows:

- Unauthorized constructions and dumping wastes in areas from Katu-Ela Delkanda junction to Bellanwila and on marshy lands at Aththidiya, have obstructed natural waterways
- Wastes and silting obstruct drains along roads
- Unauthorized land fillings obstruct natural water flows
- Storm water drains are not regularly and properly maintained

6.2 Social Infrastructure

6.2.1 Educational Facilities

The formal and the informal educational institutions in Maharagama in the field of education, health, banking and youth services are not only significantly important at the regional level, but also at the national level.

The following national level institutions are located within this urban council area

- Sri Jayewardenepura University
- National Institute of Education
- Training School of Dental Nurses
- Training Institute for Bankers
- National Youth Services Council

There are 25 schools within Maharagama area with a student population of 24015. This is only 65% of the total school going age group population in the area. This indicates that, about 1/3 of the students in the area are attending the schools from out side the town. This indicates that there is a shortage in schools in the area. Further, it reveals the existence of popular national schools in the adjoining urban areas. The table number 21 gives the number of schools in the area and the descriptions thereof.

Table No.20

THE FACILITIES IN SCHOOLS IN THE MAHARAGAMA URBAN COUNCIL AREA-2000

Name of School	No. of Students	No.of Teachers	Buildings Area Sq.ft	Extent Ac.R.P	Grades	Pipe water	Electricity	Play grounds
Widyakara M.V	2706	94	34400	1:2:33	1-13	Y	Y	N
Kottawa Ananda V.	3947	73	31198	4:0:4	1-13	Y	Y	Y
Buvanekaba M.V.	710	35	18800	1:3:30	1-13	Y	Y	N
Maharagama Central M.V.	1300	61	38200	3:0:0	6-13	Y	Y	Y
Kottawa Vidyadana M.V.	280	19	14973	2:2:35	1-11	N	Y	N
Polwaththa Junior	12	05	6160	3:2:	1-5	N	N	Y
Madiwela Sri Rahula M.V.	950	48	22000	7:2:0	1-13	N	Y	Y
Kalalgoda	153	15	10700	3:2:18	1-11	N	Y	N

M.V.								
Ruckmale M.V.	293	18	7600	1:3:5	1-11	N	N	N
Mahamaya Girls M.V.	1051	44	17600	0:1:39	1-13	Y	Y	N
Maharagama Buddhist School	315	17	14250	0:3:18	1-11	N	Y	N
Depanama Junior V.	212	17	6600	0:2:0	1-11	N	N	N
Stanley Tilakaratne School V	131	16	13050	2:0:0	1-11	Y	Y	Y
Udahamulla Siddartha M.V.	760	46	21850	4:2:1	1-13	Y	Y	Y
Malapalla Vijayagosha Junior V.	174	20	8400	2:0:2	1-11	N	Y	N
Kottawa Dharmapala M.V.	3144	116	40450	7:0:2	1-13	Y	Y	Y
Kottawa North Dharmapala Junior V.	1693	61	24400	0:0:3	1-11	Y	Y	Y
Pamunuwa Junior V.	178	12	4400	0:0:80	1-11	N	Y	N
Buwanekaba Junior V.	385	24	12600	0:3:0	1-8	Y	Y	Y
Dharmasoka Junior V.	546	21	10400	1:3:10	1-5	Y	Y	N
D.D.Jayasinghe Junior V.	208	18	7200	0:0:120	1-11	Y	Y	N
Rapiel Thennakoon Vidyalaya	210	18	6400	0:2:0	1-11	Y	Y	N
Maharagama President College	3721	136	76505	4:0:0	1-13	Y	Y	N
Ambagahapura Junior V.	547	26	10300	1:2:1	1-11	Y	Y	Y
Pannipitiya Buddhist Junior V.	389	19	8800	0:0:18	1-11	N	Y	Y
	24015	979						

6.2.1.1 Problems

The following are the main problems that have been identified.

- Absence of a good library, laboratory facilities and buildings.
- Lack of adequate playground.
- Non-availability of electricity for some schools.
- High incidence of road accidents and traffic problems due to the location of Buvanecaba Vidyalaya and Vidyakara Maha Vidyalaya in the town centre.
- Inadequacy of lands for Janadhipathi Vidyalaya, the only national school in the area.

6.2.2 Health and Sanitary Facilities

The following health facilities are located within the area.

- | | | |
|-----------------------------|---|----|
| • Government Base Hospitals | - | 03 |
| • Private Hospitals | - | 01 |
| • Private Dispensaries | - | 17 |
| • Ayurvedic Dispensaries | - | 22 |
| • Dental Surgeries | - | 06 |

Government hospitals that render a national level service to the public are more significant in their service delivery. Sri Jayawardenepura hospital, government cancer hospital and ayurveda research hospital have the capacity to provide medical facilities, research facilities, laboratory facilities and dental surgery. The services of medical specialists from these institutions not only to public residents in the area, but also to the general public.

In addition to this, the maternity and childcare clinics, family planning clinics are periodically carried out. In addition filaria control projects and inoculation of dogs are undertaken by the Regional Director of Health Services.

6.2.2.1 Problems

The following are the problems relating to health and sanitation.

- Inadequate shopping facilities for the purchase of the requisites of the patients by their visitors at Sri Jayawardenepura hospital and the cancer hospital.
- Environmental problems caused by unauthorized constructions around Sri Jayawardenepura hospital.

6.2.3 Recreation and Entertainments Facilities

Land available for entertainments and recreation purposes is limited and constitute only 0.1% of the total land area. In comparison to the total population

of the town this is not adequate. The potential of Boralesgamuwa Lake also has not been properly developed for recreational facilities.

Among the other significant facilities available for the people in the area are as follows.

- Cinema halls 02
- Community Centres 07
- Reading Rooms and Library Facilities 02
- Sports Clubs 12
- Guest Houses 04
- Open Air Theatres 01

6.2.3.1 Problems related to Recreation and Entertainment Facilities

- The spaces allocated for playgrounds and open parks on recreation and entertainment activities are inadequate.
- The negligence of the development of Boralesgamuwa Lake which can be used as source of income to urban council which preserved as aesthetic beauty and create recreation and entertainment.
- Inadequacy of community halls.

6.2.4 Collection and Disposal of Waste

Maharagama Urban Council also faces the similar problems confronted by the other local authorities in the collection and disposal of solid waste. Generally, in Maharagama each residential housing unit has approximately a land space of 600 square meters (20 perches). As such they are in a position to dispose the waste generated by the households within their own premises. But in densely populated areas like Udahamulla, Mirihana and Madewela and within the town centre the disposal of the waste has become an acute problem. Presently the solid waste collection centers in these areas have been identified and for its disposal tractors, hand carts and labourers are employed.

About 50 tons of waste are collected at the 125 solid waste collection centers daily, of which only about 40% could be disposed, daily. (Map No. 13)

The composition of solid wastes generated in these areas are as follows :

Polythene	5%
Vegetable and Animal Parts	50%
Coconut shells and Thambili empties	20%
Metal Parts	4%
Timber Parts	8%
Glass	3%
Paper Waste	<u>10%</u>
Total	<u>100</u>
	===

Source : Urban Council, Maharagama.

65 labourers have been employed for collection of solid waste within the town. The following vehicles have been provided to them.

Tractors	09
Compactors	03
Loaders	01
Tippers	03

A 1 ½ acre marshy land at Madiwela owned by the UDA is used for disposal of solid waste.

6.2.4.1 Problems

The following are the identified problems relating to disposal of solid waste :

- Environmental pollution caused by 60% of the solid waste remaining.
- Environmental damage caused by using the marshy lands and vacant lands in the area as dumping ground for wastes disposal.
- Non availability of adequate land space for disposal of solid waste.
- Environmental degradation due to unauthorized dumping of waste in to marshy lands owned by the Urban Development Authority.

6.2.5 Sewerage

There is no sewerage system within Maharagama town. In addition, there is a sewerage system for Sri Jayawardenepura hospital connected to the Sewerage system of the Dehiwela – Mt. Lavinia Municipal Council. Other national level institutions have their own special sewerage systems.

6.2.5.1 Problems

Problems relating to sewerage systems are as follows :

- Due to the quick urbanization, problems relating to sewerage disposal within the town centre are increasing.
- Due to plots being below 150 sq.m. (6 perches) in extent, the toilet based on pits systems cannot be implemented.
- The increase of the housing density increased the sewerage disposal problem has become a crucial issue.
- Pollution of Ground Water due to accumulation of sewerage in septic tanks.

07. Strengths, Weaknesses, Opportunities and Threats

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
The centralized location facilitates, the ability to maintain good relationships with the neighbouring communities.	Although, Maharagama is a Regional Commercial Centre, the land usage for Commercial purposes is only about 0.19%.	The location of National Level Institutions attract by the Central Government.	The increasing floating population produces a higher volume of garbage in the City.
As it is the main entry point for express highways, regional coordination has become feasible.	78% of the access roads are narrow and less than 15 feet width.	The main intersection of the Southern Express Highway (SEW) and Outer Circle Highway (OCH) will be at Makumbura.	No efficient transport management.
Geo-physical features like lakes, waterways, paddy field and marshy lands have created a natural drainage system.	There is no proper drainage system in the town centre.	As said in Column one (1), the Geo-physical features related to drainage elements will have to be conserved.	Unauthorized land fillings.
Even though, Maharagama is one of the highly urbanized towns, it is also suitable for rural habitation.	Haphazard residential areas.	Create new Housing Complex Schemes.	Unauthorized land filling and human settlements.
Due to the location of Institutions of the City has become nationally significant.	There are no shops in the vicinity of the Hospitals for the visitors.	Possibilities to create settlements closer to Cancer Hospital.	Increased unauthorized building constructions closer to Sri Jayawardenapura Hospital.
About 66% of the total land area is utilized for residential purpose, and 97% the total houses are in good condition for living.	The high prices of a unit of Residential lands.	Introducing new Housing Projects – ex. Welsitipura, Shanthilankaragama.	Unauthorized settlements in Government and U.D.A. lands.
(a) Existence of a road network centralizing the town to facilitate divisional and regional coordination. (b) Kelani valley railway line runs	(a)Location of unplanned road junctions. (b)The railway	(a)Proper planning to develop alternative road construction.	(a)Due to the high urbanization of the Town Centre, unprecedented increases in the floating passengers.

through the City, and six Railway Stations are located within the town limits.	transport is not functioning up-to its full capacity.	(b)Increase the daily railway passengers.	(b)Increased unauthorized construction of buildings in the lands reserved for Railway Department. No proper management.
Electricity and Telephone facilities are available to cover entire area.	5% of the total houses are not provided with electricity.	The additional supply of electricity for the fast urbanization of the Town.	Unauthorized connection of electricity by the temporary shanty dwellers causing electricity leakage.
Remnant pieces business has become an important, it has a daily turnover of Rs.2 to 4 Millions.	The remnant pieces business is not properly organized.	Improvement of this business to formal level.	Due to the improper business activity, the large amount of accumulation of garbage and traffic congestion in the Town.
(a) Daily use of 65 labourers and 14 vehicles for the disposal of garbage.	There are no proper places identified as disposal site.	Mechanization of garbage disposal.	60% of the total garbage is not removed from the Town Centre, which creates environmental pollution.
(b)Maharagama U.C., Dehiwala-Mt. Lavinia, M.C. and private Institutions involved in sewerage disposal respectively.	Because of the high urbanization, the increased sewerage production and inadequate sewerage disposal system.	Introduction of Septic Tank Methods.	Increased environmental pollution.
There are many National educational Institutions and 26 Schools are available.	The inadequacy of infrastructure facilities.	Improving the facilities of reading rooms and libraries.	High incidents of road accidents, because of the strategic location of some Schools in the Town Centre.

08. Maharagama Urban Development Plan

8.1 Planning Vision

The vision of this development plan is to improve the institutional sectors to suit the national and regional requirements which can meet the challenges of the 21st century, develop a first level commercial town as defined in the core area development plan of the Colombo Mega polis and to promote a qualitatively fully equipped and environmentally balanced residential town.

The proposed zoning plan for the area (Map No.14) and building density (Table 21) are given below respectively.

8.2 Objectives & Strategies

The objectives embodied in the plan and the strategies to achieve them are as follows:

Objectives	Strategies
Improvement of infrastructure facilities in order to create affluent residential town	<ul style="list-style-type: none"> -Introducing a zoning planning system planning regulations -Building regulations - Preparation of Development Guide Plan -Systematize the location of middle income houses and improvement to substandard houses in the area
Promote a 1 st level Commercial center	Zoning for utilization of land for diversification of mixed and commercial activities
Minimize traffic congestion by improving transport and road network	<ul style="list-style-type: none"> -Enforcement of road reservation -Providing facilities for parking - Introduce inner circular and outer circular road to the town.
Enhance efficiency of the institutions located within the urban council area by improving necessary facilities	<ul style="list-style-type: none"> -Construction of pipe-borne water distribution system for the entire town area. -Introduce a sewerage system -Improvement and regularization of the surface drainage system for flow of rain water <ul style="list-style-type: none"> - Development of the Thalpathpitiya new town - Re-structuring cancer hospital - Identification of lands for expansion of national institution of educational institute and Sri Jayewardenapura University

<p>Designing plans to meet future requirements and development while protecting existing wet lands, waterways, rivers and natural resources to maintain ecological balance</p>	<ul style="list-style-type: none"> -Increasing leisure and entertainment facilities under the zonal planning -Framing regulations to protect wet lands, water ways, agricultural lands and other natural resources -Introducing canal reservations
<p>Systematize solid waste management. Obtain the maximum private sector participation when implementing urban development plan</p>	<p>Implement the integrated solid waste management plan. Priorities the opportunities private sector investment within the development plan.</p>

Proposed Development Proposals

Identified Problems	Development Proposals	Implementing Institution
<p>Housing</p> <ul style="list-style-type: none"> At present there is a housing shortage amounting to 3961 housing units and housing shortage might increase further in the future. 	<ul style="list-style-type: none"> To permit the agricultural highlands with low productivity to be sub divided subject to a control of standard. To increase the housing density by providing opportunities to construct housing flats in the residential zone in the town centre. To construct housing flats for unauthorized occupants in government reservations. To commence middle class housing schemes to suit the future residential needs at Weera Mawatha, Thalapathpitiya, Kulasevanawatta and Madiwala. To commence low income housing schemes at Kulasevanawatta and Madiwala. 	<p>UDA NHDA</p>
<p>Land Use</p> <ul style="list-style-type: none"> Existence of less than 1.9% of land usage for allocation of commercial activities. Existence of less than 0.1% of land usage for parks and playgrounds. 	<ul style="list-style-type: none"> 6% of land allocated for commercial use in the proposed zoning plan. Development of Makumbura as focal point where it meets the proposed Southern Expressway and Outer Circular Road for a commercial and service centre. 10% has been allocated for wet land natural conservation from the proposed zoning plan. There are more land space available for parks and playgrounds in this zone. 	<p>UDA Maharagama Council Urban</p>

<p>Economic Base</p> <ul style="list-style-type: none"> • Existence of a huge unemployment about 24%. • Pamunuwa Cut Piece Textile Marketing Centre not being development formally. 	<ul style="list-style-type: none"> • Form a high development zone combining Maharagama, Kottawa and Thalawatugoda towns. • Development of Maharagama and Kottawa towns. • Development of Maharagama and Kottawa towns as a first order commercial town within the area. • Development of Thalawatugoda towns as a second order commercial town within the area. • Development of Pamunuwa and Pannipitiya towns as third order towns. • Development of Navinna, Depanama, Vidyala Junction and Makumbura as service centers to main towns. • Economic base being widen due to development of service centers providing commercial and service facilities in areas like Makumbura and Kottawa due proposed Southern Expressway and Outer Circular Road. • Obtaining of portion of land from the Gafuria Arabic College, Maharagama for formal development of Pamunuwa Cut Piece Market Centre. 	<p>Maharagama Urban Council.</p>
<p>Road and Transport</p> <ul style="list-style-type: none"> • Absence of Bus Stands for Maharagama and Kottawa towns. 	<ul style="list-style-type: none"> • A portion of the land where the Maharagama Bus Depot is situated at present is proposed for the Bus Stand and the implementation of the proposal will solve the problem a public bus stand existed hitherto. 	<p>UDA CTB Passenger Transport Authority.</p>

	<ul style="list-style-type: none"> • It is proposed to utilize a portion of a land which has been reserved at present for the rehabilitation of children for a public bus stand which has been shortcoming hitherto for Kottawa Town. It is proposed to utilize a portion of land about 5 acres in extent for the commercial requirement by relocating the Kottawa Children Rehabilitation Centre to Makola area. • Development of Hideki land and a portion of Gafuria College in Maharagama Town for parking of vehicles. 	UDA Probation & Childcare Department. Passenger Transport Authority. Maharagama Urban Council.
<ul style="list-style-type: none"> • Traffic Congestions 	<ul style="list-style-type: none"> • Development of following by-roads to ease the traffic congestion in the town (Map No. 15). <ol style="list-style-type: none"> 1. High Level Road and Old Road – Widening of road from Wattegedara Junction up to Maharagama Road. 2. Dumriya Mawatha – Widening of the Dumriya Mawatha by 12 metres (40 ft.) in width from Wattegedera Junction to Pannipitiya. 3. Vidyakara Mawatha – Improvement and Widening of Vidyakara Mawatha and Elhena Road by 12 metres. (40 ft.). 4. Weerakeiya Road – Improvement and Widening of Waraketiya Road up to Piliyandala Road by 12 metres (40 ft.) 5. Isipathana Road – Improvement and Widening of Isipathana Road up to Janatha Road through the proposed playground by 12 metres (40 ft.). 6. Maharagama – Piliyandala – Improvement and Widening of Maharagama – Piliyandala Road by 15 meters (50 ft.) 7. Improvement of Wattegedara Road 8. Rajamaha Vihara Road – Widening of Nawimana 	UDA Urban Council Maharagama Urban Council Road Development Authority Provincial Road Development Authority.

	<p>Raja Maha Vihara Road as a approach road to the playground and carry out improvements.</p> <ol style="list-style-type: none"> 9. Cross Road – Improvement of the Cross Road connecting High Level Road and the Old Road. 10. Pamunuwa Road – Removing unauthorized construction on either side of road and rectify boundaries. 11. Widening of Thalapathpitiya Road. 12. New Hospital Road to Polwatta Road – Construction of new across the paddy field from the New Hospital Road to Polwatta Road. 13. Widening the Weera Mawatha and to carry out improvements of the road up to the proposed Housing Complex. 14. Shalawa Road - Connecting the Shalawa Road and the Parakum Mawatha a cross the paddy field owned by the Urban Development Authority. 15. Pitawella Road – Construction to connect three subways along the paddy field owned by the Urban Development Authority. 16. Flyover – Construction of Flyover across Pannipitiya Railway Station connecting Borella Road and New Road. <ul style="list-style-type: none"> • Introducing the road reservations and building limits as given in the Annex II. • Outer Circular Road and Inner Circular Road covering the Maharagama Urban Council area have been proposed and thereby the existing traffic congestion in the area could be minimized and the road network of the area would be improved. 	<p>Maharagama UC RDA PRDA UDA</p>
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<p>Sewerage</p> <ul style="list-style-type: none"> Absence of a sewerage system whole town. 	<ul style="list-style-type: none"> A sewerage system has been proposed for areas serving Madiwela – Mirihana coming under Maharagama Urban Council area by the sewerage system proposed for the Kotte Municipal Council by the NWS&DB and the whole area is not covered by it. However, when considering the high population density of the area and other environment factors, there is a necessity of Sewerage System for Maharagama area. In view of the above area action should be initiated with the NWS&DB to prepare a sewerage system to cover the Maharagama urban area. 	<p>NWS&DB UDA</p>
<p>Solid Waste Management</p> <ul style="list-style-type: none"> Absence of a recognized methodology for solid waste management in the area. 	<ul style="list-style-type: none"> It is proposed to implement a national level project for solid waste management in the Western Province at Kesbewa – Karadiyana area and solid waste in Maharagama area could also be diverted to this centre. However, proposed land for waste management within the area itself and recycling methodology should use for solid waste management within urban council area as long term solution. There is a project to distribute compost bins among householders in order to dispose of solid waste at present and action should be taken to insist that all new housing units should compulsory to have a compost bin prior issue the Certificate of Conformity (COC) and also action should be taken to distribute compost bins to all housing units in the area with the initiation of NGOs and the Central Environment Authority. 	<p>Solid Waste Management Board UDA Maharagama UC.</p>

	<ul style="list-style-type: none"> • Construction compost tanks adjoining the weekly fare for the disposal of solid waste collect in the weekly fare and make arrangement for recycling solid waste. • Implementation of training programs and awareness programs. • Implementation of programs in combination of all establishments where implementing the program for solid waste management. • If there are establishments, factories where the solid waste management is carried out efficiently, action should be taken to encourage them by giving tax relief and special allowances. • Increase of private sector participation for solid waste management. • Allocation of sufficient provision from the Annual Budget for solid waste management. 	
Irregular storm water drainage causes flooding of certain area completely during the rainy season	<ul style="list-style-type: none"> • Formation of a plan for storm water drainage in the town centre. • Development of Katu Ela • Redevelopment of Boralesgamuwa Lake • Development of right bank canal of Diyawanna oya • Introduction of drainage system covering the whole of urban council area in addition to the town centre. 	Maharagama UC. Sri Lanka Land Reclamation & Development Corporation. Irrigation Department.
<p>Education Facilities</p> <ul style="list-style-type: none"> • About 1/3 of the school children in the area attend schools out side the town. • Absence of proper infrastructure facilities in majority of schools in the area at present. 	<ul style="list-style-type: none"> • Action to be taken to develop few school at present in the area as national level schools. • Development of at least few Maha Vidyalayas as Central Schools. • Development of at least few junior schools as Maha Vidyalayas. 	Western Provincial Council. Education Department University Grant Commission.

	<ul style="list-style-type: none"> • Necessary steps to provide infrastructure facilities to schools with less facilities. • Necessary action should be taken to expand the Sri Jayawardenapura University by identifying the land requirement for further expansion. 	
<p>Health and Sanitation</p> <ul style="list-style-type: none"> • The difficulty in taking the serious patients quickly to the hospital due to traffic congestion. • Increase unauthorized construction around the hospital. 	<ul style="list-style-type: none"> • Development of Nawinna – Ambuldeniya – Sri Jayawardenapura Road as an alternative road in order to minimize the traffic congestion along Maharagama – Pamunuwa Road. • Construction of a helipad in a block of land owned by the UDA situated close to Sri Jayawardenapura Hospital. • Protection of the environment around the hospital by removing unauthorized stalls constructed within the urban council area. 	<p>RDA</p> <p>Department of Civil Aviation.</p>
<p>Leisure & Recreational Facilities</p> <ul style="list-style-type: none"> • Minimum opportunities for leisure and recreational facilities. 	<ul style="list-style-type: none"> • Implementation of Borelesgamuwa Lake Development Scheme. • Implementation of Thalpathpitiya Green Park Project. • Construction of a Sport Complex in a 14 acre land in front of Richard Pieris Factory at Nawinna. • Construction of a playground in a vacant land of 4 acre in extent situated close to Udyana Mawatha of Papiliyana Road. • Development of a playground in a land 2 acre in extent situated bordering Mirihana Raja Maha Vihara Road. 	<p>UDA Maharagama UC</p>

	<ul style="list-style-type: none">• Designing of strip of land for an Environmental Park on the left side of the New Hospital Road from the Kimbulawala Junction.• Construction of two storied community hall near Mirihana Cemetery Road.• Construction of a community hall in Niwanthipura near Buwanekaba Mawatha.• Providing facilities required for reading rooms and community halls in the area.• Improvement to the community hall at Madiwela, Thalapathpitiya.	
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