

**Approval of the Development Plan for  
Urban Development Area of Balangoda**

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I, Mahinda Rajapaksa, Minister of Defence and Urban Development do hereby approve the Development Plan for Balangoda Urban Development Area, having considered the recommendations made by the Board of Management of Urban Development Authority on 09.10.2013, by the virtue of the powers vested with me under Section 8f of the Urban Development Authority (Amendment) Act No. 4 of 1982.



.....  
**Mahinada Rajapaksa**  
**Minister of Defence and Urban Development**

Ministry of Defence and Urban Development  
No. 15/5,  
Baladaksha Mawatha,  
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19.05.2014...

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## PART I : SECTION (I) — GENERAL

### Government Notifications

#### APPROVAL OF THE DEVELOPMENT PLAN FOR KALMUNAI MUNICIPAL COUNCIL

PUBLIC are hereby informed that the Development Plan prepared under Section 8A of the Urban Development Authority (Amendment) Act, No. 4 of 1982, for the Urban Development Area of Kalmunai Municipal Council has been approved on 19th May 2014, by Hon. Mahinda Rajapaksa, Minister of Defence and Urban Development by virtue of powers vested on him under Section 8 "F" of the said Amendment Act.

NIMAL PERERA,  
Chairman,  
Urban Development Authority.

03rd June 2014.

#### Approval of Development Plan for Kalmunai Municipal Council Area

I, Mahinda Rajapaksa, Minister of Defence and Urban Development, do hereby approve the development plan for the Kalmunai Municipal Council area having considered the recommendations made by the board of Management of the Urban Development Authority on 09.10.2013, by virtue of the powers vested in me under Section 8 F of the Urban Development Authority (amended) Act, No. 04 of 1982.

MAHINDA RAJAPAKSA,  
Minister of Defence and  
Urban Development.

Ministry of Defence and Urban Development,  
No. 15/ 5, Baladaksha Mawatha,  
Colombo 03.  
19th May 2014.

07-207/1



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1A

**APPROVAL OF THE DEVELOPMENT PLAN FOR BATTICOLOA MUNICIPAL COUNCIL**

PUBLIC are hereby informed that the Development Plan prepared under Section 8A of the Urban Development Authority (Amendment) Act, No. 4 of 1982, for the Urban Development Area of Batticaloa Municipal Council has been approved on 19th May 2014, by Hon. Mahinda Rajapaksa, Minister of Defence and Urban Development by virtue of powers vested on him under Section 8 "F" of the said Amendment Act.

NIMAL PERERA,  
Chairman,  
Urban Development Authority.

03rd June 2014.

**Approval of the Development Plan for Batticaloa Municipal Council Area**

I, Mahinda Rajapaksa, Minister of Defence and Urban Development, do hereby approve the development plan for the Batticaloa Municipal Council area having considered the recommendations made by the board of Management of the Urban Development Authority on 09.10.2013, by virtue of the powers vested in me under Section 8 F of the Urban Development Authority (amended) Act, No. 04 of 1982.

MAHINDA RAJAPAKSA,  
Minister of Defence and  
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Ministry of Defence and Urban Development,  
No. 15/ 5, Baladaksha Mawatha,  
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19th May 2014.

07-207/2

**APPROVAL OF THE DEVELOPMENT PLAN FOR BALANGODA URBAN COUNCIL**

PUBLIC are hereby informed that the Development Plan prepared under Section 8A of the Urban Development Authority (Amendment) Act, No. 4 of 1982, for the Urban Development Area of Balangoda Urban Council has been approved on 19th May 2014, by Hon. Mahinda Rajapaksa, Minister of Defence and Urban Development by virtue of powers vested on him under Section 8 "F" of the said Amendment Act.

NIMAL PERERA,  
Chairman,  
Urban Development Authority.

03rd June 2014.

**Approval of the Development Plan for Urban Development Area of Balangoda**

I, Mahinda Rajapaksa, Minister of Defence and Urban Development, do hereby approve the development plan for Balangoda Urban Development Area, having considered the recommendations made by the board of Management of Urban Development Authority on 09.10.2013, by the virtue of the powers vested with me under Section 8 F of the Urban Development Authority (amended) Act, No. 4 of 1982.

MAHINDA RAJAPAKSA,  
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Ministry of Defence and Urban Development,  
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19th May 2014.

07-207/3

## **PREFACE**

Balangoda Urban Council is situated in the Ratnapura District, Sabaragamuwa Province. It is situated 1000 feet above mean sea level with attractive landscape and pleasant climate. The objectives of this development plan is to provide essential service centre for agricultural improvement and to minimize the natural disasters for the development of residential urban area. Due to its location, there are a number of water streams found in this area.

Having considered all the above facts, necessary steps have been taken to minimize the disaster and to develop the area in a planned manner.

## **ACKNOWLEDGEMENT**

The Planning Team of Urban Development Authority, Ratnapura District Office in Sabaragamuwa Province is grateful to the following institutions along with the UN-Habitat for their coordination, for providing necessary technical equipment and for their support in successfully conducting the stakeholder meetings regarding the development plan. At this moment we are extremely thankful to Plnr. Indu Weerasoori Project Manager of DRR and her team and Mr. Manju Pradeep Widanagamarachchige DRR Projects Office for their help at various stages of this Balangoda Development Plan for the support given by them in the preparation of this plan.

- Balangoda Urban Council
- Balangoda Divisional Secretariat
- National Physical Planning Department
- Road Development Authority
- Ceylon Electricity Board
- National Water Supply and Drainage Board
- Archeology Department
- Ministry of Health
- Provincial Council (Sabaragamuwa Province) and Ministries
- Central Environmental Authority
- Census and Statistics Department
- Postal Department

The Team would like to express the gratitude to the Chairman, Director General and Development Planning Division of the Urban Development Authority for the immense encouragement and support given to prepare and finalized of this plan.

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# Chapter One

## 1.0 Introduction

Balangoda is the semi administrative town, located 50 km from Ratnapura, the capital city of Sabaragamuwa province bounded by bordered Central and Southern province of Sri Lanka. Balangoda urban area is established to satisfy the requirements of the pradeshiya sabas such as Imbulpe, Balangoda and Weligepola, which are located in the eastern region of Balangoda electorate, close to central hills and bordering Uva province. According to the hierarchy of the urban centres in Sabaragamuwa province, it is classified as a 3<sup>rd</sup> order town and 2<sup>nd</sup> order town in the Ratnapura district.

The urban area of Balangoda is 10 sq.km. in extent and spread over an area of 1.5 km along Balangoda – Colombo road, 2.0 km along the Balangoda - Badulla road, 2.5 km along the Balangoda - Kaltota road and 0.75 km along the Balangoda - Rassagala road. Balangoda urban area operates as the main commercial and service centre and a semi administrative centre for the small towns such as Pambahinna, Weligepola, Udawela, Pinnawela and Rassagala and for the surrounding villages.

## 1.1 History

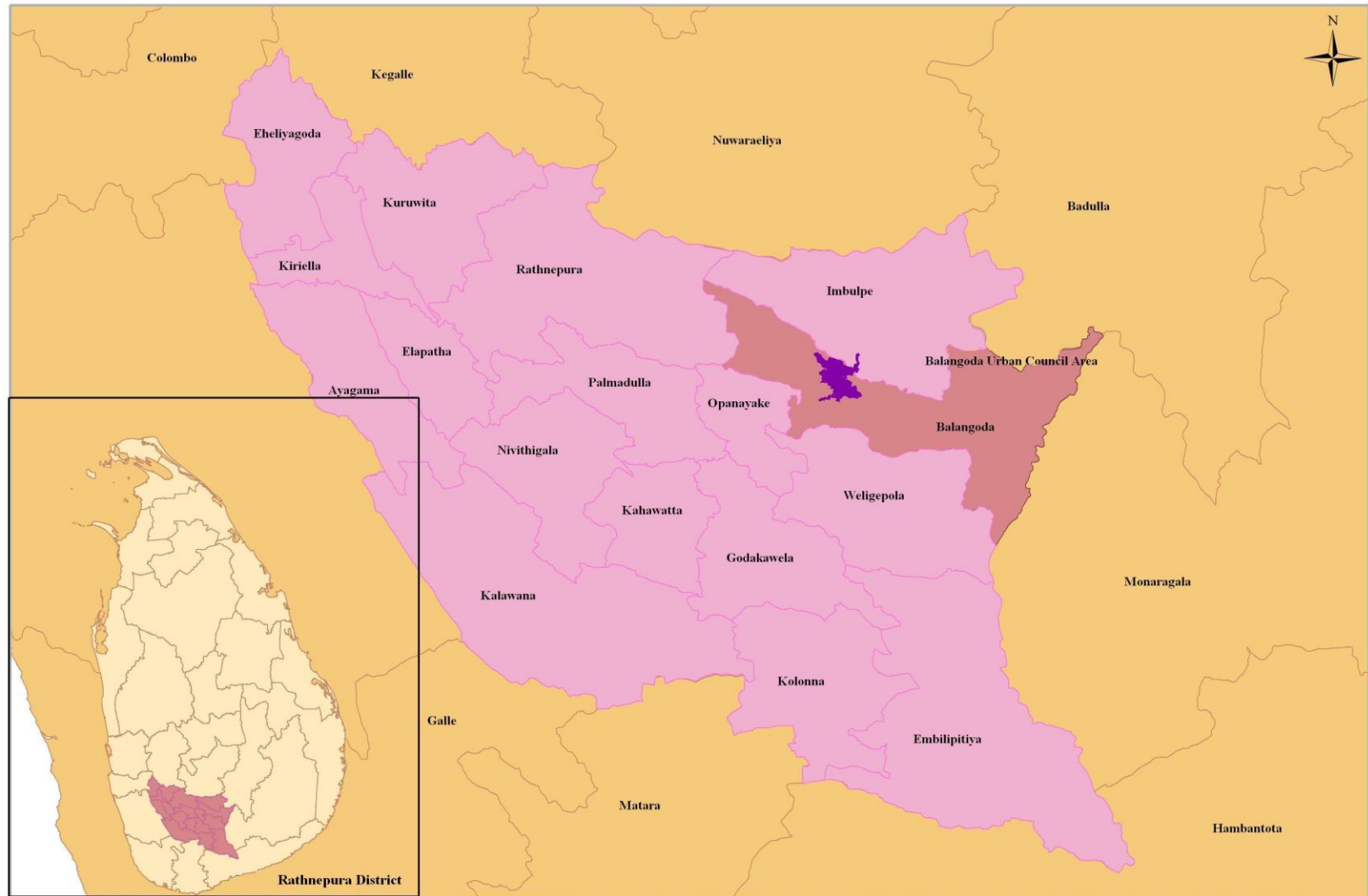
The name ‘Balangoda’ was established in the Kandian era although it is a historically and archeologically valuable town. According to the legend, the king had seen some soldiers and shouted amazingly as ‘*sebalun godak*’, and the first two words ‘*se*’ has lopped and used as ‘*Balungoda*’, and thereafter it has been used as Balangoda.

Balangoda urban area was expanded gradually during the British colonial era. It was governed by a regional board during the period of 1930 – 1945. In 1945 it was established as Urban Council and presently it is functioned as the same status as an Urban Council.

The urban area is divided into 9 wards in order to facilitate the urban administrative activities. It was declared as an area under the jurisdiction of the Urban Development Authority on 04.08.1980.

## Location of Balangoda Urban Council Area

Map No. 01



Source : 1:10000 Land Use Map  
Survey Department of Sri Lanka

Urban Development Authority  
Sabaragamuwa Provincial Office  
Rathnapura

## **1.2 Location and Environmental Settings**

Balangoda urban area is located within the northern latitudes of  $80.41^{\circ}$  and  $80.43^{\circ}$  and the eastern longitudes of  $6.38^{\circ}$  and  $6.40^{\circ}$ . The extent of the urban area is 10,000 sq.m. and located at a height between 600m – 641m from the mean sea level. Balangoda urban area is bordered to Nuwara-Eliya district from the north, Rakwana electorate from the south, Moneragala district from east and Badulla district from the north-east.

According to the terrain in the area, there are flat areas, river valleys, as well as mountain ranges and sloppy areas. Red soil and loam soil are the main soil categories with in the area. ‘Felspa’, ‘Calcite’, rubble, gravel, sand and clay are the main minerals in the area and availability of special variety of stone called ‘Varnokytes’ indicates that there are large amount of gem mines.

The average annual temperature of the urban area is between centigrade  $25^{\circ}$  –  $35^{\circ}$ . The average temperature increases in the months of April & May and July & August while the months of December and January the temperature decreases. According to the climatic zones, it shows up-country wet zone climatic conditions as well as low-country wet zone climatic conditions. Intermediate climatic conditions are also shown in this area. The rainfall of the area ranges from 1500 mm - 4000 mm and the heavy rainfall obtain from the north-east monsoon and south-west monsoon within the period of October-November and March-April. In addition inter monsoonal rains and convectional rains provide a reasonable amount of rainfall.

There are several environmental sensitive places in Balangoda urban area and surrounding. Belihuloya, World’s end, several waterfalls such as Bambarakanda, Duvili ella, Surathali ella, Dehena ella, Kirindi ella, the rivers such as Walawe river, Dorawela Oya, Belihul oya and the mountain ranges such as Dethanagala Kanda, Hagala kanda are the main features of this area. Accordingly, Balangoda is an environmentally important area, which attracts local and foreign tourists regularly.

## **1.3 Cultural and Religious Background (Heritage)**

- Human skeletons named as ‘Saypion Saypion’ before 3700 BP, which is an important turning point of human evolution had been found from this area.
- Location of gem mines in the area due to availability of stone variety called ‘Varnokytes’, and the area become an international centre for gem trade.

- Birth place of the world first lady Prime Minister Hon. Sirimawo Bandaranayake.
- Birth place of most Ven. Balangoda Ananda Maithree, who has done a great service to the Buddhism.
- ‘Kuragala’ viharaya, which is identified in several names such as Boltumbe Saman Devalaya, which has a national importance, Aluthnuwara Kuda Katharagama Devalaya, and Diwaguhawa, which is a belief of the Buddhist devotees as well as the belief of Islam devotees as the right foot print of Lord Nabi located closely to the urban area.

## **Chapter Two**

### **2.0 National and Regional Importance of the Town**

#### **2.1 Importance of the Town in the National Physical Plan**

According to the ‘National Physical Planning Policy and Plan of Sri Lanka (2011-2030)’ prepared by the Department of National Physical Planning, Balangoda urban area is coming under ‘Proposed Protected Area Network’. Accordingly, Balangoda urban area is located within the Central Fragile Area.

The objectives of the ‘Proposed Protected Area Network’ is given in the ‘National Physical Planning Policy and Plan’ and it is as follows.

‘In order to preserve the water sources of the country, the high sensitive zone has been included in the conservation zone. Some of the selected towns in this area have been reserved for this purpose and development would be controlled in these areas. In order to avoid the conflict situations in the land use activities, the strategies for preservation will be implemented’.

Accordingly, the report on ‘Population and Projects in outer plantation area Plan’ of ‘National Physical Policy and Plan’, Balangoda area has been identified as a town which could not be further developed. Further it has been identified Balangoda as the second capital city of Ratnapura district. (Refer Map No. 02)

According to the ‘Physical Plan for Sabaragamuwa Province’ prepared by the ‘Department of National Physical Planning’ it is proposed to develop Balangoda as a second order town. The following objectives have been mentioned in the above Plan.

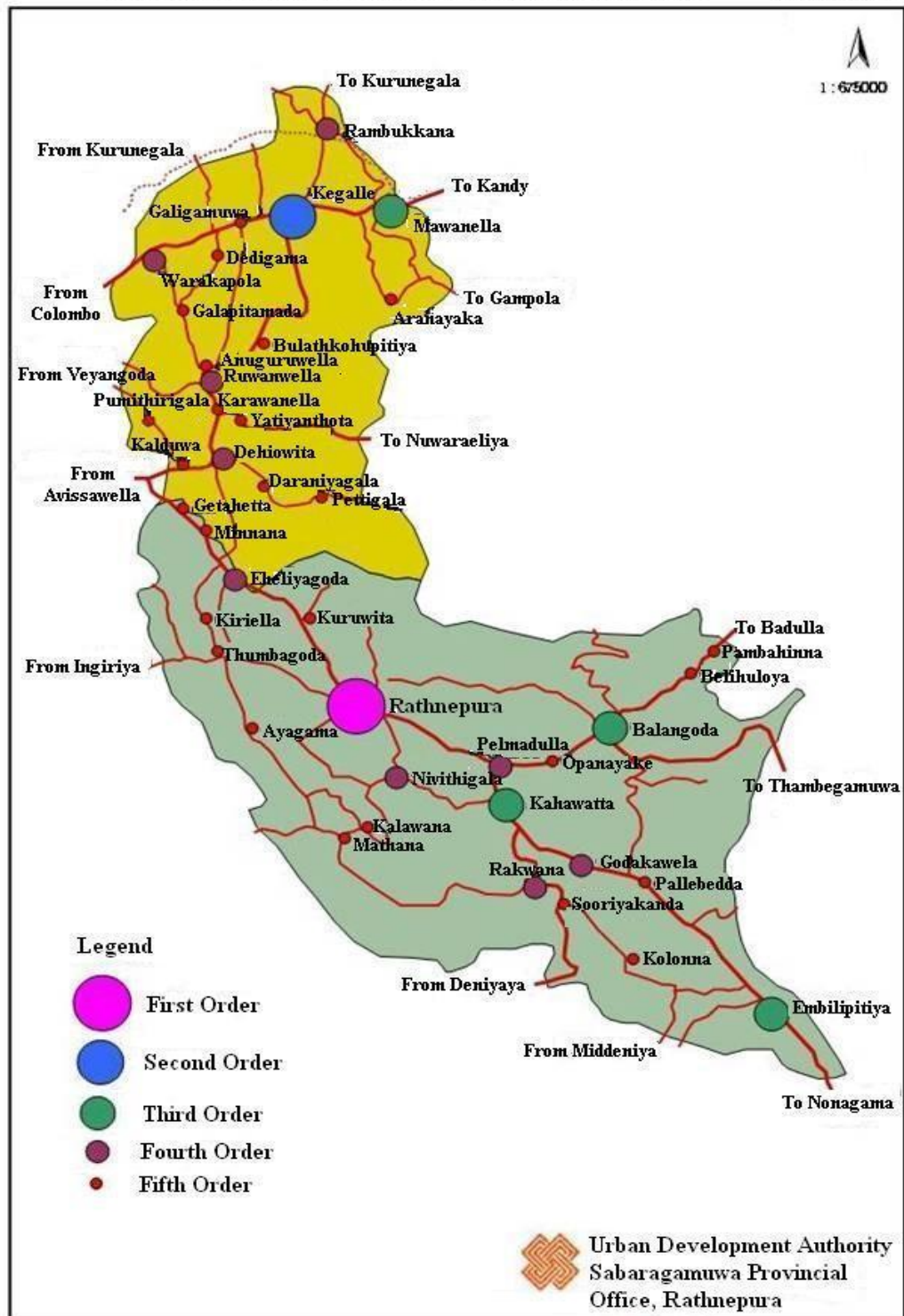
1. Protect the environment through limiting development in high sensitive central environmental zone, proposed protected area network and areas of local, regional and national significance.
2. Ensure that the people living in Sabaragamuwa Province are safe from natural disasters.
3. Create a strong network of cities, towns and villages in order to provide a diverse employment opportunities, service facilities at a appropriate level and to provide a high quality of life.



4. Provide physical and social infrastructure facilities and access roads with efficient public transport service that will support the people in the cities, towns and villages of Sabaragamuwa Province to ensure a better economy and livelihood.
5. Protection of water catchment areas, water resources and water falls in order to improve water quality to stabilize the supply of water for domestic, agricultural, industrial activities and power generation and to send excess water to the water shortage areas.
6. Build a sustainable economic environment with well established tourism industry and diverse employment opportunities for the people of Sabaragamuwa Province.

# Present Urban Service Centres in Sabaragamuwa Province

Map No. 02



## **2.2 National and Regional Linkages**

### **2.2.1 National Linkages**

Balangoda urban area, which is the main hub of Balangoda electorate established in a central location to get direct linkages with several provinces and districts of Sri Lanka. Among those linkages, Colombo district and Western province are linked through Balangoda - Colombo road, Badulla district and Uva province are linked through Balangoda - Badulla road, Nuwara Eliya district and Central province are linked through Balangoda - Hatton road, Hambantota district and Southern province are linked through Balangoda, Weligepola and Embilipitiya, Moneragala districts and Southern part of Uva province linked through Balangoda - Kaltota road are the main linkages of the urban area. Accordingly, the area is enriched with the special features such as bio diversity, climatic and weather conditions diversity and cultural and ethnic diversity.

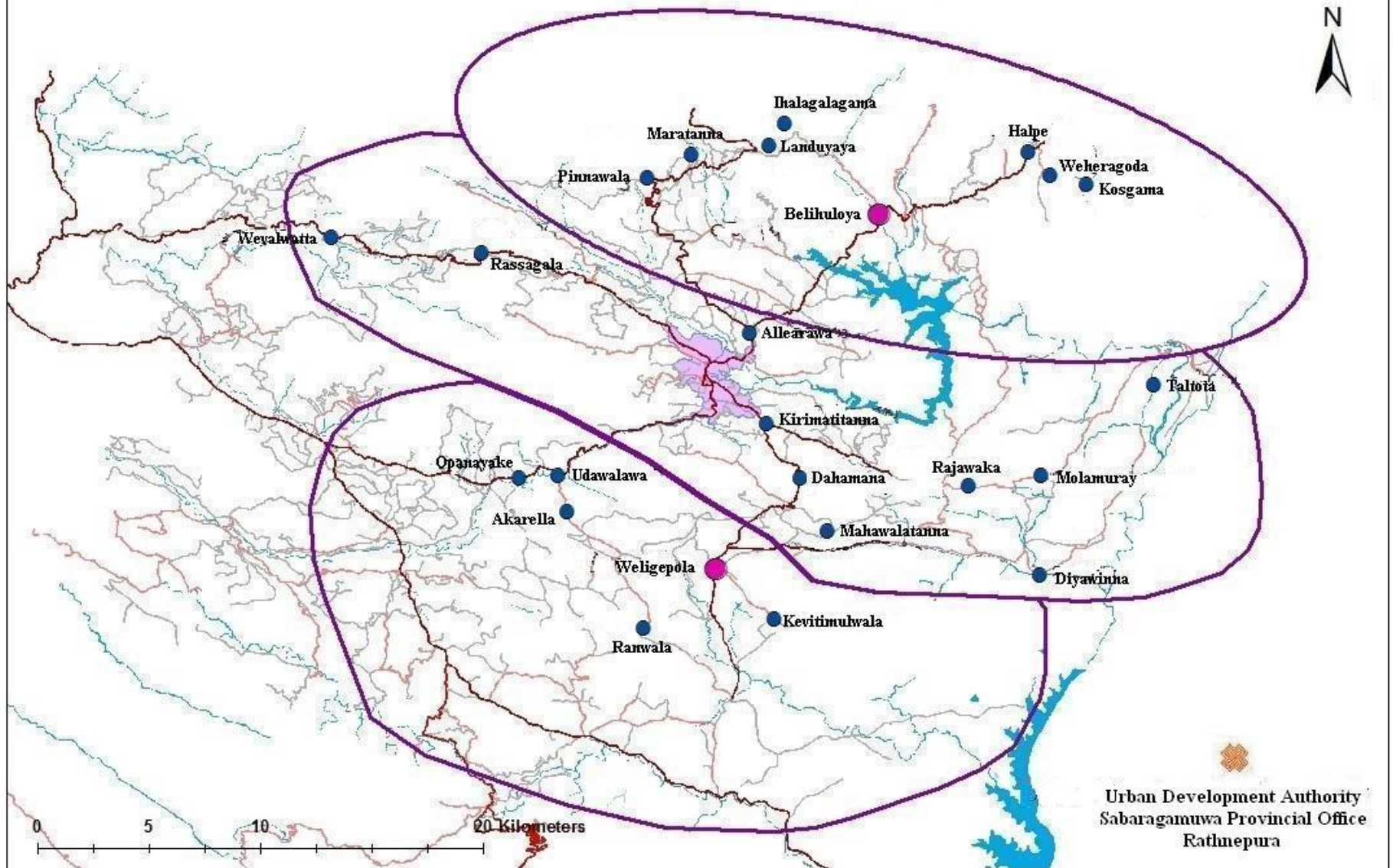
### **2.2.2 Regional Linkages**

Balangoda urban area consists of a feeder area, centrally located at the Balangoda electorate and has direct linkages with the divisional secretary's divisions of Balangoda, Imbulpe, Balangoda Weligepola.

Balangoda urban area, which is functioning as the main economic and service centre as well as semi administrative centre of the Balangoda electorate, has direct linkages with the secondary towns such as Weligepola, Kaltota, Udawela, Rassagala, Belihuloya, Pambahinne, Aluthnuwara, Ella Arawa and Pinnawala. Balangoda urban area becomes a special town due to several important factors in terms of regional, zonal, national and international context. (Map No. 03 - Regional centres obtaining services from Balangoda town).

### Service Sub Centres of Balangoda Town

Map No. 03



## Chapter Three

### 3.0 Population

#### 3.1 Existing Population and Population Growth Pattern

Balangoda town, which is 10 sq.km. in extent records a total population of 16000 in 2001 and it was grown up to 22123 in 2011 according to the population records of census of population and statistics in 2011. This amount is 15 % of the total population of the Ratnapura District. The following table indicates the population details of Balangoda area.

**Table No. 01**

**Total Population and the Growth Details**

<b>Census Year</b>	<b>Total Population</b>	<b>Population Growth rate (%)</b>
1971	8,653	
1981	10,260	1.73
2001	16,000	1.6
2005	16,960	1.5
2011	22123	1.5

*Source :- Population and Housing statistics - 2001*

The above table shows the growth pattern of the population from the year 1971 to 2011 and the population data in each year. Accordingly, population of 8653 recorded in 1971 and 10260 in 1981. Within the above 10 year period the population growth was only 1607. Similarly, the growth rate of 20 year period between 1981 – 2001 was decreased from 1.73 to 1.5 and the same growth rate of 1.5 maintained during the 20 year period up to 2001. This shows that the growth rate of Balangoda urban area is decreasing gradually. This is not a special character to this area, but generally, the population growth rate is decreasing in district as a whole.

#### 3.2 Density of Population

According to the census data, the population density of 8 persons per ha. in 1971 was grown up to 12 persons per ha. in 2001. Similarly in 2011 the population density was further increased up to 23 persons per ha.

### 3.2.1 Population Density of Balangoda Urban Area

The population density of Balangoda Urban area varies in different areas. Table 02 indicates such differences and the Map 04 explains same.

**Table 02**

Urban Area	Area Ha.	Population		Population Density Persons / ha.		Population Density 2011	
		Year 2001	Year 2005	Year 2001	Year 2005	Population	Persons/ha.
Ellepola	119	1161	1468	8	9	1946	16
Kotugodalle	90.9	1549	1865	16	17	2244	24
Balagahamula	76.6	2328	2645	30	34	1420	18
Gorokgahamada	98.00	1058	1375	9	10	4893	49
Dehigasthalawa	57.2	943	1247	14	16	3034	53
Dorawela	162.4	1958	2271	11	12	2350	14
Thumbagoda	133.8	1647	1975	11	12	3846	28
Kirindigala	162.4	1604	1915	9	9	2053	12
Olugantota	83.7	944	1255	9	11	1337	15
Urban Area	1000	16000	16960	12	13	23123	23

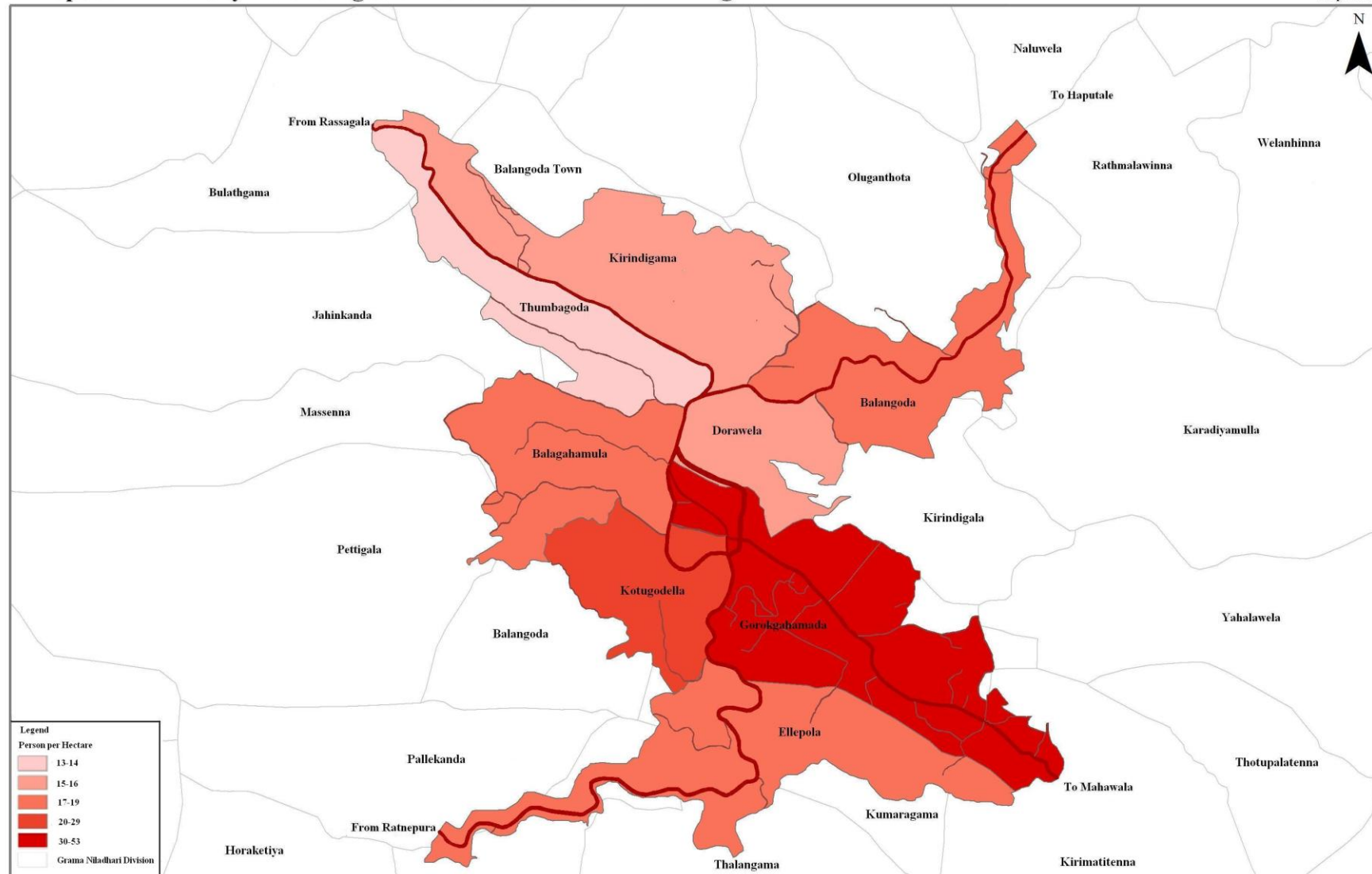
*Source :- Records of Census of Population 2001 and 2011*

The above table indicates that high density of population living in the divisions of Dehigasthalawa and Gorokgahamada and the low densities in Dorawela, Kiridigala divisions. Availability of infrastructure facilities, low rate of natural disasters and the geographical location are the main reasons for high density of population in the town centre and surroundings. Similarly, there are low population densities indicate in the areas away from the town centre. Lack of infrastructure facilities and the high rate of natural disasters are the main reasons for this situation.



# Population Density According to the Urban Wards 2011-Balangoda Urban Council Area

Map No. 04



Source : 1:10000 Land Use Map  
Survey Department of Sri Lanka and  
Census and Statistics Department

0 0.5 1 2 Kilometers

Urban Development Authority  
Sabaragamuwa Provincial Office  
Rathnepura

### 3.3 Commuting Population

A daily commuting population of about 35000 arrives to the Balangoda town to obtain the different types of services and the Table 03 further describes this situation.

**Table No. 03**

**Commuting Population - 2011**

<b>Requirement</b>	<b>No.</b>	<b>Percentage %</b>
Education	1 8,900	54.0
Administration	8750	25.0
Other	7350	21.0
<b>Total</b>	<b>35,000</b>	<b>100.00</b>

*Source :- Urban Development Authority – 2011*

The main factors for migration of population are;

1. Due to location of several national schools and tuition classes in the town centre, majority of population commute to the town to get the services.
2. Majority of population commute to the town due to establishment of Sabaragamuwa University.
3. Majority of population from surrounding villages and rural areas commute to the town to fulfill their daily needs as well as diverse commercial requirements.

### 3.4 Population by Age Groups

The following table indicates the population by age groups.

**Table No. 04**

**Population Diversity - According to the Age Group**

<b>Age Group Year</b>	<b>2001</b>		<b>2011</b>	
	<b>Population</b>	<b>Percentage %</b>	<b>Population</b>	<b>Percentage %</b>
Less than 1	4222	28	9196	41.0
19-35	6755	45	10926	35.0
36-60	2895	19	5471	15.0
More than 60	1085	8	2001	9.0
<b>Total</b>	<b>14957</b>	<b>100</b>	<b>22123</b>	<b>100.00</b>

*Source :- Department of Census of Statistics - 2011*



According to the above table, it indicates the population in the age group between 19 – 60 years has been dropped from 2001 to 2011 from 64% to 50%. Hence, there is a more dependency ratio in 2011 when compared to 2001. According to the data of 2011, 50% of the population is dependants, while nearly 10% of this amount is aged population.

### 3.5 Population according to Sex Ratio

Table No. 05 indicates the sex ratio of the urban area.

**Table No. 05**

#### Sex Ratio

Ward	Population - 2001			Sex Ratio 2001	Total Population - 2011			Sex ratio 2011
	Total Population	Female	Male		Total Population	Female	Male	
Ellepola	1468	629	838	106	1946	956	990	111
Kotugodalle	1865	799	1065		2244	1127	1117	
Balagahamula	2645	1133	1511		1420	667	753	
Gorokgahamada	1375	589	785		4893	2243	2650	
Dehigasthalawa	1247	534	712		3034	1473	1561	
Dorawela	2271	973	1297		2350	319	314	
Thumbagoda	1957	838	1118		3846	2796	2767	
Kiridigala	1915	820	1094		2053	346	707	
Olugantota	1257	537	717		1337	650	687	
<b>Total</b>	<b>16000</b>	<b>6852</b>	<b>9137</b>		<b>23123</b>	<b>10577</b>	<b>11546</b>	

*Source :- Reports of Census of Population and Housing – 2001 and 2011*

According to the above table, the sex ratio has been increased from 106 in 2001 to 111 in 2011.

### 3.6 Population according to the Ethnicity

Table No. 06 indicates the population by ethnic groups.

**Table No. 06**

#### **Population diversity by Ethnicity – 2001 - 2011**

<b>Type of Population</b>	<b>No.</b>	<b>Percentage</b>
	2011	%
Sinhala	15477	70.0
Sri Lankan Muslims	3577	16.0
Sri Lankan Tamil	2267	10.0
Indian Tamil	797	4.0
Burger	5	10.0
Malay	0	0.0
Other		
<b>Total</b>	<b>22123</b>	<b>100.00</b>

*Source :- Department of Census and statistics - 2001 and 2011*

When analyses the population by ethnicity, it reveals that multi ethnic groups are living in the area and 70% represents Sinhala while Muslims and Tamils are 16% and 10% respectively.

### 3.7 Population Diversity according to Religious Groups

The following table indicates the population diversity by religion.

**Table No. 07**

#### **Population by Religion**

<b>Religion</b>	<b>2011</b>	
	<b>No.</b>	<b>Percentage</b>
Buddhist	13367	60
Islam	3577	16
Hindu	3064	14
Roman Catholic	1080	5
Other	1035	5
<b>Total</b>	<b>22123</b>	<b>100</b>

The main factor of the population by religion is the multi religious character. The main religious group in the area is Buddhists with multi religion society. According to the data in 2011, it reveals that there are 60% Buddhists, 16% Islam devotees and 14 % Hindus and few from other religious groups live in this area. Further, it reveals that there is a reducing trend of Buddhist and Islam devotees as well as Roman Catholics while increasing rate of Hindu devotees.

### 3.8 Population Forecast

**Table No. 08**

<b>Population Forecast</b>			
<b>Year</b>	<b>Growth rate (1.4%)</b>	<b>Growth rate (1.5%)</b>	<b>Mean rate (1.7%)</b>
2011	22123	22123	-
2016	23715	23229	24070
2021	25422	24390	26188
2026	27252	25610	28492
2030	28805	26634	29917

*Source :- Field survey, Urban Development Authority*

The population forecast has been calculated based on three types of growth rates. Accordingly, the population has been forecasted considering 1.4% as the minimum growth rate, 1.7% as the maximum growth rate and 1.5% as the mean growth rate. Accordingly, the forecasted population by year 2030 will be 26,634.

## Chapter Four

### 4.0 Land Use

#### 4.1 Land Use Pattern and Special Features

The land use pattern of Balangoda urban area is decided on the physical, economical, social and environmental factors. The land use distribution of the area according to the field survey done in 2011 is given in the table below. (Map N0. 05)

**Table No. 09**

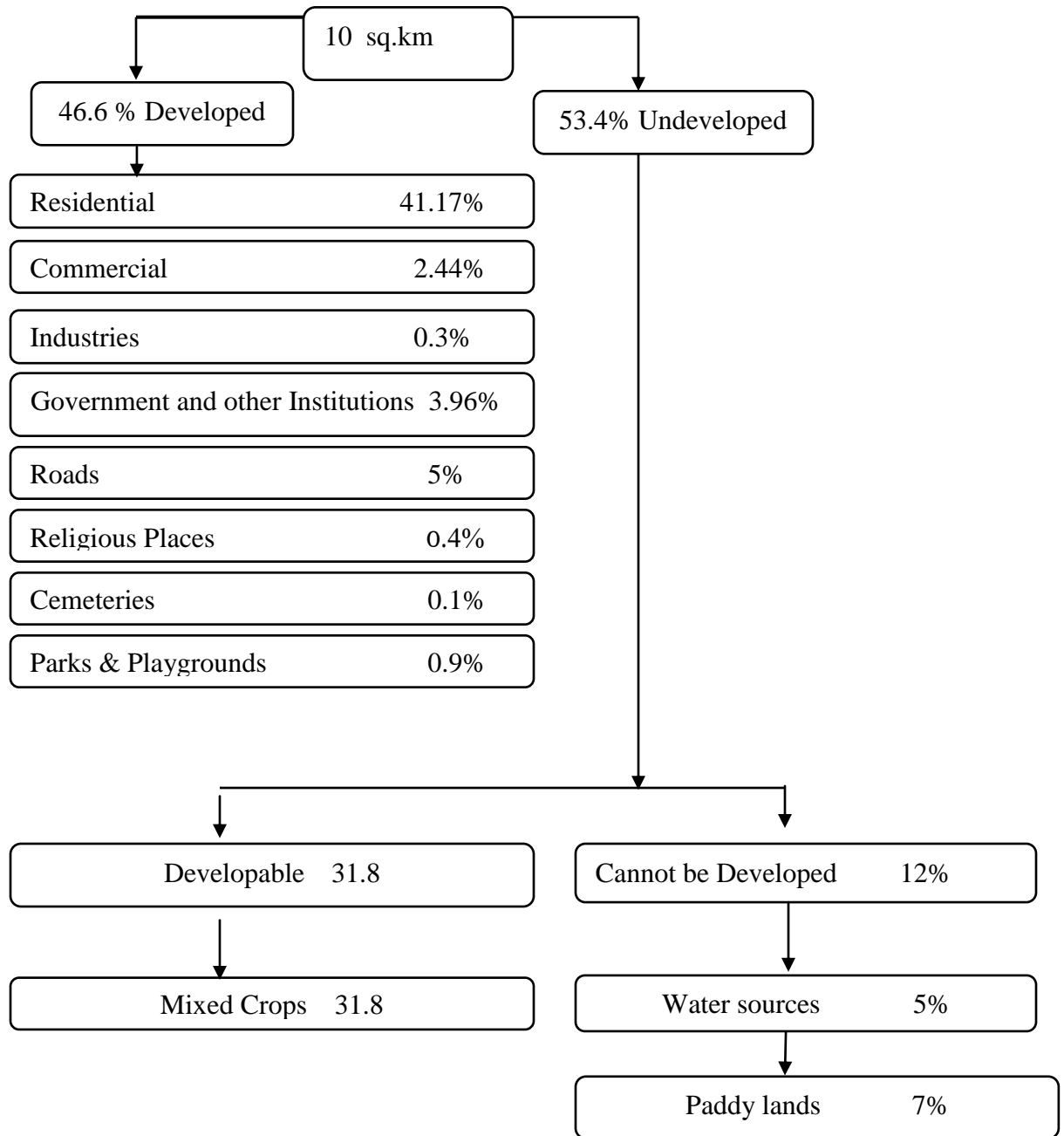
**Land Use Pattern - 2011**

<b>Land use</b>	<b>Land Extent ha.</b>	<b>% of the Total Land</b>
Residential	415	41.5
Commercial	27	2.7
Government & Semi Government Institutions	39	4.0
Industries	3	0.3
Paddy Lands	70	7.0
Mixed Crops	318	31.8
Scrub land	30	3.0
Religious	4	0.4
Parks & Playgrounds	10	1.0
Cemeteries	7	0.7
Vacant lands	22	2.2
Roads	50	5.0
Water Sources	5	0.50
<b>Total</b>	<b>1000</b>	<b>100</b>

*Source ; Land use Survey – 2011, Urban Development Authority*

According to the above table, 56.6% of the land is developed land. 53.4% of the land has not been developed. However, when exclude the water sources, paddy lands and high lands in reserved areas, there is a possibility of using the balance land, presently used for mixed crops, for residential purposes.

## 4.2 The Land Use of the Balangoda Urban Area



## **Residential Land Use**

Out of the total urban area, 41.5% of the land or 415 ha. has been used for residential purposes. Accordingly, the majority of the land in this area is used for residential purposes. However, the residential use in the town centre becoming converting to commercial uses and the residential uses are moving away from the town centre gradually.

## **Commercial Land Use (Trade Activities)**

2.7 % of the total land or 24 ha. in Balangoda Urban area has been used for commercial activities. This land use is spread over only along the both sides of the main roads of the town centre. However, the new trend of conversion of residential use into commercial use in the town become a special feature in this area. Similarly, commercial activities are spreading along the roads such as Barns Ratwatte Mawatha and Weerasundararama Mawatha which are not used for commercial purposes until now. Increase of unauthorized use could be mentioned as a special feature in the town.

## **Government and Other Institutions**

The area reserved for government and other institutions are low as 4.0 % and these uses are spread over the area in a scattered form without a proper manner. It is revealed that the area reserved for institutional purposes are inadequate for Balangoda urban area which is established as the main administrative centre of the Balangoda electorate.

## **Paddy Lands**

7% of the total extent or 70 ha. of the urban area is under paddy cultivation and farming is done both in Yala and Maha seasons which gain economic benefits as well as play an important role in terms of environmental sensitive zones. However due to the haphazard filling of paddy lands and some instances use as the dumping yards, leads to several environmental issues.

## **Parks**

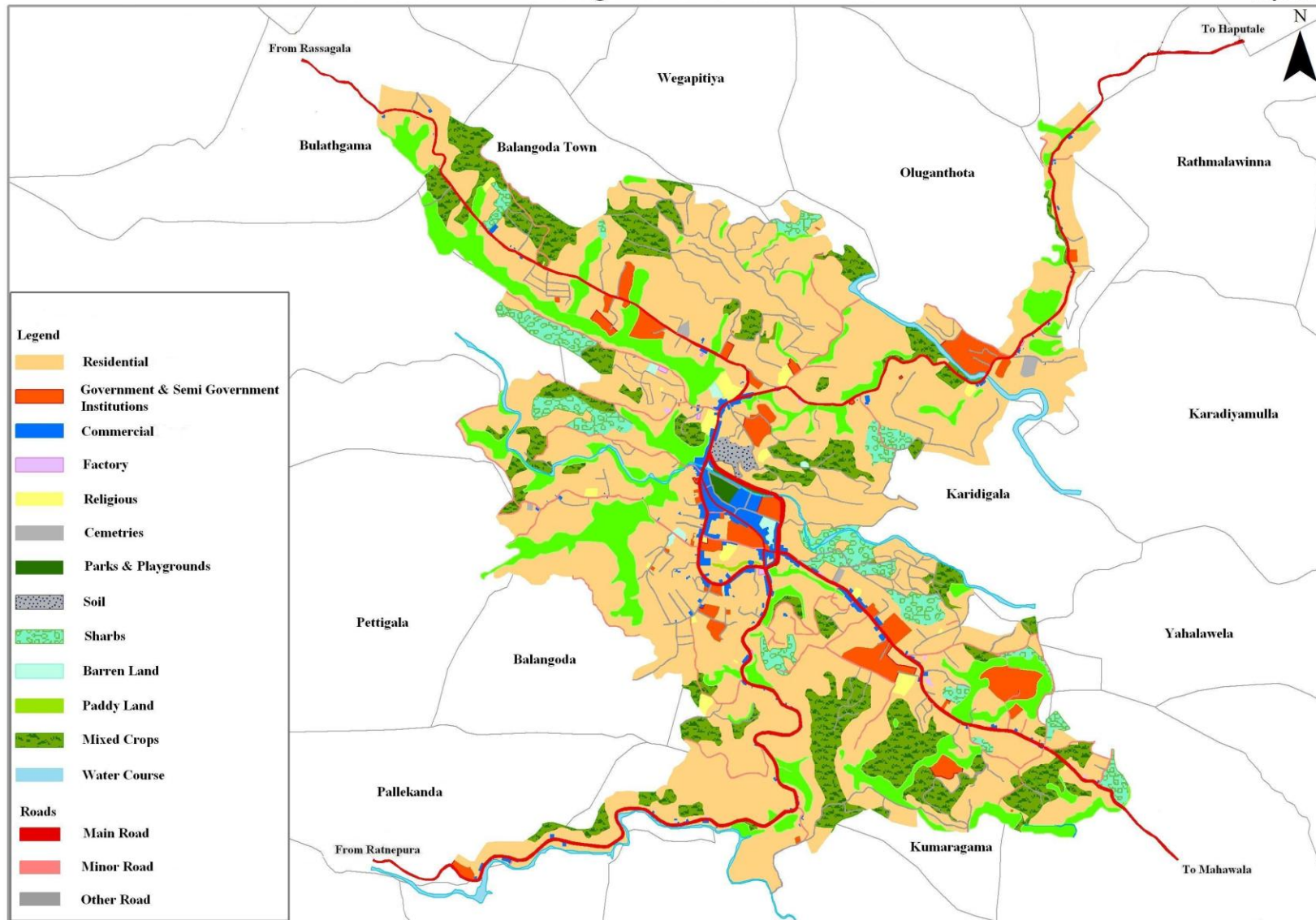
10 ha. of land has been reserved for this purpose and this land consist of several land lots centralizing the public playground which is insufficient for its purpose. Presently this is the only land available for the activities, such as sports activities as well as public meetings, musical shows etc.

Apart from the above, the uses such as school playgrounds, community halls, children's playgrounds etc. could be considered as the main usable spaces for recreational activities. However, lack of adequate space and facilities for relevant activities could be mentioned as the main problems of this sector.

In addition, the uses such as industries, mixed crops, scrub lands, religious activities spread over the area haphazardly. Specially, the scrub land area surrounded by the Munamale rock has been used for residential purposes in a haphazard manner become a main problem and thereby has to face for environmental and physical disasters such as earth slips and ultimately end with environmental imbalance of the area.

## Land Use Pattern 2011 - Balangoda Urban Council Area

Map No. 05



Source: 1:10000 Land Use Map  
Survey Department of Sri Lanka and  
Field Survey

0 0.2 0.4 0.8 1.2 1.6  
Kilometers

Urban Development Authority  
Sabaragamuwa Provincial Office  
Rathnepura



### 4.3 Land Values

The main factor for deciding the land values of the Balangoda town are the availability of infrastructure and the physical formation of the town. The following table indicates the land values of the town.

**Table No. 10**

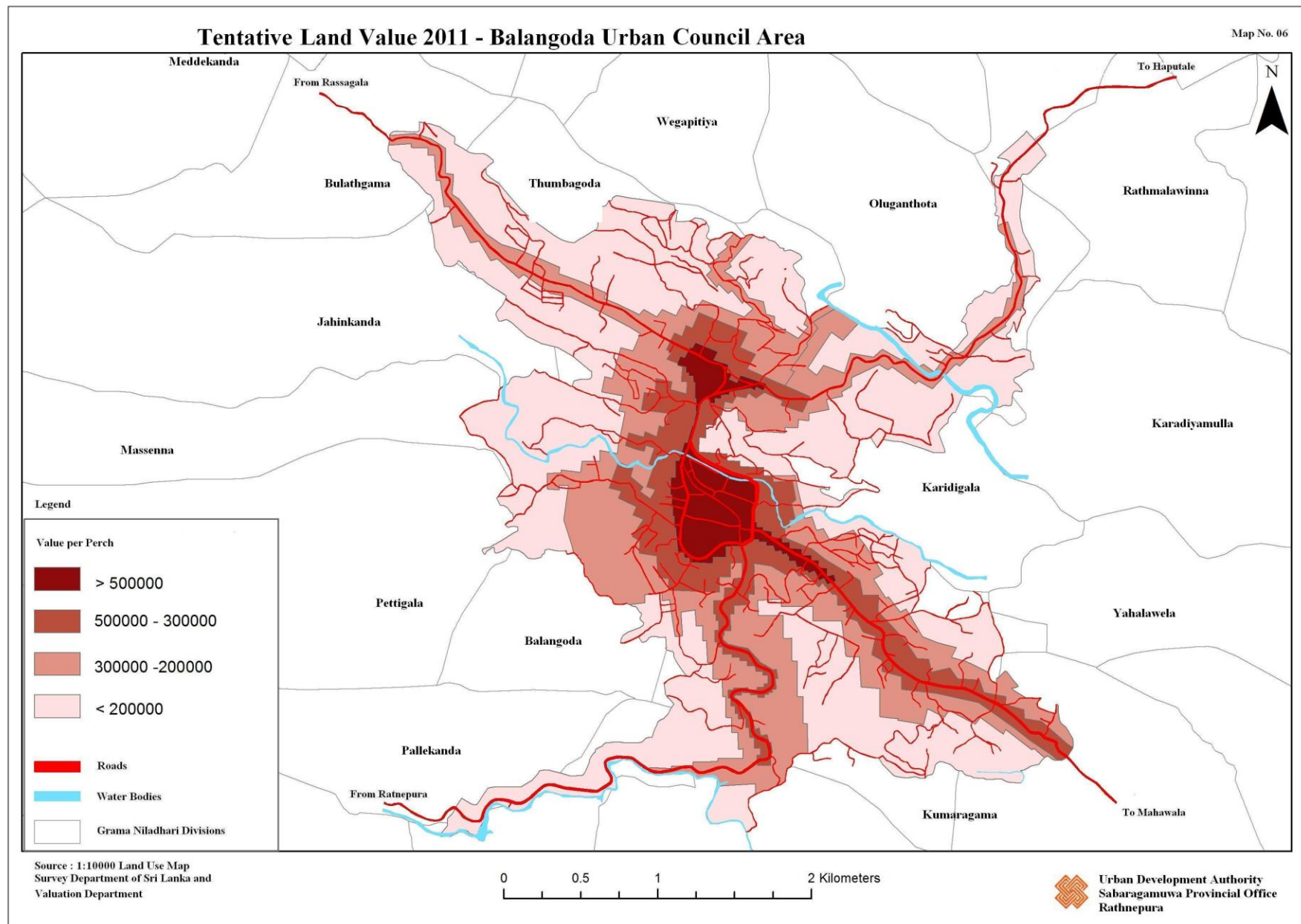
**Land Values - 2011**

<b>Zone</b>	<b>Value range Approximate value of 25 sq.m or a perch (Rupees)</b>
Town centre area	200,000 >
Surrounding area of the town centre	200,000 - 100,000
Surrounding area along main roads	100,000 - 50,000
Other areas	50,000 <

*Source :- Balangoda UC (Land Values)*

The land values of the urban area are given according to the above zones and it could be identified that the high land values are maintained in the commercial areas in the town centre and recorded low land values away from the town centre. A part from that, the infrastructure availability is also a main factor for deciding land values. Accordingly, the town centre where the infrastructure facilities are available recorded a high land values and the lands away from the town centre recorded low land values. (Map 06)

The lowest land values are recorded in mountain area of Dorawela ward, which is the border of the urban area limit of the Kirindigala and Thumbagala ward. The main reason for the low land values due to existence of steep slopes, less accessibility and lack of infrastructure facilities.



#### **4.4 Problems**

- Due to location public service activities such as schools, religious places and government institutions in the town centre, the land area is limited for the commercial and service sector activities and to provide the relevant facilities.
- Difficulty in providing an efficient service to the public due to location of government and other institutions in a scattered form and in a haphazard manner.
- Deficiencies in rain water disposal systems caused collection of waste to the cultivated lands and soil erosion leads to difficulties in paddy cultivation in 3 ha. of paddy lands.
- Haphazard filling of land and use these lands for residential purposes.
- Linear development of commercial activities in an unplanned manner along the main roads.
- Conversion of residential uses in to commercial uses in the town centre.
- Insufficient land reserved for recreational activities.

#### **4.5 Conclusion**

The outstanding feature in the land use pattern of the Balangoda urban area is the linear development along the main roads.

Also due to the increasing demand for commercial activities in town centre, because that there is an increasing demand for residential uses in outer areas of the town centre, specially Gorokgahamada and Dehigastalawa area.

## Chapter Five

### 5.0 Housing

#### 5.1 Existing Housing and Housing Category

The housing records have been found from the census and statistics survey records done in 2001 and 2011 and the details of housing such as number of houses, housing deficit and housing density have been described in these documents. Accordingly, the total number of housing in the Balangoda Urban development area was 2549 in 2001. In addition, there were 23 shared housing, 14 institutions and 1034 buildings not used for living purposes in 2001. The housing density was calculated based on the above data and recorded as 5.12 per ha. Number of housing have been increased up to 5124 in 2011 and density also have been increased accordingly.

**Table No. 11**

**Type of Housing - 2011**

Type of houses	Quantity	Percentage (%)
Permanent	4047	79
Semi Permanent	992	18
Temporary	153	3
<b>Total</b>	<b>5124</b>	<b>100.0</b>

*Source:- Divisional Secretary, Ratnapura – Census of population and housing*

#### 5.2 Housing Density

**Table No. 12**

Grama Niladhari Division	Extent (ha.)	No. of Houses	Average Housing density Housing Units per ha.
Kirindigala	164.6	523	3
Ellepola	121	268	2
Gorokgahamada	100	585	6
Dehigastalawa	57.2	817	14
Kotugodalle	92.6	649	7
Balagahamula	78.6	532	7
Dorawela	164.4	127	1
Thumbagoda	135.8	286	2
Olugantota	86	1337	15
<b>Total</b>	<b>1000</b>	<b>5124</b>	<b>5</b>

*Source:- Census of population and housing and Urban Development Authority - 2011*

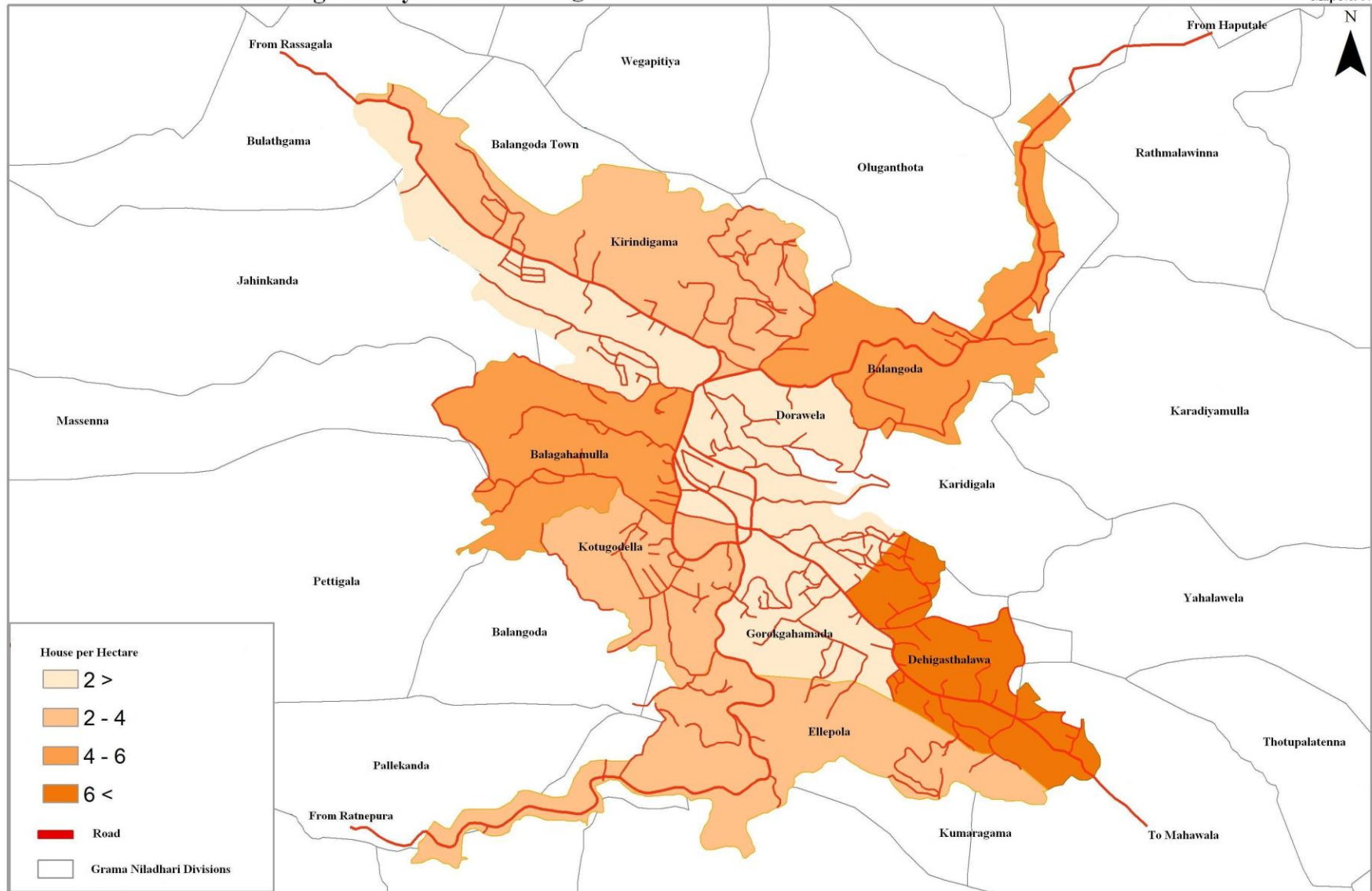
Availability of infrastructure, physical settings, cultural and ethnicity and the land use of such areas could be identified as the main factors for housing density in the Balangoda urban area. The details of the housing density of the wards are given in the Table No. 12 (Map No. 07, Housing density by Wards)

According to the above table the average housing density is 5 units per ha. in Balangoda urban area. However, in Ratnapura Municipal Council area, it is 20 units per ha. The wards such as Olugantota, Dehigasthalawa recorded a high density while Thumbagoda shows a low housing density. Distribution of infrastructure facilities and disaster situation at a minimum level are the main reasons for high value for housing density in this area.

Lack of suitable lands housing development due to physical settings (Geographical Conditions) is the main problem for the housing deficit in the Balangoda town and the surrounding area.

# Housing Density - 2013 - Balangoda Urban Council Area

Map No. 07



Source : 1:10000 Land Use Map  
Survey Department of Sri Lanka and  
Census and Statistics Department

0 0.3 0.6 1.2 1.8 2.4 Kilometers



Urban Development Authority  
Sabaragamuwa Provincial Office  
Rathnepura

### 5.3 Housing Deficit

The following table gives the details of housing forecast considering the housing deficit in the urban area and the future requirements as the main factors.

**Table No. 13**

#### **Housing Deficit (2011 – 2030)**

<b>Year</b>	<b>Population</b>	<b>No. of Families</b>	<b>No. of Houses</b>	<b>Requirement</b>	<b>Deficit</b>
2011	24824	5516	5124	5516	392
2016	27859	6191	—	6191	586
2026	31267	6948	—	4948	882
2030	34090	7576	—	7576	1323

*Source :- Sabaragamuwa Provincial Office - UDA - 2011*

As per the census of population and housing survey done in 2011, the total number of housing in the Balangoda urban area recorded as 5124. Accordingly, the present housing deficit is 392. According to the above table, the housing deficit by 2030 with the increasing population would be 1323.

The following assumptions have been considered, when calculating the housing deficit.

- Population growth rate as 1.5
- Household size as 4.0
- Annual housing growth rate as 4.5
- Decay of 1% of housing stock per year.

### 5.4 Issues and Problems

- Since shortage of appropriate lands for housing construction become a barrier for housing development, it is important to identify suitable lands for construction of houses as well as proposal of housing projects.
- The geographical location of the area is a barrier for construction and distribution of houses.

## Chapter Six

### 6.0 Economic Base

#### 6.1 Present Economic Base

The economic status of Balangoda urban area based on the collection of primary, secondary and tertiary activities of the area. The main factor for primary sector economic activities is the spreading over the agricultural activities in the area. Cultivation of Paddy, vegetable and plantation of fruit, tea, and flowers are some of the important crops in this area. Apart from that, the mineral resources available in the area is also become one of the primary economic factors of the area. The gem industry in the area provides a major contribution in the economic sector.

The industries in associated with the agricultural products and the minerals allied industries are taken as the main secondary industrial activities in the area.

Provision of services based on the above mentioned agricultural and industrial activities as well as services for the people in the area are coming under the main tertiary economic activities in the area. Supply of relevant fertilizer, agro chemicals and seeds as well as provision of technical know-how for the packaging and preserving of agro products also take a major role in this sector. In addition, fulfillment of requirements of the people in the urban and rural areas and also provision of social services such as the activities in relation to education, transport, health as well as associated services are based on the tertiary services.

#### 6.2 Employment Pattern

**Table No. 14**

<b>Job field</b>	<b>Percentage (%)</b>
Government jobs	25%
Private sector	35%
Agriculture sector	22%
Self-employment	18%

*Source :- Office of the Divisional Secretary- 2011*



### 6.3 Sectoral Contribution for Urban Economy

According to the 'Resources Profile' of the office of Divisional Secretary, the urban economy of the area is fed by the different sectors as follows.

- Agro Economy - 16%
- Industries - 7%
- Trade - 27%
- Services - 30%
- Construction industry - 20%

*Source :- Office of Divisional Secretary - 2011*

#### Commercial Activities

The economic activities of the urban area are carried out through both government and private sector. The details of the shops and the service centres established under the above, are given in the following table.

**Table No. 15**

**Composition of Commercial Centres**

Type of Commercial Activity	No. of Commercial Centres
Commercial banks and insurance companies	11
Retail and whole sale services	56
Health services (Ayurveda/Pharmacy/Medical services)	16
Transport services	03
Customer service	20
Production industries	03
Restaurants	30
Food production	11
Education services	05
<b>Total</b>	<b>155</b>

*Source :- Balangoda Urban Council - 2011*

In addition, the weekly fair of Balangoda gives a fullest support to the economic activities of the area. This weekly fair is held only once a week, where as there is a daily trade activities in some of the stalls.

Several matters have to be considered on the economic base of the town. The feeder area of the Balangoda town consists of 3 divisional secretary's divisions such as Balangoda, Imbulpe and Weligepola. The population of those areas are as follows.

1. Balangoda Divisional secretary's division - 59,326
2. Imbulpe Divisional secretary's division - 78,573
3. Weligampola Divisional secretary's division - 30,583

All the economic activities of the above population have been provided by the Balangoda town.

### **Industrial Activities**

Location of two garment factories, play a major role in the economy of the Balangoda town. Apart from that, there are four Tea factories, which are located in the surrounding area also provide a major contribution to the town. Garment and other production factories in the industrial sector provide a reasonable contribution. In addition, the economy is based on the gem industry and the other services as well.

### **Agricultural activities**

Although paddy and tea cultivation could be seen in a small scale manner in the Balangoda urban area, it plays a major role by providing services for agricultural areas located in the outside areas, as well as sales centres for the same. It is a special feature that the raw materials from the out side areas are used for tea factories. The tea plantation and the tea products provide a major contribution to the economy. The paddy cultivation in the area is at a basic stage. In addition, there is reasonable contribution to the cultivation of export crops.

### **Banks and financial institutions**

There are 11 financial institutions both public and private sector, established in the town centre. In addition, the branch offices of most of the financial institutions in Sri Lanka are established in the town centre. When consider the distribution of economic activities of the area, Balangoda town is basically a customer service supplying centre.

## **6.4 Issues and Problems**

- The economy of the town based on the plantation sector.
- Less accessibility to the surrounding towns.
- Deficiency of developable and suitable lands for economic activities.

It is clear that the economy of Balangoda town based on the agricultural products in the surrounding area and the town act as a service centre for the people in the surrounding area.

## Chapter Seven

### 7.0 Infrastructure Facilities

#### 7.1 Physical Infrastructure Facilities

##### 7.1.1 Main Roads

Balangoda urban area is located at the centre where Colombo - Badulla 'A' grade road and the other main roads such as Balangoda – Kaltota road, Balangoda – Rassagaala road and Balangoda - Hatton road are met. The road network of the Balangoda urban area controlled by the Road Development Authority (RDA), Sabaragamuwa Provincial Council and the Balangoda Urban Council. Balangoda main road, Mahawelathanne road and the Old road are maintained by the RDA while Old post office road, Pettigala road, Karadiyamulla road and Massanne road are under control of provincial council of Sabaragamuwa. 7.0 km distance of tarred roads and 2.96 km distance of non tarred roads are maintained by the Urban council. (The road network within the Balangoda urban area is shown in the Map No.08)

**Table No. 16**

**Road Network**

<b>Grade</b>	<b>Name of the Road</b>	<b>Length (Meter)</b>	<b>Width (Meter)</b>	<b>Starting point</b>	<b>End point</b>
A	Colombo - Badulla	2.750	50	Urban Coucil (UC) limit	UC limit
A	Balangoda Old Road	750	40	From Balagahamula	Dorawela bridge
B	Balangoda - Kaltota	2000	40	From Badulla road	UC limit
B	Balangoda - Rassagala	2250	40	From Badulla road	UC limit
C	Balangoda - Massane	300	30	From Thumbagoda	UC limit
C	Pettigala	2	30	From Old road	UC limit
C	Karadiyamulla	750	30	From Gantota	UC limit

*Source :- Road Development Authority and Urban Council information - 2011*

Due to the fact that the increase rate of vehicle movement of regional and the local transportation, the available narrow road network is inadequate to cater for this situation. Further this has become a major problem due the unplanned developments along the main roads, parking of vehicles along the roads and absence of a Bus stand. Construction of new Bus stand and by-pass road under the 'Balangoda New Town Development Programme' could be stated as a solution for this problem. The road network within the urban area and the reservations for such roads in detail are given in the Annexure 02 of the Volume II.

### **7.1.2 Traffic Movement and Transport Service within the Town**

A survey has been done by the UDA in 2011 regarding the traffic movement and the records are as follows. Since Balangoda town is located centralizing the Colombo - Badulla main road, the following table indicates the traffic movement of the town.

**Table No. 17**

**Traffic Movement of the Urban Area - 2011**

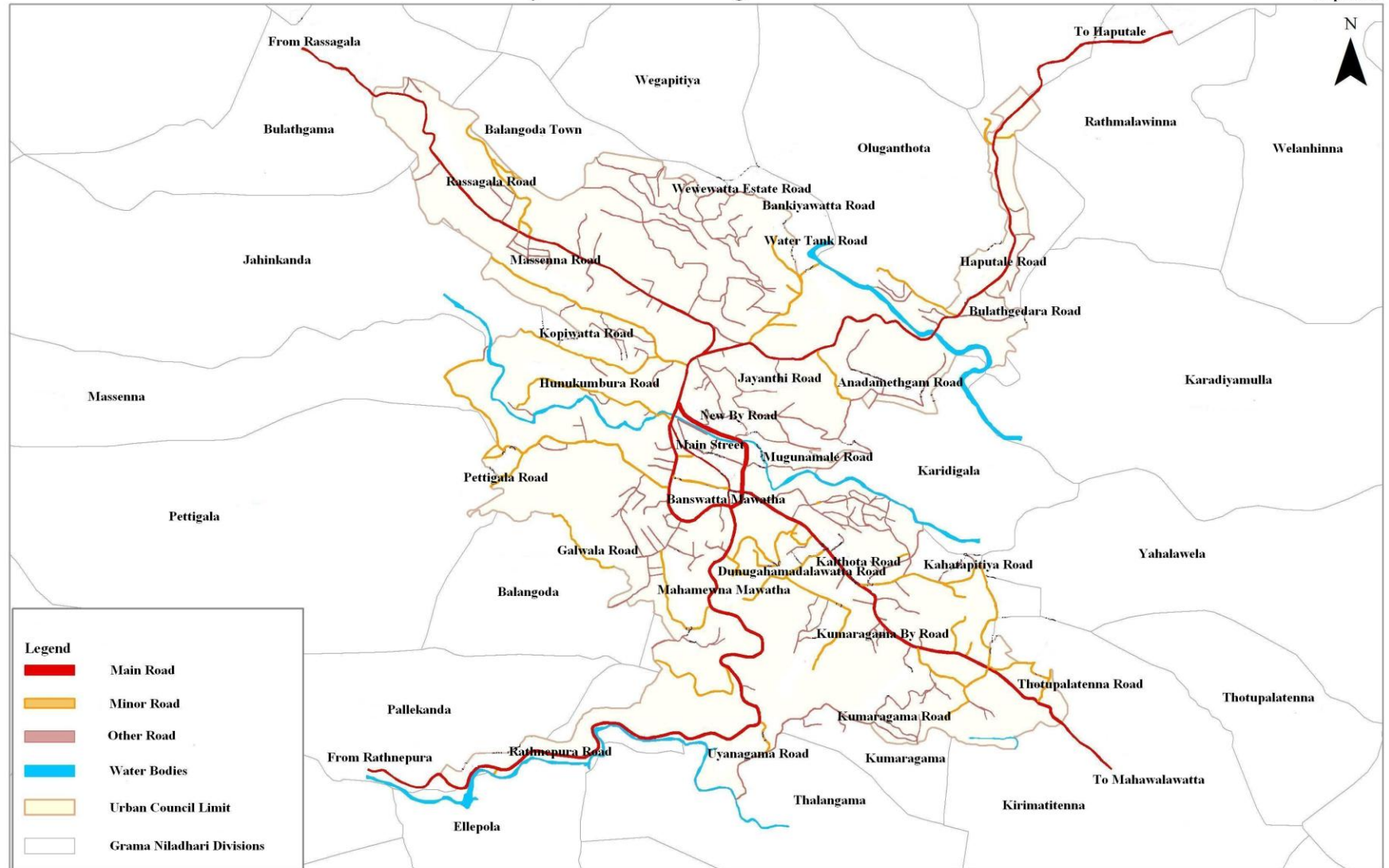
<b>Type</b>	<b>Percentage (%)</b>
Traffic movement towards outer areas	64%
Internal traffic movement	36%

*Source :- Field Survey, Urban Development Authority*

The transportation established within the urban area could be identified as public transportation and goods transportation. The transport service for the public is provided by the People's Transport Service and Road Passenger Transport Service. centralizing the Balangoda bus stand. In addition, vans and the three wheels also provide a considerable support for this service. The main contributors for transportation of goods are lorries, tractors, three wheelers and also the public transport buses. The details of the daily passenger transport service of the bus stand are given in the Table No. 18.

# Road System 2013 - Balangoda Urban Council Area

Map No. 08



**Table No. 18****Daily Passenger Transportation - 2011**

<b>Method of Transportation</b>	<b>Small Buses</b>	<b>No. of Arrivals</b>	<b>No. of Passengers</b>	<b>Percentage (%)</b>
Peopalised Transport Service	150	878	48,200	46.7
Private Transport Service	135	605	55,000	53.3
<b>Total</b>		<b>1483</b>	<b>103,200</b>	<b>100.0</b>

*Source :- Peoplised Transport Authority, Road Passenger Transport Service of Balangoda - 2011*

The main role of the public transportation is done by the Peopalised Transport Service and the details of the bus service such as number of buses and the number of arrivals are given in the above table. Apart from that, lorries and vans are used in rural areas with minimum facilities where no train service or other transport facilities.

**7.1.3 Telecommunication Facilities**

Sri Lanka Telecom is the main provider of the telecommunication facilities in Balangoda area. In addition, other private sector organizations also provide a contribution for this service. Specially, for the areas do not have network system, provide facilities through towers. Also, usage of mobile telephones are at a increasing demand.

**Table No. 19****Distribution of Telephone Connections - 2011**

<b>Type of usage</b>	<b>No. of connections</b>	
	<b>Quantity</b>	<b>Percentage ( %)</b>
01. Residential	900	57.7
02. Commercial	600	38.5
03. Offices	45	2.8
04. Services	13	1.0
<b>Total</b>	<b>1558</b>	<b>100.0</b>

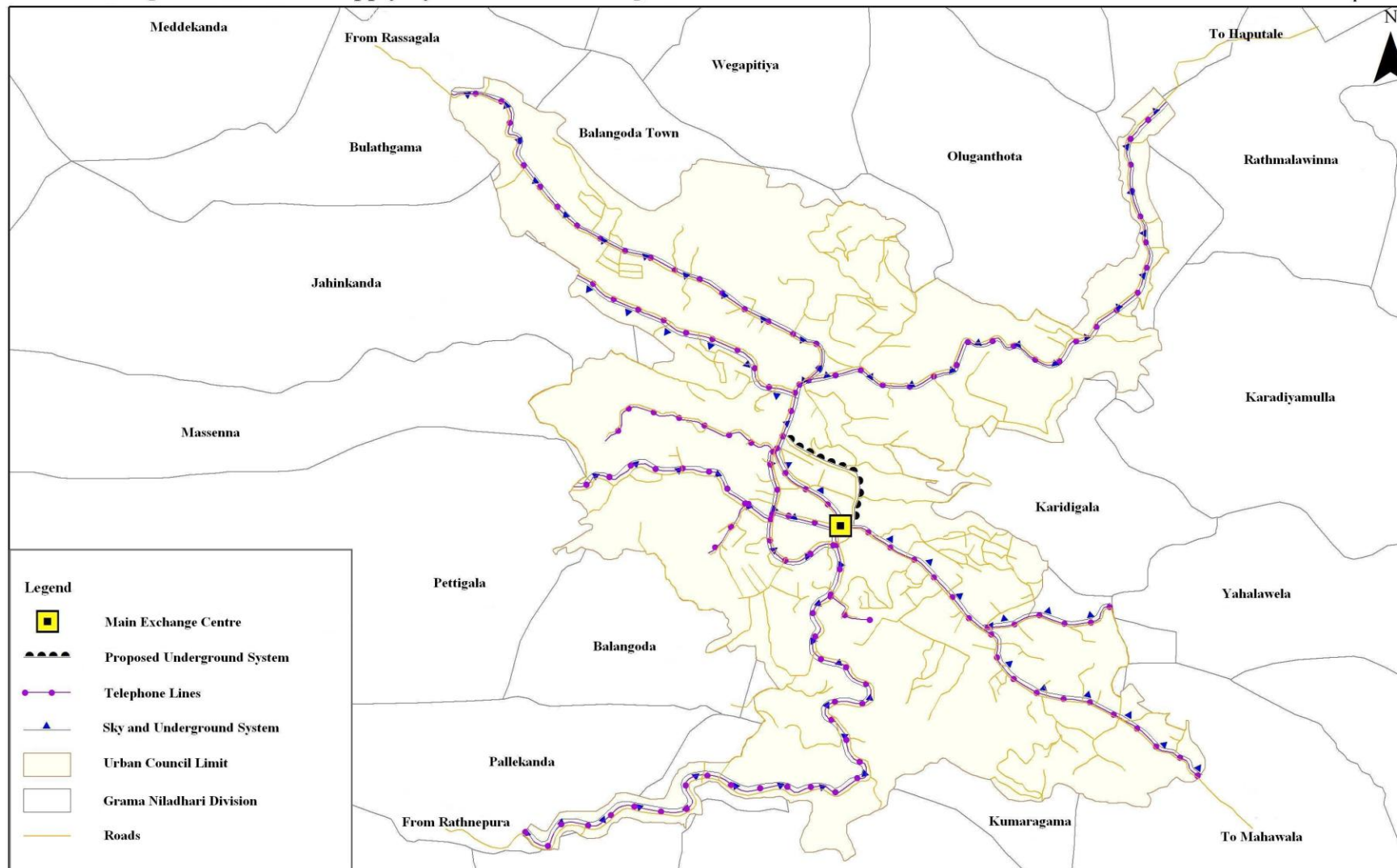
*Source :- Sri Lanka Telecom - Ratnapura*

According to the above Table No. 19, 58% of the telephone connections are used for residential purposes and 38% for commercial activities. Therefore, it is understand that the telecommunication service in Balangoda is mainly used for residential and commercial activities.

The details of the telecommunication distribution are shown in the Map No. 09. It is noticed that the telecommunication and the other infrastructure facilities are spread over within the urban centre and along the main roads.

## Telephone Network Supply System 2013 - Ratnapura Urban Council Area

Map No. 09



Source: 1:10000 Land Use Map  
Survey Department of Sri Lanka and  
Sri Lanka Telecom

0 0.5 1 2 Kilometers

Urban Development Authority  
Sabaragamuwa Provincial Office  
Rathnepura

#### 7.1.4 Postal Service

The main post office of Balangoda is the main centre for the postal service in the Balangoda electorate where urban area has been taken as the centre. In addition, the postal service is provided by two sub post offices and an agency post office.

##### Main services

Telegrams, registration of parcels, express parcels, printed matter, emails and faxes.

#### 7.1.5 Social and Recreational Facilities

**Table No. 20**

**Social and Recreational Facilities - 2011**

Type	No. of Units
Rest house and restaurant	07
Sports Clubs	05
School Playgrounds	02
Public Libraries	01
Cemeteries	02
Urban Council Playgrounds	01

*Source :- Urban Council – Balangoda*

The details of the above table indicate that the social and recreational facilities in the Balangoda urban area has been developed at a minimum level. It is important to develop these facilities when consider the main factors such as existing population, rate of growth of population and the migrating population. It is required to redevelop the existing parks, linear parks, open area parks and the public playgrounds. Therefore, a suitable work programme has to be provided to satisfy the future requirements.

#### 7.1.6 Electricity Supply

The electricity supply for the urban area is provided by the Ceylon Electricity Board. There are 8573 in the area and about 100 – 200 applications are annually forwarded to the Ceylon Electricity Board. The total capacity is 1550 KVA and present consumption is only 950 KVA. There are five substations located within the urban area and the capacities used by such stations are given in the following table.



**Table 21****Electricity Supply – Capacity and Distribution -2011**

<b>Location of Sub station</b>	<b>Capacity (KVA)</b>	<b>Capacity used presently (KVA)</b>
1) Substation in the Town	400	280
2) Substation at Magistrate	400	260
3) Substation at Massane	250	200
4) Substation at Milk Board	250	160
5) Substation at Hospital	250	50
<b>Total</b>	<b>1550</b>	<b>950</b>

*Source :- Ceylon Electricity Board – Balangoda - 2011*

According to the Table No. 22, 74.2% of the electricity connections are used for residential purposes and 24.4% are used for commercial activities. Therefore, it is clear that the electricity consumption pattern is mainly established for residential uses.

**Table No. 22****Electricity Consumption – According to usage**

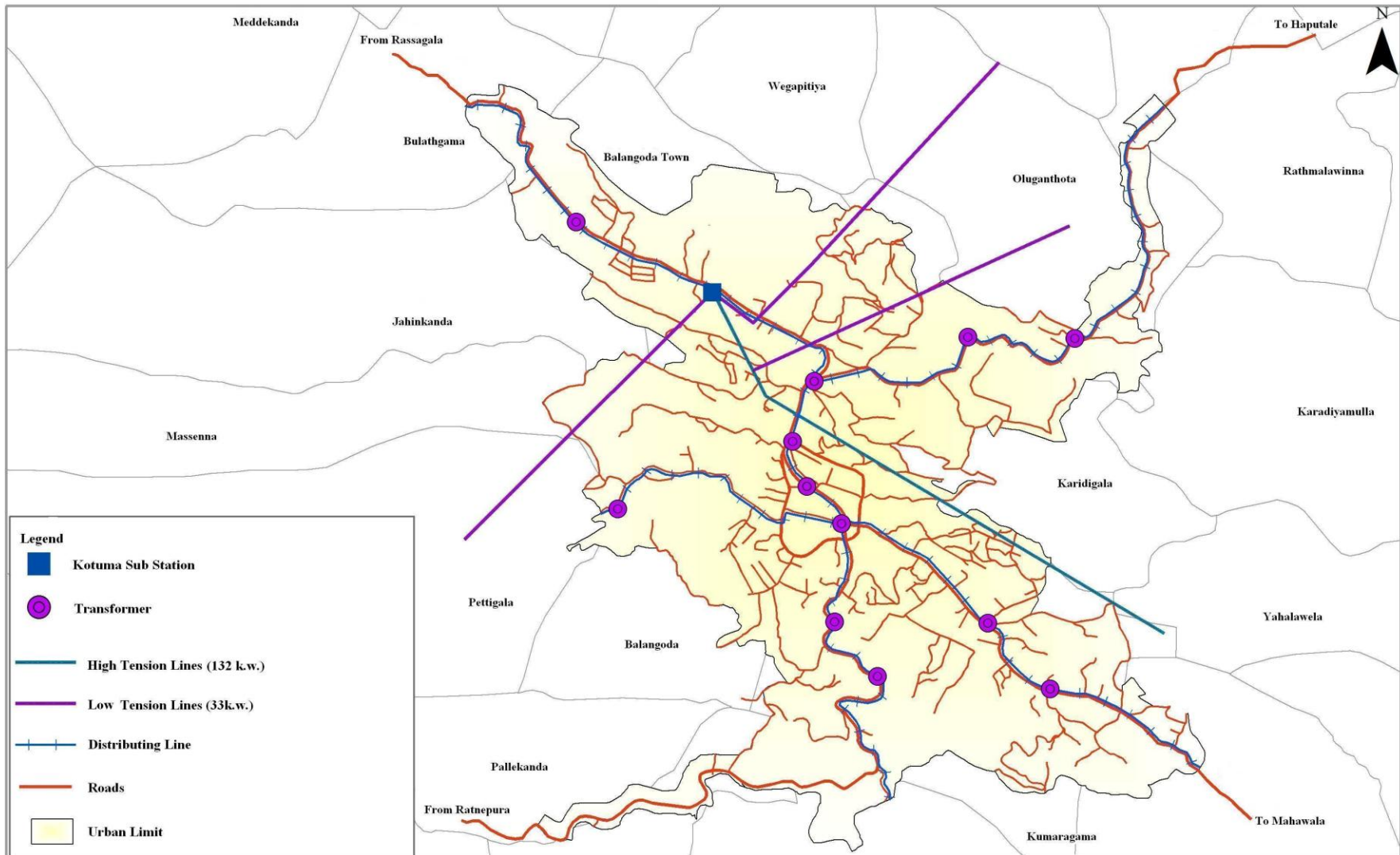
<b>Consumption</b>	<b>No. of Connections</b>	<b>Percentage</b>
1) Residential	6357	74.20
2) Commercial Institutions	2090	24.40
3) Government & Semi Government Institutions	60	0.70
4) Industries	46	0.53
5) Religious	20	0.23
<b>Total</b>	<b>8573</b>	<b>100.00</b>

*Source :- Ceylon Electricity Board – Balangoda - 2011*

Although the electricity supply distribution network is spread over the urban centre and along the main roads, it is noticed that there is a decrease in distribution away from the town centre (Map No.10). When studying the electricity supply in the Balangoda town, there is a possibility of using the supply system and the capacity for future development needs.

## Electricity Supply - Balangoda Urban Council Area

Map No. 10



Source: 1:10000 Land Use Map  
Survey Department of Sri Lanka and  
Electricity Board - Bulathgama  
Balangoda

0.55 0.275 0 0.55 1.1 1.65 2.2  
Kilometers

Urban Development Authority  
Sabaragamuwa Provincial Office  
Rathnepura

### 7.1.7 Drinking Water Supply

The drinking water supply within the urban area is done by the National Water Supply and Drainage Board. The capacity of the drinking water supply is 2400 cu.m. and it is 70% of the water requirement of the area. The balance 30% get from the wells and the water springs. The main water source of the area is Walave river. In addition, the Pettigala water scheme, which has been started in 1975, also provides water for the area.

Supply of water to the town centre area is done throughout the day while the other areas get water occasionally. (see Map No. 11)

The water connections in the urban area in 1991 was 1257 and it has been increased up to 2253 in 2011. The details of the water connections are given in the table below.

**Table No. 23**

#### **Drinking Water Supply according to Consumption Categories - 2011**

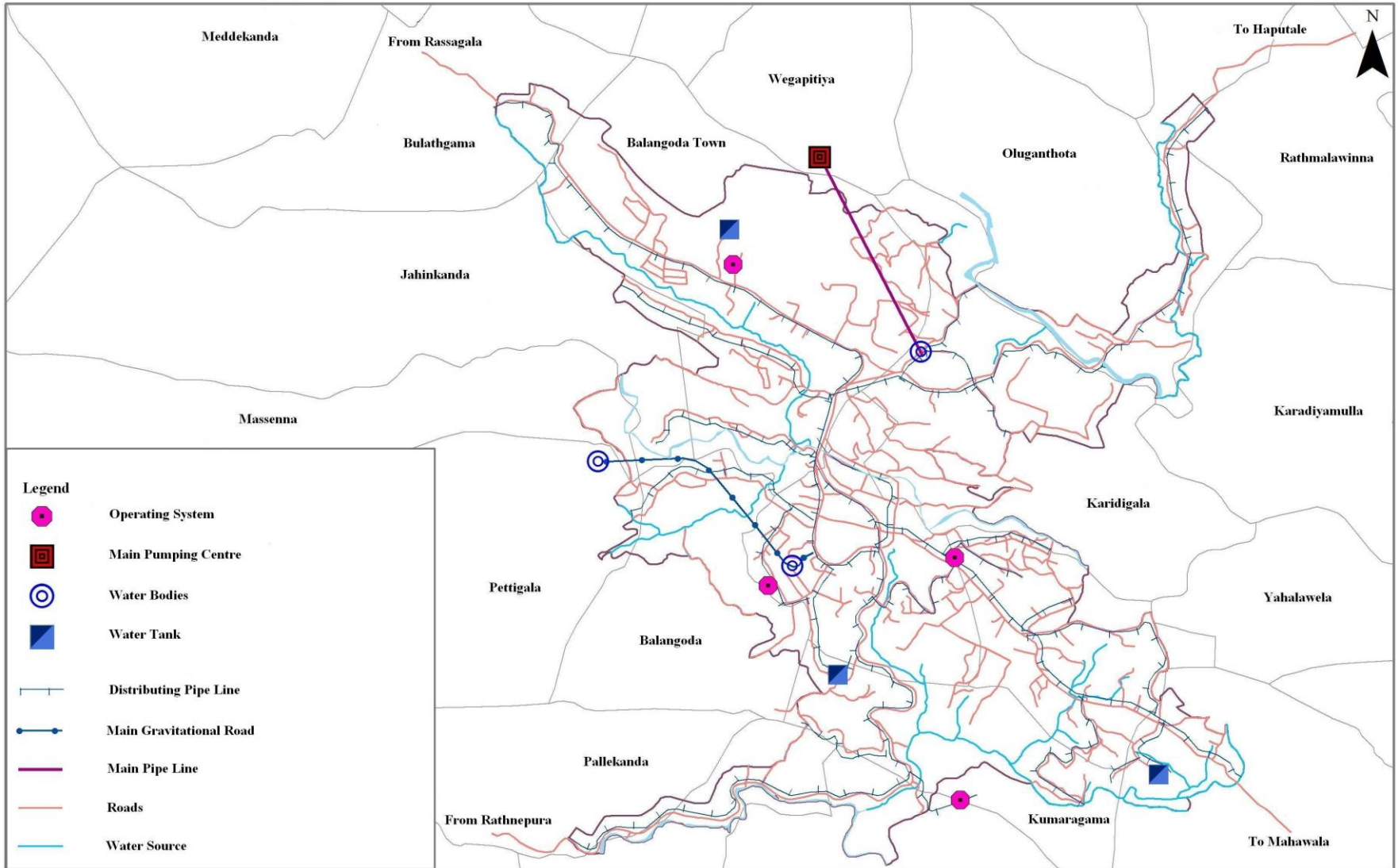
<b>Category</b>	<b>No. of Connections</b>
Residential	1466
Business Purposes	550
Schools	113
Common Water Taps	101
Tourist Hotels	01
Religious Places	22
<b>Total</b>	<b>2253</b>

*Source :- National Water Supply and Drainage Board – Balangoda Office - 2011*

Out of 101 common taps mentioned in the above table, two taps are fixed out of the town centre. Although the water supply from these taps are limited for drinking purposes but, it is used for bathing, washing of clothes and other purposes also. According to the Water supply and drainage board, it is recorded that there is a wastage of 50% of the water. Further, there are only 3 pumps which are in dilapidated condition are available to pump water and therefore the distribution of water is done occasionally. Wastage of water also occurs due to leakage of water through old pipelines. A Norwegian aided project is launching to fulfill water requirement of the area.

# Water Supply System 2011 - Balangoda Urban Council Limit

Map No. 11



Source: 1:10000 Land Use Map  
Survey Department of Sri Lanka and  
Water Board Balangoda

Urban Development Authority  
Sabaragamuwa Provincial Office  
Rathnepura

### 7.1.8 Solid Waste Management

The solid waste management project has been commenced by the Balangoda urban council as a solution for adhoc solid waste disposal which had been a huge problem to the Balangoda UC, with the corporation of Sabaragamuwa provincial council, under guidance of the community environmental programme of Ministry of Forest resources and environment. 10 tons of solid waste per day is collected within the town area. These waste are not categorized, but after separation, the degradable waste is converted into compost. Accordingly, model compost project is implemented in the town.

### 7.1.9 Drainage System

The drainage system of the Balangoda urban area is based on Walave river and the Kalu ganga which are some of the main rivers in Sri Lanka. Part of the water drain off to Walawe ganga through Dorawela Oya and the water from the other part, drain off to Kalu ganga through 'We' ganga and small streams and drains.

The rainwater harvesting system is newly constructed under the financial aid of Asian Development Bank and the prevailing flood situation has been avoided through this project. However, there is no separate drainage system for waste water in the area and it is directly connected to the rain water drainage system without purify. (Table No. 24 indicates the details of the drainage system). This cause several environmental problems by mixing of waste water with the natural water sources and main rivers.

In addition, collection of rain water and the waste water in the paddy lands and wetlands become marshy areas and cause adverse effects for paddy cultivation. This has been identified as a main problem and therefore, it is need to pay special attention on this matter.

**Table No. 24**

#### **Drainage - 2011**

<b>Type</b>	<b>Length (k.m.)</b>	<b>Percentage</b>
Cement / Concrete drains	6.5	16%
Soil drains	35.0	84%
<b>Total</b>	41.5	100%

*Source :- Balangoda Urban Council*

### 7.1.10 Sewerage

There is no central sewerage system in the Balangoda town. However, Balangoda UC encourages the public to construct water seal toilets for each and every house privately, through the approval of building applications. There are 3 public toilets within the urban area in common places. The details of the sewerage systems in the urban area are given in the Table No. 25

**Table No. 25**

**Sewerage System - 2011**

Type of Toilet	No. of Units	Percentage
Water seal toilets	2110	81.15
Toilets with pits	486	18.07
Other	4	0.15
<b>Total</b>	<b>2600</b>	<b>100.00</b>

*Source :- Balangoda Urban Council and Divisional Secretariat*

There are 04 housing units within the urban area do not have toilets and 486 houses have unsafe toilets and it is important to pay special attention to provide water seal toilets for them in the future development programmes. Specially, it is important to introduce a central sewerage system as a current requirement in order to minimize the environmental and hygienic problems.

## 7.2 Social Infrastructure Facilities

### 7.2.1 Health Facilities

The health facilities for the Balangoda area are provided by the Balangoda District hospital. The details of the hospital staff and the services are given in the Table No. 26.

**Table No. 26**

**Balangoda Base Hospital - Facilities and Staff Composition - 2011**

No. of Beds	No. of in-house Patients	No. of OPD patients per day	No. of Physicians	Specialists	Nurses
187	159(per day)	434	MO 22 DEN. 03 RMO.02	3	79

*Source :- Base Hospital - Balangoda*

There are 12 wards available for in house treatment with 187 bed capacity. In addition there are 3 new wards are been constructed and thereby expand the capacity of out patients department (OPD). Also, the present OPD has been changed and a rapid and efficient medical service will be provided by the new medical complex. Apart from that, the following items have been introduced to the hospital to avoid the shortcomings prevailed in the hospital.

1. X ray unit
2. Blood Bank
3. Dental section
4. Hostel facilities for Doctors and Nurses

Balangoda hospital is functioned as the Base hospital for the area with the development of the above sectors. Specially, most of the multi functions that are carried out in the Ratnapura National Hospital are done in this hospital. The surgical ward is one of the main items, which take a major role.

In addition to the above basic services as well as the other services of the hospital, the following institutions also provide services in the medical sector.

01. Ayurvedha
02. Private medical centres
03. Pharmacies

### **7.2.2 Education**

There are 9 government schools located in the Balangoda urban area with 10084 students. When categorize according to the education level and the available facilities, there are only one 'A' grade school, three 'B' grade schools, two 'C' grade schools, one 2<sup>nd</sup> grade school, one 3rd grade schools and two private schools. The details are given in the Table No. 27.

In addition, some technical courses are started under vocational training programme such as air conditioning and carpentry are started in Kumara Vidyalaya and Junior school for the school leavers.

**Table No. 27****Details of Schools - 2011**

Name of the school	No. of Students		Total	No. of Teachers	Teacher Student Ratio	Area per Student (sq.m.)
	Male	Female				
Sri Buddha Jayanthi Central School	1100	1225	2325	84	1:28	11
Balangoda Central Collage	794	780	1574	76	1:21	10
Ellepola Maha Vidyalaya	177	163	340	21	1:16	11
St. Agnes Balika Maha Vidyalaya	199	1070	1269	52	1:24	09
Balangoda Vidyaloka Vidyalaya	680	557	1237	52	1:24	10
Balangoda Kumara Vidyalaya	522	380	902	33	1:27	5.5
Jeilani Central Collage	550	499	1049	48	1:22	8
Balangoda Tamil Maha Vidyalaya	322	338	660	26	1:22	10
C.C Tamil Maha Vidyalaya	373	355	728	34	1:21	10
<b>Total</b>	<b>4717</b>	<b>5367</b>	<b>10084</b>	<b>426</b>		

*Source :- Divisional Education Office – Balangoda Urban Area - 2011*

According to the above table the teacher student ratio for the Balangoda area is lesser amount when compared to the standard ratio of 35 per teacher. Thus, it is indicated that there are no shortage of teachers. However, the problem raised here is a shortage of teachers for some subjects. Specially, English, Mathematics and Science as well as for the advance level classes.

Similarly, there is a shortage of equipments and a problem arose on facilities. This is a serious problem in schools except popular schools. Further, there are very few facilities for informal education activities in the area. Lack of equipment, financial deficiencies and lack of skilled technical knowledge could be mentioned as the main shortcomings for this situation.

In addition, lack of teachers for religious education is a serious problem in this area. Attending the students for tuition classes in Sundays become a serious problem for religious education.



### **Information Technology (IT)**

An educational centre called ‘Nanasala’ has been implemented successfully within the town area under the guidance of Ministry of Science and Technology. It is recorded that a large amount of school children benefitted from this centre. Apart from that, there are several small scale institutions established within the town centre to provide internet facilities as well as educational centres for information technology.

#### **7.2.3 Open Spaces**

The one and only playground in Balangoda town is the Urban Council playground. It is 1.2 ha. in extent and it is not at all adequate to develop as a fully equipped playground. Presently, it is the only place used for public activities such as sports activities as well as for public meetings and musical shows. This playground consists of a pavilion and two rooms with toilet facilities. In addition, there are facilities for cricket and volley ball. However, the administration and maintenance of this playground at present is at a minimum level.

The Ratnapura – Rassagala main road is one of the boundaries of the playground, which is located in front of the playground and Dorawela Oya also flows parallel to the road.

It is proposed in this plan to construct a two storeyed building for the Pavilion and to reserve the upper floor for physical training activities. In addition, it is proposed to improve the Pavilion area as well as to construct a Indoor Stadium. Further, the land required for 400m track has to be found.

Further, it is proposed in the plan that the old pola land is suitable to develop as a children’s park.

#### **7.2.4 Religious Places**

The Table No. 28 gives the details of the religious places located within Balangoda urban area.

**Table No. 28**

**Composition of Religious Centres - 2011**

Type	No. of Units
Buddhist Schools	9
Christian Temples	4
Mosques	5
Religious Centres for Hindus	2
<b>Total</b>	<b>20</b>

*Source :- Field Survey, Urban Development Authority - 2011.*

The above table indicates the multi religious the cultural diversity of the area.

### **7.3 Issues and Problems**

#### **Main Roads**

- Construction of unauthorized buildings within the street reservations
- Less accessibility to the surrounding area of the town centre
- Physical barriers in constructing of roads

#### **Transport Service**

- Geographical location with mountains, slopes, narrow road net work without a proper maintenance are the main problem in this sector
- Due to the lack of space within the town centre, there is a problem in providing pavements and parking spaces. As a temporary solution for this situation, both side of the roads are used to park the vehicles of the public who comes to the town for various purposes. In addition, part of the road is being used to park the three wheelers and other hired vehicles.

#### **Telephone Facilities**

- Telephone facilities are available only along the main roads

#### **Postal Service**

- Delays in postal bus service and poor condition of roads cause delaying in distribution of letters
- Lack of knowledge among the people of the area regarding the email facilities etc.

- Inadequate number of postmen employed

### **Social and Recreational Facilities**

- Absence of Open air theatre and Cinema hall
- Lack of open spaces

### **Drinking Water Supply**

- Absence of continuous distribution of water by the Water Supply and Drainage Board

### **Drainage System**

- Blocking of natural drainage system due to irregular filling of lands
- Collection of waste water in the rain water drains
- Blockade of drains due to earth slips

### **Sewerage**

- Discharge of sewage into the rain water drainage system
- Usage of water seal toilets where the Ground Water level is high

### **Health Facilities**

- Shortage of Doctors
- Shortages of Nurses
- Non availability of continuous water supply
- Improper mortuary facilities
- Absence of emergency unit and Ambulance Facilities

### **Information Technology**

- Non availability of properly established information technology centre in the area.

## **Chapter Eight**

### **8.0 Environment**

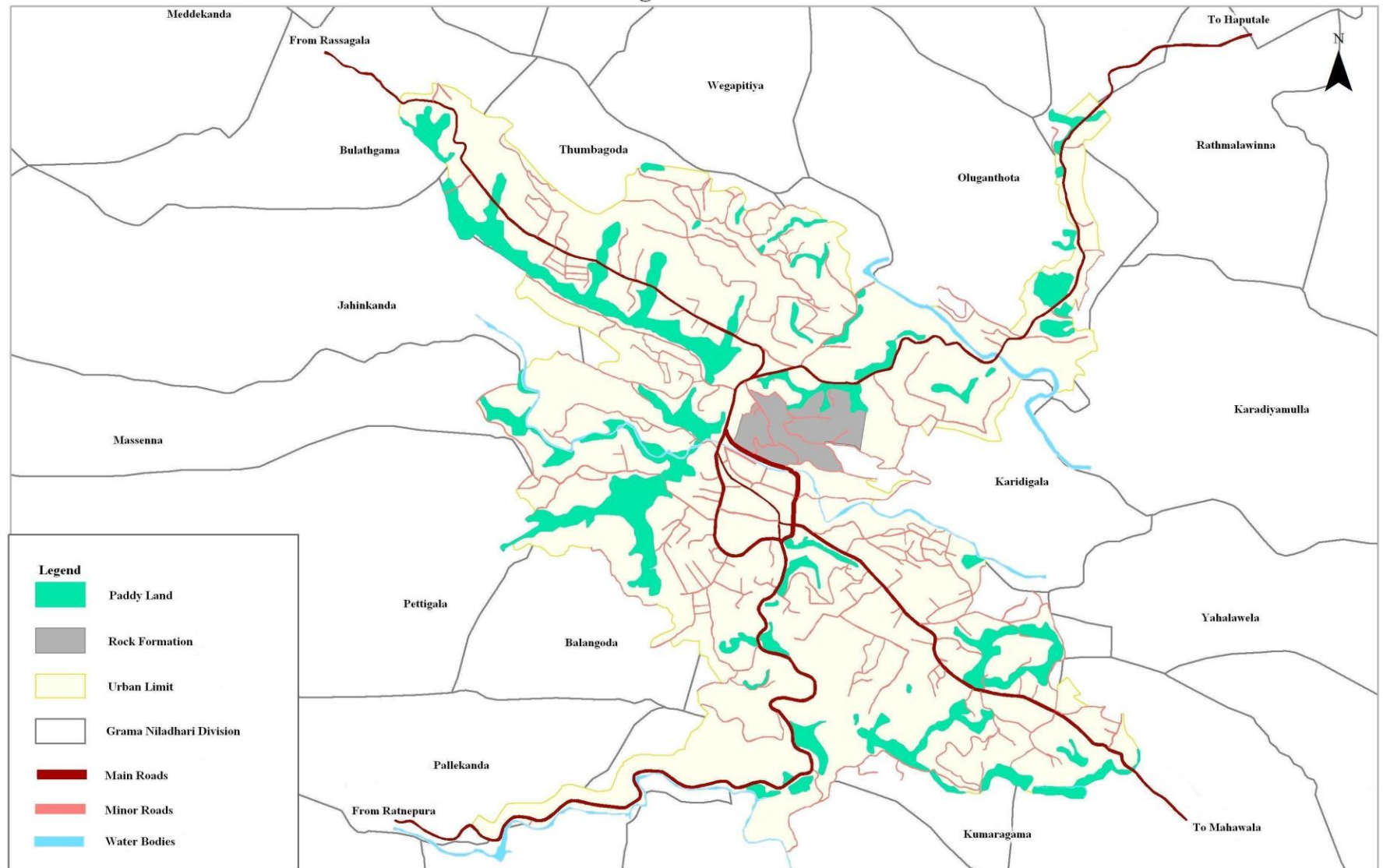
#### **8.1 Environmental Sensitive Zones**

The Balangoda town is located in the intermediate zone, at a height ranging from 1000' – 3000' from the mean sea level and within the catchment area of the Walawe river. 'Dethanagala' mountain range, 'Pettigala' mountain, 'Hagala' mountain and 'Massanne' mountains are falling within the urban council area. Most of the mountain hills are covered with forest reserves. Major water sources flow from the eastern part of the town towards the low lands in southern part, from 'Dorawela' basin through 'Wee' basin. The paddy lands and the low lands are shown in the Map No. 12.

It is a special character that the Balangoda town is located within the lower area of Dorawela basin. Further, this town contains different types of geographical features such as river basins, mountain hills, low lands and steep slopes. However, due to the location of the town in a valley surrounded by mountain range resulted in the increase of natural disasters. Also due to flow of Dorawela oya across the town and the 'Wee' river which is a tributary of Kalu ganga commence at Mawela area of Balangoda, in Balangoda town located in a valley, resulted in occasional flooding. Further, due to the type of the soils such as: red brown soil, 'alluvial', clay soil reduce the absorption capacity of the soil and thereby intensify the speed of the water flow. Accordingly the physical formation of Balangoda town, diversification of the climatic conditions. 70% of the land is prone to slip, 60% of the population live in mountainous areas. Flooding of Dorawela oya and flowing of three water sources such as; Kalu ganga, Wee ganga through the town area, may be the cause for the high natural disaster situation in the Balangoda area.

# Environmental Sensitive Zone 2011-Balangoda Urban Council Area

Map No. 12



Source : 1:10000 Land Use Map  
Survey Department of Sri Lanka and  
Urban Development Authority

0 0.5 1 2 Kilometers

Urban Development Authority  
Sabaragamuwa Provincial Office  
Rathnepura

## **8.2 Identified Disasters**

### **Flash Flooding**

It has been identified that the areas such as, weekly pola in the town centre, bus stand and the area where Darawela bridge is located, are faced to flash flooding. Further, it has been identified that the roads, paddy fields and other agricultural lands in Dorawela, Hunukumbura, Massanne , Ratowita are also faced to flash flooding. (Map No. 13)

### **Earth Slips**

It has been identified a few earth slip prone areas such as, community housing areas, roads and some areas which consist of common infrastructure. Among those, there are soil erosions in Pallekanda, Ellepola, Maligatenne, Saraswathi watte, Dorawela, Kiridigala, Hunukumbura, Massanne, Ratowita and Bankiyawatte and earthslips in Ellepola, Kumaragama, Pallekanda, Saraswathi watte, Bulathgama and Thalangala areas have been recorded. Map No. 14 describes the areas which face to earth slips and the amount of danger.

### **Forest Fires**

It is recorded forest fire in natural forest areas due to the different types of human activities (surrounding area of Mugunamale mountain)

### **Soil Erosion**

It has been identified a trend to intensify the flooding and earth slip situation due to stagnation comes of soil from the mountain areas and sloppy areas.

There is a possibility of having natural disasters at a increasing rate due to encroachment of reservations and human activities within these areas.

Having drought seasons and scarcity of water.

## **8.3 Disaster Mitigation**

According to the above study, it has been found few strategies to mitigate the natural disaster.

- 1) Improvement of physical environment of the town and management of natural resources.
- 2) Bring awareness among the people regarding the natural disasters through social information system.
- 3) Strengthen the active response during the natural disaster period in order to minimise the dangers.
- 4) Minimise the dangers through continuous assessment, evaluation and coordination.
- 5) An Introduction of active land use management process.

It is important to attend to the above factors to mitigate the different types of natural disasters.

#### **8.4 Disaster Vulnerable Assessment**

The disaster areas and the vulnerable areas of Balangoda town has been mapped under the project called ‘The project to prepare the methods and strategies to reduce the disaster risk in Sri Lanka’ conducted by the ‘Human Settlement Development Programme’ of United Nations while considering vulnerability of Balangoda area, it has been found that there is a high risk in the areas of Ellepola, Kirindigala and Bulatgama.

When consider the multi hazards situation in Balangoda town, the northern and the southern parts of the urban council area indicates high vulnerability. Availability of steep slopes resulted increase amount of landslides and earth slips in this area. The main reason for the present situation in the Balangoda urban area is due to improper constructions and unsuitable land use on steep slope.

Although the vulnerable zones as mentioned above could be identified in Balangoda, when considering Balangoda urban council area in isolation, it is negligible when compared to the disaster situation in the other areas of Ratnapura District.

#### **8.5 Problems**

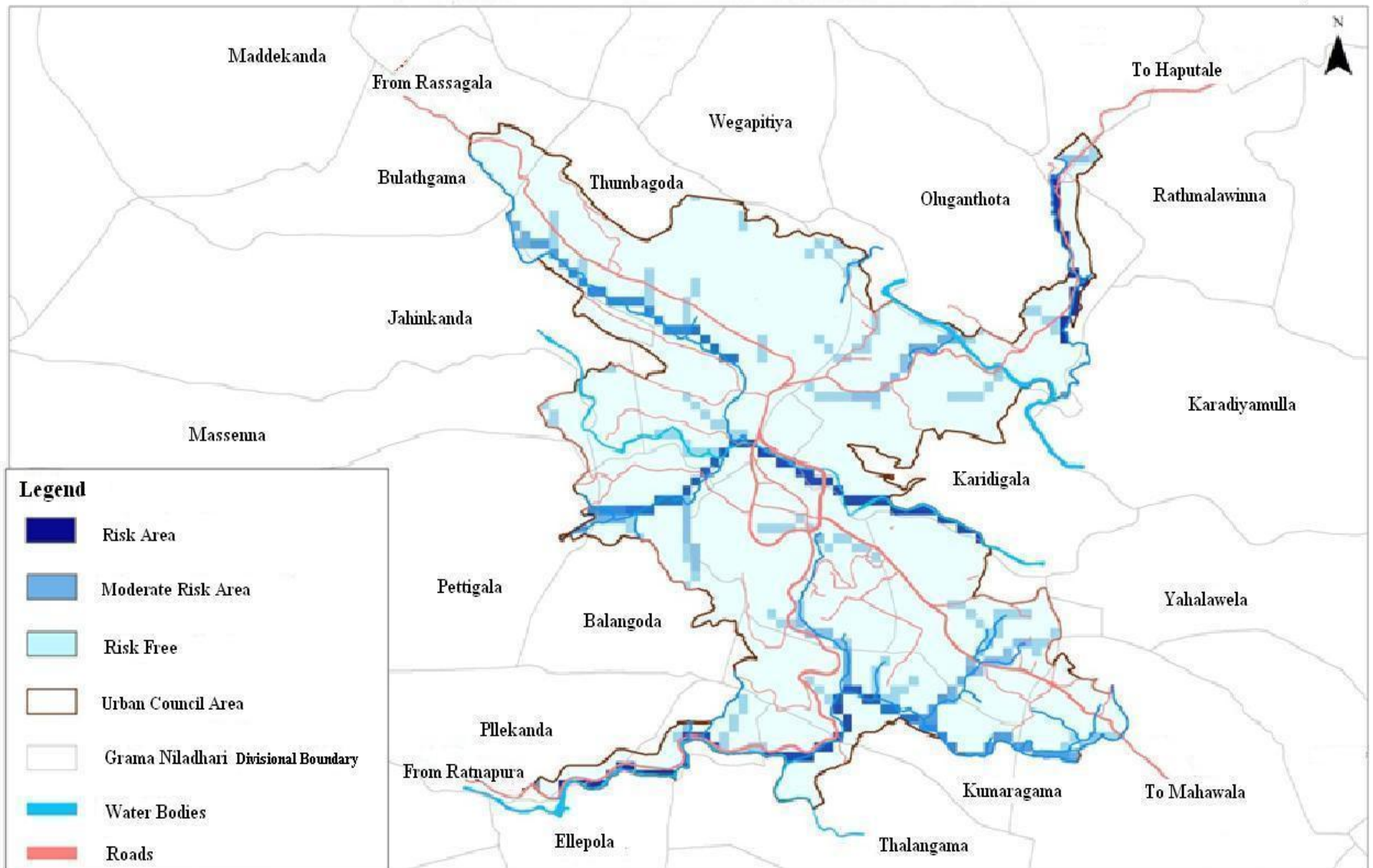
- Difficulty in finding lands for increasing residential requirement due to natural disasters.
- Lack of suitable lands for development.
- Absence of positive attitudes regarding the disasters danger among the people.
- Improper development activities.

#### **8.6 Conclusions**

- There is a possibility to increase the disasters through unplanned development activities.
- This could be countered through planned development.

# Flood Prone Areas (2012) - Balangoda Urban Council Area

Map No. 13



Source: 1:10000 Land Use Map  
Survey Department of Sri Lanka and  
Faculty of Architecture, University of Moratuwa

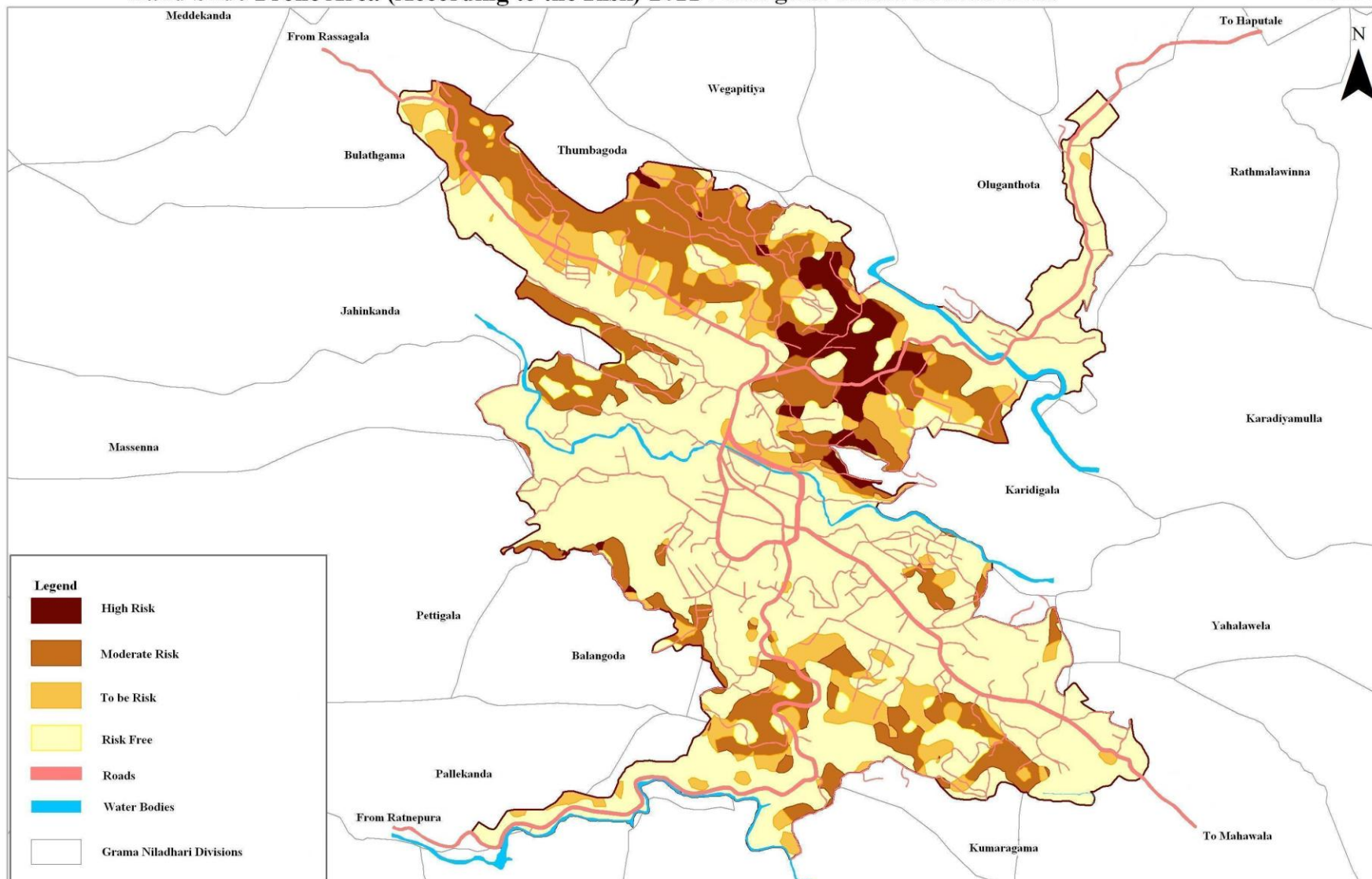
0 0.5 1 2 Kilometers

Urban Development Authority  
Sabaragamuwa Provincial Office  
Ratnapura



# Land Slide Prone Area (According to the Risk)-2011-Balangoda Urban Council Area

Map No. 14



## Chapter 09

### 9.0 SWOT Analysis

#### 9.1 Analysis of Strengths, Weaknesses, Opportunities and Threats

	Strengths	Weaknesses	Opportunities	Threats
Physical	<b>Location</b> <ul style="list-style-type: none"> <li>Located in central place where direct and in direct relations could be done with Western, Central, Southern and Uva provinces.</li> </ul>	<ul style="list-style-type: none"> <li>Less accessibility.</li> <li>Traffic congestion.</li> <li>Land consists of mountain and sloppy areas.</li> <li>High cost incurred in road development.</li> </ul>	<ul style="list-style-type: none"> <li>Possibility to establish as the main service centre for the urban area the surrounding feeder area establish as a tourism centre.</li> </ul>	<ul style="list-style-type: none"> <li>High population density.</li> <li>Under utilization of lands.</li> <li>Unauthorized constructions.</li> </ul>
	<ul style="list-style-type: none"> <li>Good accessibility to the surrounding areas.</li> </ul>	<ul style="list-style-type: none"> <li>Narrow roads with bends and slopes.</li> </ul>	<ul style="list-style-type: none"> <li>Possibility of providing a good regional accessibility.</li> </ul>	<ul style="list-style-type: none"> <li>Problems in drainage system.</li> <li>Earth slips during the rainy season.</li> </ul>
	<ul style="list-style-type: none"> <li>Centrally located to several tourist important places. (Duvili ella, Alupola ella, Dehena ella, Kiridi ella, Surathali ella, Bambara kanda ella, Belihul oya, and worlds end, Bolthumbe Saman Dewalaya, Kuragala, Buduruwagala, access to Haputhale - Nuwara-Eliya road through Balangoda)</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure facilities at a low level.</li> <li>Minimum publicity.</li> </ul>	<ul style="list-style-type: none"> <li>Potential to develop as a tourism zone by developing infrastructure facilities .</li> </ul>	<ul style="list-style-type: none"> <li>Physical barriers for accessibility.</li> <li>Dry off water springs due to the haphazard development activities.</li> <li>Damage to the Environmental beauty and high possibility for environmental pollution.</li> </ul>

	Strengths	Weaknesses	Opportunities	Threats
<b>Physical</b>	<b>Land use</b> <ul style="list-style-type: none"> <li>• Possibility of developing 33% of undeveloped lands.</li> </ul>	<ul style="list-style-type: none"> <li>• Irregular land use and use of unsuitable lands for development.</li> </ul>	<ul style="list-style-type: none"> <li>• Optimum utilization of lands through systematic and proper land use</li> </ul>	<ul style="list-style-type: none"> <li>• Frequent flooding and earth slips due to flow of Dorawela oya through the town centre.</li> </ul>
<b>Economical</b>	<ul style="list-style-type: none"> <li>• Availability of minerals such as gem mines, Phelspa, and Calcite in large amounts.</li> </ul>	<ul style="list-style-type: none"> <li>• Non existence of related industries to get the optimum utilization of the minerals.</li> <li>• Technology is at a primary stage.</li> </ul>	<ul style="list-style-type: none"> <li>• Possibility to develop as a main buying and selling centre for gems and develop the allied jewellery industry.</li> <li>• Possibility to develop Industrial sector through improvement of industries related to mineral resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Destruction of the natural environment due to mining and cause spread of infectious diseases.</li> <li>• Adverse effects on filling of rivers and canals, destruction of river banks, soil erosion and flooding.</li> </ul>
	<b>Industries</b> <ul style="list-style-type: none"> <li>• Location of small scale industries and handy craft industries in large amount in the surrounding area of Balangoda (Jewellery and gem cutting etc.)</li> <li>• Location of several tea factories for manufacturing of tea.</li> </ul>	<ul style="list-style-type: none"> <li>• Absence of lands to establish industries within the urban area limits.</li> <li>• Reduction of production capacity due to climatic and weather conditions.</li> </ul>	<ul style="list-style-type: none"> <li>• Possibility to develop as a service centre for the surrounding tea manufacturing industry.</li> </ul>	<ul style="list-style-type: none"> <li>• Competition with foreign countries regarding export products of gem industry and handy craft industry.</li> </ul>

	<b>Strengths</b>	<b>Weaknesses</b>	<b>Opportunities</b>	<b>Threats</b>
<b>Economical</b>				<ul style="list-style-type: none"> <li>• Since most of the lands being environmental sensitive, there is a possibility of having soil erosion and earth slips due to tea plantation in these lands.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>• Centrally located to several historical and religious places. Eg:- - Sri Pada Mountain - Bolthube Saman Devalaya - Kuragala historical Sacred area - Aluth Nuwara, Kuda Katharagama Devalaya.</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure development is at a minimum level.</li> </ul>	<ul style="list-style-type: none"> <li>• Possibility of develop as a attractive place for local and foreign devotees.</li> </ul>	<ul style="list-style-type: none"> <li>• Problems to planned policies due to multi ethnic groups living in the area.</li> </ul>
	<ul style="list-style-type: none"> <li>• Increasing demand for land in the urban area and in-migration from the other areas to reside.</li> </ul>	<ul style="list-style-type: none"> <li>• Improper blocking out of lands and improper land use.</li> </ul>	<ul style="list-style-type: none"> <li>• Possibility of establishing residential areas through the zoning plan and provide required facilities in order to retain the in-migration population within the area and to get their contribution to the national development.</li> </ul>	<ul style="list-style-type: none"> <li>• Problems creating among cultural, religious and ethnic matters.</li> <li>• Increase of environmental problems.</li> </ul>

	<b>Strengths</b>	<b>Weaknesses</b>	<b>Opportunities</b>	<b>Threats</b>
<b>Social</b>	<ul style="list-style-type: none"> <li>• 49.3 % of the population coming under the work force.</li> </ul>	<ul style="list-style-type: none"> <li>• Less possibilities for vocational training for the available work force.</li> </ul>	<ul style="list-style-type: none"> <li>• Possibility to establish the work force in proper job opportunities.</li> <li>• Possibility of creating job opportunities in nearby areas</li> </ul>	<ul style="list-style-type: none"> <li>• Out-migration of population to other areas. (for jobs, business purposes, education)</li> </ul>
	<ul style="list-style-type: none"> <li>• Utility service at a acceptable level.</li> </ul>	<ul style="list-style-type: none"> <li>• Shortage of drinking water to 30% of the population.</li> <li>• Drainage system do not spread over the whole town area.</li> </ul>	<ul style="list-style-type: none"> <li>• Launching of a new water project under the Norwegian aid.</li> <li>• Establishment of disaster mitigation unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Less attention by the people on unauthorized construction and natural disasters.</li> </ul>
	<ul style="list-style-type: none"> <li>• Availability of Compost project and common sewerage project.</li> </ul>	<ul style="list-style-type: none"> <li>• Management of solid waste become a problem due to high usage of polythene.</li> </ul>	<ul style="list-style-type: none"> <li>• Possibility of getting income as well as creating job opportunities through the compost project and common sewerage project.</li> </ul>	
<b>Environmental</b>	<ul style="list-style-type: none"> <li>• Flowing of Dorawela oya and Walawe river through the urban area.</li> </ul>	<ul style="list-style-type: none"> <li>• Barriers to Agro economy and minimizing of water retention areas.</li> <li>• Unauthorized filling of paddy lands.</li> </ul>	<ul style="list-style-type: none"> <li>• Possibility to develop gem industry based on the feeder area.</li> </ul>	<ul style="list-style-type: none"> <li>• Collection of large amount of solid waste to the waste water lines due flowing of waste water through the town and contamination of water.</li> <li>• Possibility of facing to natural hazards due to flooding.</li> </ul>