

## STATUS OF URBANIZATION IN SRI LANKA: A COMPREHENSIVE REVIEW OF LITERATURE

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### ABSTRACT

Urbanization is the process which transforms predominantly village culture into predominantly urban culture. It is a powerful phenomenon in the socioeconomic development of a country. The main purpose of this paper is to review the literature in relation to urbanization in Sri Lanka to understand the present status of urbanization in Sri Lanka. This literature review adopts a traditional (narrative) review approach to explore and synthesize the existing body of knowledge on urbanization in Sri Lanka. Selected scientific publications written in the last 50-year period were used for this review and the review is completely qualitative. As many researchers pointed out, although many areas in the country have gained remarkable urban characteristics over the last two decades, the absence of a proper official definition based on a scientific approach to identifying the urban areas has under-estimated the country's level of urbanization and does not adequately reflect the real picture of urbanization. As the World Bank revealed it is evident that Sri Lanka's urbanization pattern is characterized by a low-density-ribbon urban development pattern. There is a rapid growth of urbanization along the periphery of cities like Colombo and other regional cities and their transport arteries. Therefore, Sri Lankan cities are being connected with 'ribbon growth' along road connections between cities. This pattern of low-density-ribbon urbanization development is difficult to plan and manage and it leads to economic inefficiency and makes service delivery uneconomical. It also increases congestion and related environmental damage, while reducing the potential efficiency gains from agglomeration economies. Therefore, this urban development pattern of the country is a severe challenge in promoting sustainable urban development. The review revealed that urban sprawl is one of the key challenges facing Sri Lanka's cities today. Economic growth and urban-rural migration, recent large development projects such as the port city project, change in trade and investment climate in the country as Colombo's emergence as a regional hub for trade and investment and increase in per capita income of the population are major demanding factors for urban living. However, a new method which is suitable for identifying emerging urban centers and incorporating the urban sprawl of the existing ones into the national urban system should be formulated.

## **1. INTRODUCTION**

Urbanization is the process which is responsible for forming and developing the urban areas in a country. It is a major change taking place globally and is not merely a modern phenomenon, but a rapid and historic transformation of human social roots on a global scale, whereby predominantly village culture is being rapidly replaced by predominantly urban culture. Presently, more than half of the world's population lives in urban areas and the world is rapidly transforming into an urban world. In 2019, the United Nations estimated that more than half the world's population (4.2 billion people) now live in urban areas and by 2041, this figure will increase to 6 billion people. This situation has led the process of urbanization to become one of the powerful phenomena of the socio-economic development of a country.

Though simply urbanization is defined as the process whereby an increasing proportion of the world's, regions or a country's population lives in urban areas it is a complex process of change affecting both people and place. It brings vast changes such as a progressive concentration of people and activities in towns thereby increasing the general scale of settlements, a change in the economy of a country or region whereby non-agricultural activities become dominant, a change in the structural characteristics of demography (e.g. high density per unit of area, low natural growth rate, low fertility and mortality rates, high migration rate from rural to urban), a spread of urbanism beyond the built-up areas of towns thereby inducing rural dilution and the transmission or diffusion of economic, social and technological changes into the rural areas. This process is cumulative and

the size of urban areas, in terms of persons and activities will call for changes in patterns and intensities of land use within those areas. Therefore, it is a determinant as well as a positive force for economic growth, poverty reduction and human development of a country.

As McMichael (2000) stated urbanization is a key force in human society and city living may be the "keystone of human ecology" across the globe with rapid urbanization. He also praises cities themselves are centers of "ideas, energy, creativity and technology" and this characterization of the "city", coupled with the inseparable link between urbanization and development. As Montgomery and others, (2004) "Urbanization is a complex socio-economic process that transforms the built environment, converting formerly rural into urban settlements, while also shifting the spatial distribution of a population from rural to urban areas. It includes changes in dominant occupations, lifestyle, culture and behavior, and thus alters the demographic and social structure of both urban and rural areas".

Urban areas, commonly referred to as cities and towns, are locations where both public and private services of high quality are readily available, and basic services are often more accessible compared to rural areas. These areas have significant potential for growth, driving job creation and innovation, and they play a crucial role in the local economy. Many countries have recognized the importance and advantages of cities as hubs for markets, services, commerce, transportation, distribution, communication, manufacturing, innovation spread, social development, and the integration of rural

economies. As a result, developing cities has become a key strategy to promote the growth of underdeveloped regions by concentrating investments, capitalizing on the benefits of agglomeration economies, and spreading development to nearby areas.

Economic growth and urbanization are often closely connected. Urban areas serve as the primary engines of regional economic growth, being more productive than rural areas due to the benefits of agglomeration economies. Cities are equipped with essential infrastructure, services, communication networks, and a skilled workforce, allowing them to achieve economies of scale, agglomeration, and urbanization. Agglomeration economies provide advantages for economic activities when businesses are located near others in similar industries. Cities generate positive externalities such as agglomeration, scale, diversity, and specialization.

Sustainable economic growth cannot be realized without the expansion of cities, which play a crucial role in driving regional economic development. Furthermore, urban areas foster social diversity, promoting the integration of people from various social, ethnic, and religious backgrounds. They offer organizations that help assimilate rural residents into urban life, while also introducing new attitudes, behaviors, and lifestyles suited to city living. These areas create new opportunities for social and economic mobility. Additionally, cities have proven to be more effective at combating poverty compared to rural areas, with their role in poverty reduction becoming increasingly significant. For example, the average incomes of urban residents are four times higher than those of rural ones in

countries such as China and Thailand (UN/Habitat, 2011). China, with its program of urbanization millions of people have escaped from poverty in less than 25 years. With economic growth highly correlated with poverty reduction, the high growth of cities bodes well for poverty reduction.

In the above context, the central role of urban areas in socio-economic development is more obvious. According to Rondinelli and Ruddle (1978), urban growth is essential to development and according to Freidman (1966), economic growth which is the fundamental factor of the development of a society tends to occur more in urban regions. A well-developed system of cities and towns in a region creates economies of scale and benefits for surrounding areas. Opportunities that cities offer for investment lead to higher levels of growth and help to achieve spatially balanced growth in a country. Today with the increasing globalization process, urban areas have to play a crucial role in socio-economic development.

Even though urbanization brings many positive changes to a country, Sri Lanka has a relatively low urbanization rate compared to other countries. In 2023, approximately 19.21 per cent of the population lived in urban areas (<https://www.statista.com/statistics/728547/urbanization-in-sri-lanka/>). As many researchers pointed out this low rate of urbanization is not the real picture of urbanization of the country and this is due to the absence of proper definition of urban for Sri Lanka. As they pointed out Sri Lanka has gained a considerable level of urbanization but, it is not shown by the statistics due to the unavailability of an expert definition. In that context, the main research question in this

study is what existing literature reveals about the status of urbanization in Sri Lanka during the last fifty-year period and what are their perspectives toward the introduction of a new method to understand the actual level of urbanization in Sri Lanka. Based on the research question the objectives of this study are to identify the definition of “urban” in Sri Lanka, new trends and patterns of urban growth in the country.

## 2. METHODOLOGY

This literature review adopts a traditional (narrative) review approach to explore and synthesize the existing body of knowledge on urbanization in Sri Lanka. The aim is to provide a comprehensive understanding of the status of urbanization in the country. The methodology consists of the following key steps:

### *i. Defining the Scope*

The review focuses on the status of urbanization in Sri Lanka, covering urban definition, form, structure, size, spread, trends, challenges, and implications of urban development in the country. The temporal scope includes literature published from the year 1970 to 2020 to capture the real picture of urbanization of Sri Lanka.

### *ii. Literature Search Strategy*

An extensive search for relevant academic and grey literature was conducted using the following electronic databases and sources:

- Google Scholar
- United Nations and World Bank Open Knowledge Repository
- Reports and publications from the Department of Census and Statistics Sri

Lanka, Urban Development Authority (UDA), and relevant ministries

Search terms included combinations of keywords such as international definition of urban, types of criteria of urban, Sri Lankan definition of urban, form, structure, size, trends, spread, hidden urbanization sprawl and functional relations.

### *iii. Selection Criteria*

Sources were selected based on the following criteria:

- Relevance to the topic of urbanization in Sri Lanka
- Published between 1970 and 2020
- Peer-reviewed journal articles, government and NGO reports, and credible news sources
- English language publications

Studies not directly related to the Sri Lankan context or lacking sufficient academic credibility were excluded.

### *iv. Data Extraction and Analysis*

Selected studies were reviewed to extract key information on:

- Types of criteria of “Urban”
- Sri Lankan definition of “Urban”
- Form and structure of urban growth
- Size, spread and trends of urban growth
- Emergent patterns of urban growth

### *v. Synthesis and Presentation*

The reviewed literature was organized into thematic sections, including the international definition of “Urban”, the Sri Lankan definition of “Urban”, the background to urbanization in Sri Lanka, the form and structure of cities, size, spread and trends of

cities and emergent patterns of urbanization. This structure allowed for a critical synthesis of the diverse perspectives and data sources.

### 3. RESULTS AND DISCUSSION

#### 3.1 International Definition of "Urban"

Urbanization is measured and the level or the rate of urbanization is the measurement of indicating the urbanization of a country. The level of urbanization of a country generally is regarded as one of the development indicators too and it reflects the level of development of that country. The rate or the level of urbanization conventionally refers to the population living in 'urban areas' expressed as a proportion of the total population of a country at a particular time. In this context, the definition of "urban" plays an important role in determining the urban status of a country.

Concerning what is an urban area, there is no global agreement as to what constitutes an "urban area". The definition of urban areas varies from country to country depending on different criteria. Most of the countries have one or several well-defined criteria for the official recognition of urban areas and therefore, they have a proper way of distinguishing urban areas from rural environments. As Weeks (2010) explains "urban" is a place-based characteristic that incorporates elements of population density, social and economic organization and the transformation of the natural environment into a built environment. Oxford English Dictionary defines an urban area as "having the qualities or characteristics associated with town or city life; especially elegant and refined in manners, courteous, suave, sophisticate". Urban is a complex concept. It is a function of sheer population size, space

(land area), the ratio of population to space (density or concentration), and economic and social organization.

In addition to determining the urban status of a country, delineated urban centers are more advantageous in terms of the development of a country as well. Generally, public investments as well as private investments in different sectors such as the service sector, manufacturing sector and infrastructure tend to concentrate on delineated urban centers. Consequently, investment can bypass settlements not defined as urban even if these can, and often do, an important role in the development of the surrounding rural area. Defined urban recenters are more beneficial for the government or the private sector in terms of supplying all types of infrastructure. The supply of infrastructure is cheaper and cost-effective because of the high concentration of population in urban areas. Transport is one of the key factors of spatial development which links all settlements of a region. Defined urban recenters are very important in introducing mass transport in a region. Mass transport systems reduce travel time, widen the marketing area, increase commuting and migration opportunities, increase access to non-agricultural employment, improve communications and extend areas of service delivery. Areas without effective transportation are plagued mostly with low social mobility, localized agriculture and low levels of industrial activities. Building or improving transport linkages broadens the radius of trade and increases productive capacity. Therefore, an efficient transport network in an area can play an important role in linking regions in terms of the movement of people and products. The optimum utilization of resources in the urban centres is one of the

other advantages of having defined urban centers. Generally, the government involves the physical planning of defined urban centers in achieving comprehensive and orderly development. Government intervention in the use of limited land through its optimum use is very significant. At the same time, Decentralization of functions is possible in the officially defined urban centers and this supports the development of polycentric structure with regional networks of cities that are dispersed throughout the country.

Since there is no harmonized definition for “urban” every country defines “urban” independently (UNESCAP, 2013). Accordingly, countries follow different approaches such as demographic, administrative, economic, morphological and functional to define urban and the definition of urban varies greatly between countries, where single and multiple criteria methods are employed to define ‘urban’ depending on the contexts and there are many disputes over these definitions. As the United Nations (2018) has noted, countries must establish their definitions following their own needs. Often, definitions of urbanization involve one or more of the following characteristics: administrative criteria, economic criteria, population-related criteria and urban criteria related to the functional nature of urban locations. Definitions vary somewhat amongst different nations. Generally, the number of different but interrelated aspects is significant in identifying urban areas.

- Urban settlements generally have larger populations than rural villages, although the size varies from country to country
- Urban places are characterized by higher population densities created by the

spatial concentration of activities and buildings

- In economic terms non-agricultural activities dominate in urban settlements and various types of goods and services are provided to the hinterlands
- The people who live in the urban areas experience urban lifestyle.

The degree of these characteristics varies from place to place, country to country and from time to time. Therefore, based on these characteristics different countries use different criteria of defining the urban status. Some countries use only one criterion, and some countries use several criteria. However, specific definitions adopted by the other countries and the criteria proposed by the United Nations in 1971 (Indrasiri, 2000) to distinguish between urban and rural five areas are dominant. They are as follows.

- Size of the population
- Local government areas
- Administrative status
- Urban characteristics
- Predominant economic activities.

In addition to these major areas, most of the European countries define urbanized areas based on urban-type land use and use satellite photos instead of census data to determine the boundaries of the areas. In less developed countries, in addition to the land use and density requirements, a requirement that a large majority of the population typically 75 per cent is not engaged in agriculture or fishing is sometimes used. However, most countries have a proper definition based on one or several criteria in identifying their urban centres. Presently, several efforts are underway at different institutions to produce globally a common definition of urban areas based on satellite

imagery of land cover or nighttime light data. (United Nations, 2018).

Table 01 shows the different criteria used by countries in 2018. One hundred and twenty-one out of 233 countries or areas considered administrative criteria to distinguish between urban and rural areas. Among these, 59 countries or areas used administrative designations as the single criterion. 108 countries have used population size or population density combining other additional criteria and 37 countries have adopted such demographic characteristics as sole criterion. However, the lower limit above which a settlement is considered to be urban

varies considerably, ranging between 200 (Greenland) and 50,000 inhabitants (USA).

Economic characteristics, in combination with additional criteria, were used by 38 countries to identify urban areas. Criteria related to functional characteristics of urban areas, such as the existence of paved streets, water-supply systems, sewerage systems or electric lighting, were part of the definition of urban in 69 countries or areas, but only in eight cases were such criteria used alone. There was no definition or an unclear definition of what constitutes the urban environment in 12 countries or areas and the entire population of a country or area was considered to be urban by 12 countries.

Table 1: Number of Countries according to the Criteria used in Defining Urban Areas - 2018

Number of criteria	Type of Criteria	Countries or areas using criteria	Percentage (n=233)	Countries or areas using criterion combination with additional criteria	Percentage (n=233)
One criterion	Administrative	59	25.3	121	51.9
	Economic	-	-	38	16.3
	Population size/density	37	15.9	108	46.4
	Urban characteristics	8	3.4	69	29.6
Two criteria	Administrative and economic	-	-		
	Economic and population size/density	17	7.3		
	Administrative and urban characteristics	20	8.6		
	Economic and population size/density	9	3.9		
	Economic and urban characteristics	-	-		
	population size/density and urban characteristics	20	8.6		
Three criteria	Administrative, economic and population size/density	4	1.7		

	Administrative, economic, and urban characteristics	-	-		
	Administrative, urban characteristics and population size/density	10	4.3		
	Economic, urban characteristics and population size/density	14	6.0		
Four criteria	Administrative, economic, population size/density and urban characteristics	11	4.7		
	The entire population is urban	12	5.2		
	No definition or unclear definition	12	5.2		
	Total number of countries or areas	233	100		

Source: United Nations, 2018

### 3.2 Sri Lankan Definition of “Urban”

Unlike most other countries, Sri Lanka does not have a clear official definition of ‘urban’. This is a long-felt problem in identifying urban areas. Even though many areas in the country have gained remarkable urban characteristics over the last two decades non-availability of a proper definition based on a scientific approach in identifying the urban areas has under-estimated the country’s level of urbanization and does not adequately reflect the real picture of urbanization due to absence of a proper method in identifying the urban areas. Further, this definitional problem has become a fundamental problem for many fields such as urban and regional planning, the study of the process of urbanization, conducting research in relation to urban development and international comparisons. At the same time, existing criteria which are based on political considerations are outdated and a new method which is suitable to identify emerging urban centres and incorporate the urban

sprawl of the existing ones into the national urban system should be formulated.

“Urban areas” in Sri Lanka are not based on any definite criterion as mentioned above. In Sri Lanka, “urban status” is conferred on an area by the Minister in charge of Local Government purely for local administrative purposes. There are no definite criteria to guide the ministerial discretion and it seems to be based on “the nature of the development of the locality or its amenities and urban character” (Mendis, 1982; Indrasiri, 2001). Accordingly, the decision to upgrade of towns or downgrading towns is based only on political considerations and no attempt to consider morphological, demographical, sociological or economic factors which are prerequisites in the process of urbanization. The current definition of urban status in the country is based on the administrative status and there is no consistency in applying this definition also due to the changes made in the administrative status from time to time by



the government. Presently, there are three types of local authorities in Sri Lanka named Municipal Councils (MC), Urban Councils (UC) and Pradeshiya Sabha (PS), but the country considers only Municipal Councils (MCs) and Urban Councils (UCs) as urban while Pradeshiya Sabhas (PS) are considered as rural even though some of them have acquired considerably higher level of urban characteristics and population concentration.

The following Table (Table 02) shows data on the share of urban population in the national population of Sri Lanka calculated based on the methods employed by the government to define urban areas from the first national census to the last national census in 2012. Since Sri Lanka's definition of urban is based on the purely administrative approach, the definition of urban changes from time to time as the administrative boundaries are changed from time to time by the government.

According to the data and information reported by the Department of Census and Statistics, Municipal Councils and Urban Councils were officially defined as urban areas from the first national census in 1871 to 1891. The minister declared urban status

depending on characteristics such as water supply and sanitation, street lighting, market facilities and efficient police service of an area (De Silva et al, 2009). The government established Local Boards (LB) under the Local Board Ordinance in 1898 as a new administrative layer to decentralize the power and they were also included in the urban category from 1901 in addition to the Municipal Councils and this continued up to 1946. After 1946 Local Boards were removed from the urban category and as a result in 1953 only Municipal Councils and Urban Councils were urban areas in the country. In 1946 the government introduced another new administrative layer termed Town Councils (TC) as the lower level of the administrative structure in the country with the Town Councils Ordinance and from 1963 all Town Councils were granted urban status. Consequently, from 1963 to 1981 Municipal Councils Urban Councils and Town Councils were the urban areas in the country leading to 134 towns. As the Table shows, there was a gradual increase in the number of towns from 19 at the first national Census to 134 at the Census in 1981 and the level of urbanization from 10.8 per cent in 1871 to 21.5 per cent in 1981

*Table 2: Urban Areas in Sri Lanka, 1871-2012*

Census years	Municipal Councils	Urban Councils	Local Boards	Town Councils	No. of Urban Centres	Percentage share of urban in national population (%)
1871	7	12	-	-	19	10.8
1881	7	13	-	-	20	10.2
1891	7	13	-	-	20	10.7
1901	7	20	1	-	28	11.6
1911	7	29	1	-	37	13.1
1921	7	34	1	-	42	14.2
1931	7	34	1	-	42	15.0
1946	7	34	1	-	42	15.4
1953	7	36	-	-	43	15.3

1963	12	36	-	51	99	19.1
1971	12	38	-	85	135	22.4
1981	12	39	-	83	134	21.5
2001	18	37	-	-	55	16.5
2012	23	41	-	-	64	18.2

Source: Department of Census and Statistics, 2012, Indresiri, 2000

In 1987, the government depending on the increasing demand for decentralization established the existing provincial council system by the 13th Amendment to the 1978 Constitution of Sri Lanka. With this new administrative change, the government invalidated the Town Councils and established Pradeshiya Sabhas (PS) as legislative bodies that preside over the third-tier municipalities in the country. There were 83 Town Councils in 1981 and all these town councils were absorbed as Pradeshiya Subhas and considered as rural removing them from the urban category. As a result, from 1987 up to date the government consider only Municipal councils and Urban councils as urban.

With the removal of the urban status of 83 areas in 1987, there was a significant reduction in the urban population of the country from 2001. As the 2001 Census has recorded only 55 urban areas were identified and the level of urbanization has dropped up to 16.5 per cent from 21.5 per cent from 1981. According to the record of the census in 2011, the number of urban recenters between 2001 and 2011 remained unchanged but the share of the urban population in the country has increased up to 18.2 per cent due to population increase in the urban centers. Figure 01 shows how the share of the urban population in Sri Lanka has changed depending on the changes made to the administrative structure in Sri Lanka from time to time by the government.

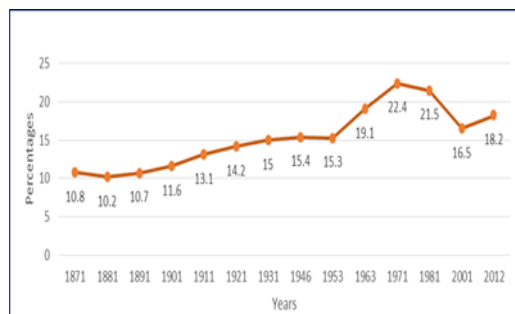


Figure 1: Percentage of Urban Population in Sri Lanka according to Official Definition

Source: Based on Indrasiri, 2000, Department of Census and Statistics, 2012

However, the minister in charge of local government upgrades Urban Councils into Municipal Councils and Pradeshiya Sabhas into Urban Councils and Municipal Councils from time to time and presently, as government statistics (<http://www.statistics.gov.lk/Pocket%20Book/chap15.pdf>) show there are 65 (2018) urban areas in the country with the newly established Polonnaruwa MC in 2018 (Figure 02). This figure includes 24 Municipal Councils and 41 Urban Councils. Presently, there are 276 Pradeshiya Sabhas in the country and it is evident that a considerable amount of them have acquired urban characteristics, especially during the last three decades with the socio-economic development of the country but are not regarded as urban areas under the current official definition.

In the above context, the present level of urbanization in Sri Lanka is not an actual picture since the country still has no

comprehensive urban definition. Urbanization is a life-changing process with a spatial attribute and continuously happening in society. Hence “definition of urban” should be able to capture the physical as well as social transformation of societies.

### ***3.3 State of Urbanization in Sri Lanka***

#### ***3.3.1. Background to Urbanization in Sri Lanka***

Urban growth in Sri Lanka was found to have appeared from the 3rd Century B.C (Indrasiri, 2001) incorporated with the intensification of agro-pastoralism activities. Most of the towns in this period were in the Dry Zone and were associated with tanks, irrigation channels and hydraulic civilization. According to the archaeological evidence, Somadewa (2006) has stated that during the latter part of the first millennium, two regions became foci of urbanism in Sri Lanka. The regions referred to are the North Central Dry Zone and the Southern and Southeastern Dry Zone of the island. Various factors have been identified as contributing to the transformation of agro-pastoral settlements in the North Central areas, leading to urbanization from the mid-first millennium. The prominent international seaport of Matota, an ancient town in the Mannar district on the western coast, had a significant economic influence on the ancient city of Anuradhapura. Archaeological findings indicate that Matota played a crucial role in long-distance maritime trade across the Indian Ocean from the late first millennium. Over time, the locations of these cities shifted in response to the changes in the political

power centers of Anuradhapura, Polonnaruwa, Sigiriya, Yapahuwa, Kurunegala, and Kandy. Natural and local cultural factors such as socio-economic, religious, cultural factors, and political factors played a big role in the rise of these cities and in transforming their physical and social patterns over a long period.

By about the 13th century AD, there was a concentration of population within the south-western quadrant of the island due to the collapse of the hydraulic civilization in the north-central plains as a result of foreign invasions and the growth of most of the towns located along the coastal belt in the south-western part of the country were stimulated with the European occupation, especially during the Portuguese and Dutch occupations, and later expanded by the British, the inland centres were developed for various purposes, including administration, commerce, plantations, and holiday resorts. Many of these urban centres are situated along raw material supply routes that connect to the main administrative hubs in Sri Lanka. Even today, these urban areas account for about three-quarters of the total urban population. A significant portion of this population is concentrated in and around the city of Colombo. As a result, the primary urban cluster of the country is found in the Colombo district, with Colombo city at its core. Additionally, certain concentrations can be identified in the Dry Zone, linked to colonization schemes, and in the central hill country, which is closely tied to the plantation economy.

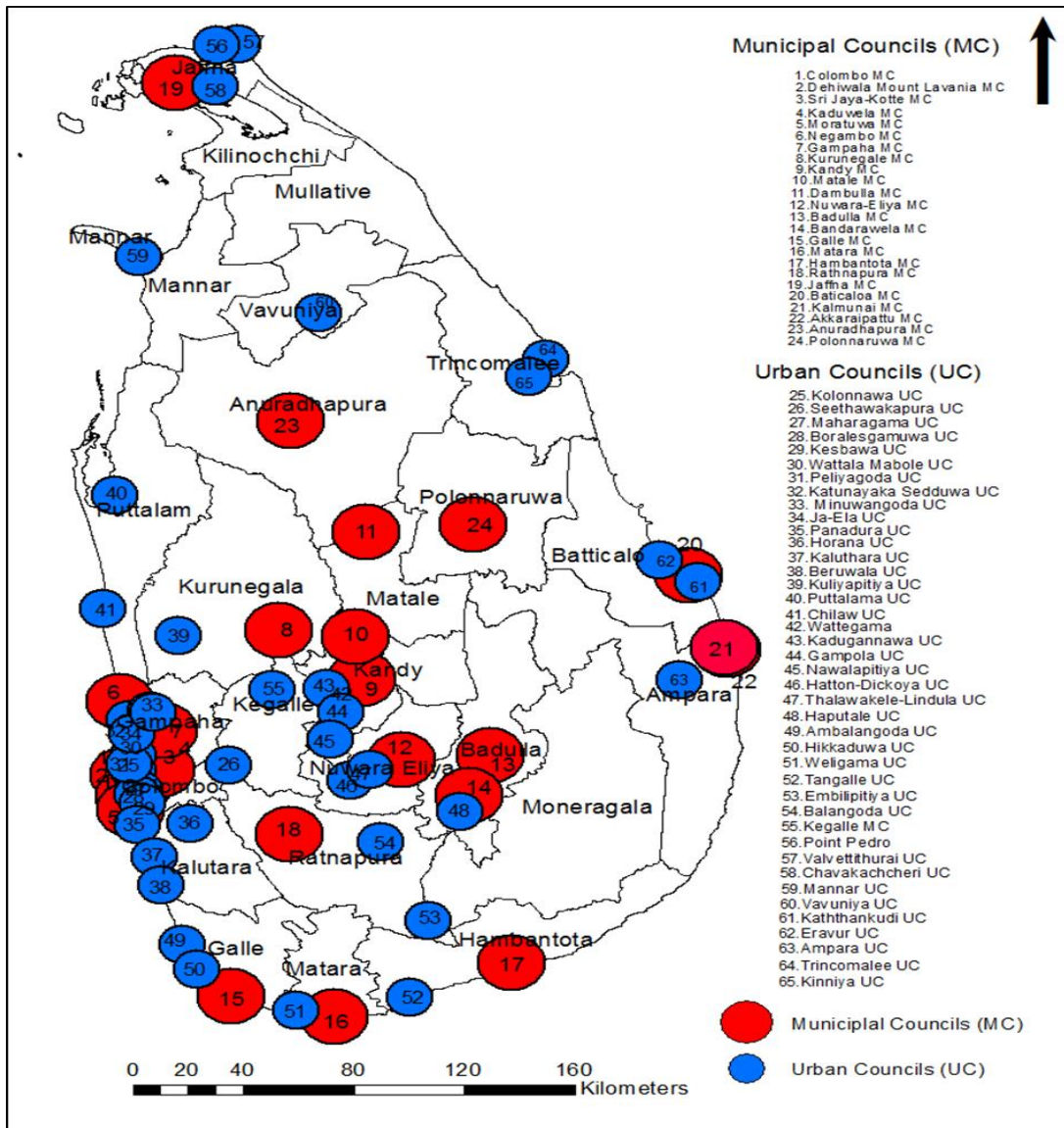


Figure 2: Urban Areas in Sri Lanka-2020

Source: Created by author based on the data of Department and Census and Statistics, 2020

After the independence of the country in 1948, the country experienced a rapid population increase especially due to the social welfare policies of the state a population increase was mostly taken place in towns and cities rather than the rural sector of these countries. In addition, after

independence, the main stimulus for urban growth was the introduction of economic liberalization policies which opened the market-driven economy in 1977. Economic liberalization policies booted up the whole economy of the country with many economic development programs and as a result of this many urban areas of the country underwent

a rapid expansion of construction. The introduction of open economic policies encouraged private sector participation and the economic boom accelerated by private sector participation in the latter part of 1980 and early 1990 created rapid growth in most of the areas in the country for commercial, administrative and other uses. The social welfare and physical planning focus on Colombo, and across the regional administrative capitals encouraged urban growth allowing for the dispersal of urban social benefits throughout the country. According to Kurukulasuriya (1979), the government's social welfare policies also focused on rural agriculture to improve peasant farmer livelihoods and through this focus, a growing agrarian economy further strengthened the capacity of the rural economy and accelerated the growth of district capitals and secondary towns which served as rural-focused service centres.

Development policies existed in 1970 directly focused towards the urban sector and a strategy for urban development (Karunatilake, 1981; Gunaratna, 2001). In 1978 the government established the Urban Development Authority (UDA) as the key urban planning and implementing agency and many city development projects including infrastructure development, and housing were carried out in Colombo and other selected cities in the interior. The Colombo Master Plan was completed in 1978 and the government recognized the need for a national spatial planning policy which emphasized a role for urban space within rural and regional development. All these actions led to encouraging urban growth, especially in the Western Province and peripheral provinces.

After the end of the ethnic conflict in Sri Lanka, the government started rebuilding the northern part of the country by implementing programs such as large-scale infrastructure development projects and these efforts undoubtedly stimulated the urbanization of the northern part of the country.

### **3.3.2. Form and Structure**

It has been observed that, because of the improvement of road surface and growth of motor traffic, it is the natural tendency of everyone to build as near as possible to the main road. The building activity, therefore, expands along the two sides of the main roads leading to a ribbon development pattern which refers to the building of houses along a main road. Sri Lanka's urbanization pattern is characterized by a low-density-ribbon urban development pattern. As World Bank has noted there is rapid growth of urbanization along the periphery of cities like Colombo and other regional cities and their transport arteries. Therefore, Sri Lankan cities are being connected with 'ribbon growth' along road connections between cities. This is best demonstrated by the night-time light data which is the best data source for capturing the urban characteristics of countries (Figure 03). Night-time light data is collected by satellites that capture images of the Earth at night, detecting artificial lights such as streetlights, building lights, and illuminated infrastructure. One of the most widely used sources is the Visible Infrared Imaging Radiometer Suite (VIIRS), which provides high-resolution global coverage of night-time illumination. This data is effective for tracking urbanization because the presence and intensity of artificial light are strong indicators of human activity and development. As areas become more

urbanized, they tend to produce more light at night due to increased infrastructure, population density, and economic activity. Night-time light data enables researchers to monitor changes in urban extent, estimate population distribution, and assess economic development over time and across regions—even in places where ground data is limited or unavailable.

As Figure 03 demonstrates urban characteristics are spreading basically along the main roads which connect the urban centers and along the coastal belt in the country.

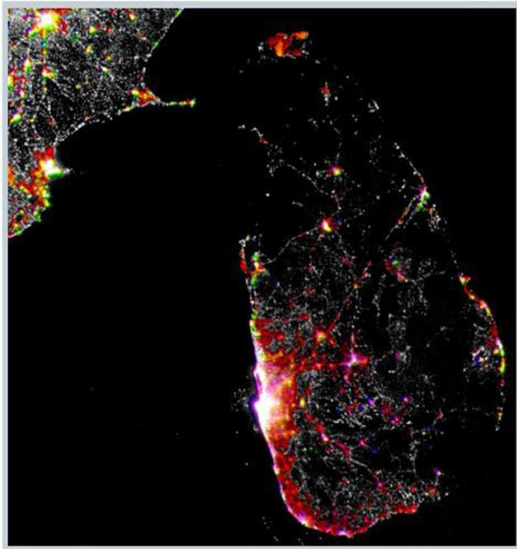


Figure 3: Night-time lights in Sri Lanka, 2015

Source: <https://blogs.worldbank.org/endpovertyinsouthasia/south-asian-urbanization-messy-and-hidden>

According to the policymakers and urban planners, this nature of development results from regulatory and institutional constraints in land and housing markets and reflects responses to location-specific issues related to land and housing costs, transport options and ecological situations as well as to

inappropriate under-pricing of urban services (World Bank/Habitat, 2018). This pattern of low-density-ribbon urbanization development is difficult to plan and manage and it leads to economic inefficiency and makes service delivery uneconomical. It also increases congestion and related environmental damage, while reducing the potential efficiency gains from agglomeration economies (Bird and Slack, 2013). Therefore, this urban development pattern of the country is a severe challenge in promoting sustainable urban development.

In the context of spatial development, Sri Lanka is a country with a core-periphery structure. Colonial and post-colonial development efforts in the country led to evolve this structure. Under British control, Colombo port was selected as the premier port and the main centre for all socio-economic, administrative and political activities. As a result, trading, administrative and service functions were strongly concentrated in Colombo city from the early days of British rule to independence. Presently, Colombo city with a relatively high degree of socio-economic development has become the largest city dominating the settlement hierarchy demographically and functionally in the country. The concentration of all activities in the city reinforces economies of scale, agglomeration, and migration and creates multiplier effects, which generates competitive advantages over all other centers. Colombo Municipality in 2012 consisted of 561,315 population and 77.6 per cent of the total urban population in the district.

With the long-term development possibilities of Colombo city presently, Western Province which is termed as “Colombo Metropolitan

Region" (CMR) has become the core region of the country and the rest of the area is regarded as the periphery of the country. It includes both the commercial capital of Colombo (Colombo Municipality) and the administrative capital of Sri Jayewardenepura with numerous suburbs and urbanized rural areas. The CMR population has grown from 3.9 million in 1981 to 5.8 million in 2012, accounting for nearly 35% of the national population increase. It covers only 6% of the land area but contains 28% of the population and accounts for 45% of the GDP and 73% of industrial value added. In contrast, the Southern and Central Provinces, as the next largest urbanized areas, contributed 10.7% and 10.0% to GDP, respectively. Western province also has substantially high per capita income, at 1.6 times the national average (World Bank/Habitat, 2012). It consists of 21 officially defined urban areas of 65 urban areas and it accounts for 32 percent of the total urban centers.

The rest of the urban population of the country is distributed in the rest of the area which is termed as the "periphery" of the country. There are several urban recenters in the central hill country which are directly linked to the plantation economy. In the nineteenth century after the opening up of hill country areas for the plantation crops, a number of factors contributed to urban growth in these areas. Urban recenters such as Nuwara-Eliya, Badulla, Bandarawela, Haputale, and Walimada are the main urban recenters with potential for tea plantation, vegetable growing areas, and eco-tourism-related activities. These urban recenters are significant as main contributors to the export sector, and tourism and serve as marketplaces to its hinterland.

Among other secondary cities in the country, a number of towns are located in the dry zone. Urban growth in the north-central province is a production of colonization schemes and agricultural development in the dry zone areas. After independence, due to the intensification of colonization programs and the Mahawali development program, the north-central province attracted a large volume of migrants. During 1971-1981, the highest recorded in-migration occurred in the Ampara, Anuradhapura and Polonnaruwa districts. 32 per cent of the total urban population increased in the country between 1971 and 1981 which had been absorbed by the dry zone (Deheragoda et al,1992). The dry zone has a great potential for diversification and commercialization of the economy through the expansion of a number of sectors such as agriculture, fisheries, cottage industries and tourism. It will increase rural job opportunities and income levels and will result in urban growth and expansion.

In the North, Jaffna as the major city of the Northern Province is playing a big role as a blooming commercial port. Jaffna has strong potential to revive as a major trade, agro-processing, fishery, and tourist centre. Trincomalee, a town on the coastal belt, is the capital of the Eastern province. Fisheries and agriculture are the main growth drivers in the Eastern Province, and tourism is emerging as a high-growth sector. Agro-processing activities have strong potential for development in Trincomalee due to their linkages with the region's vast agricultural production. Tourism also has strong potential to emerge as a growth sector for Trincomalee. With the end of the conflict, Jaffna started rebuilding its economy.

### 3.3.3. Size, Spread and Trends

According to the figures (Table 03) given by the Department of Census and Statistics, in 2012 total population of the country was 20,359,439. The urban population which

lived in 64 urban areas was 3,704,470 and it is 18.2 per cent of the total population. Table 03 gives the district-wise size of the urban population and its share of the total population in the country. Figure 04 gives its visual interpretation.

Table 3: Size of the Urban Population in Sri Lanka, 2012

District	Total Population 2012	Urban Population 2012	Share of urban population of the total district population (%) 2012
Colombo	2,324,349	1,802,904	77.6
Gampaha	2,304,833	360,221	15.6
Kaluthara	1,221,948	109,069	8.9
Kandy	1,375,382	170,544	12.4
Matale	484,531	60,267	12.4
Nuwara-Eliya	711,664	40,151	5.6
Galle	1,063,334	133,398	12.5
Matara	814,048	96,570	11.9
Hambantota	599,903	31,709	5.3
Jaffna	583,882	117,575	20.1
Manner	99,570	24,417	24.5
Vavuniya	172,115	34,816	20.2
Mulathive	92,238	0	0
Kilinochichi	113,510	0	0
Batticaloa	526,567	151,226	28.7
Ampara	649,402	153,338	23.6
Trincomalee	379,541	85,123	22.4
Kurunegala	1,618,465	30,342	1.9
Puttalam	762,396	66,952	8.8
Anuradhapura	860,575	50,595	5.9
Polonnaruwa	406,088	0	0
Badulla	815,405	69,800	8.6
Monaragala	451,058	0	0
Rathnapaura	1,088,007	99,451	9.1
Kegalle	840,648	15,993	1.9
<b>Total</b>	<b>20,359,439</b>	<b>3,704,470</b>	<b>18.2</b>

Source: Department of Census and Statistics, 2012



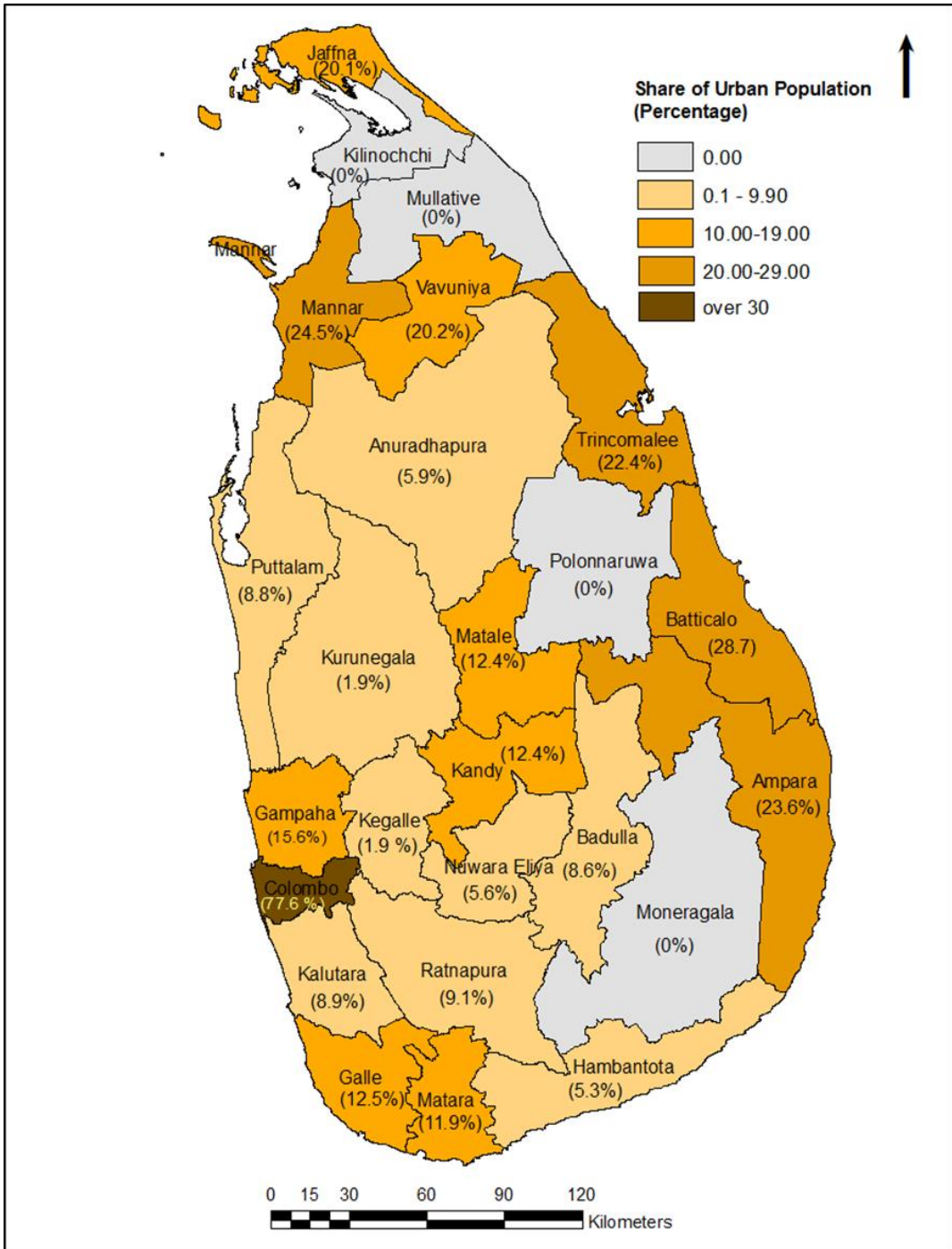


Figure 4: Share of Urban Population of Sri Lanka, 2012  
Source: Based on the Department of Census and Statistics, 2012

As statistics revealed by Table 03, the Colombo District contains an exceptional share of the urban population which accounts for around 79 per cent while all other district contains below 29 per cent. The second highest share of the urban population is contained by the districts located in the northern and eastern coastal belt and their share of urban population is around 20 to 30 per cent. The share of the urban population is

comparatively small (below 15 per cent) in the interior of the country while the Polonnaruwa and Monaragala district are completely rural.

Table 04 and Figure 05 demonstrate the picture of the size distribution of urban areas in the country. Colombo city as the primate city is exceptionally large consisting of 561,315 population (2012).

*Table 4: Size of Urban Areas in Sri Lanka – 2012*

Size Class	Urban Areas	Number of Towns	Total Population	Percent age
500,000-1,000,000	Colombo MC	1	561,315	14.9
200,000-499,999	Kaduwela MC	1	252,041	6.7
100,000-199,999	Dehiwala-Mount Laviniya MC Sri Jaya- Kotte MC, Moratuwa MC, Maharagama UC, Kesbewa UC, Negambo MC	6	984667	26.2
50,000-99,999	Kollonnawa UC, Boralesgamuwa UC, Gampaha MC, Katunayaka-Seeduwa UC, Kandy MC, Galle MC, Matara MC, Jaffna MC, Batticaloa MC, Kalmunai MC, Anuradhapura MC	11	820,302	21.83
25,000-49,999	Seethawakapura UC, Wattala- Mabile UC, Peliyagoda UC, Ja-ela UC, Panadura UC, Kaluthara UC, Beruwala UC, Kurunegala MC, Puttalama UC, Gampola UC, Matale MC, Badulla MC, Hikkaduwa UC, Rathnapura MC, Embilipitiya UC, Vavuniya UC, Kattankudi UC, Akkareipattu MC, Trincomalee UC, Kinniya UC, Polonnaruwa MC	21	747,410	19.89
Below 24,999	Minuwangoda UC, Horana UC, Horana UC Kuliyapitiya UC, Chilaw UC, Wattegedara UC, Kadugannawa UC, Nawalapitiya UC, Dambulla MC, Nuwara-Eliya MC, Hatton-Dickoya UC, Talawakale-Lidula, UC Bandarawella MC, Huputhale UC, Ambalangoda UC, Waligama UC, Hambantota MC, Tangalla UC, Blangoda UC, Kagalle UC, Ampara UC Point Pedro UC, Valvatiturai UC, Chavakachcheri UC, Mannar UC, Eravur UC,	25	390,564	10.39

*Source: Based on the data of the Department and Census and Statistics, 2012*

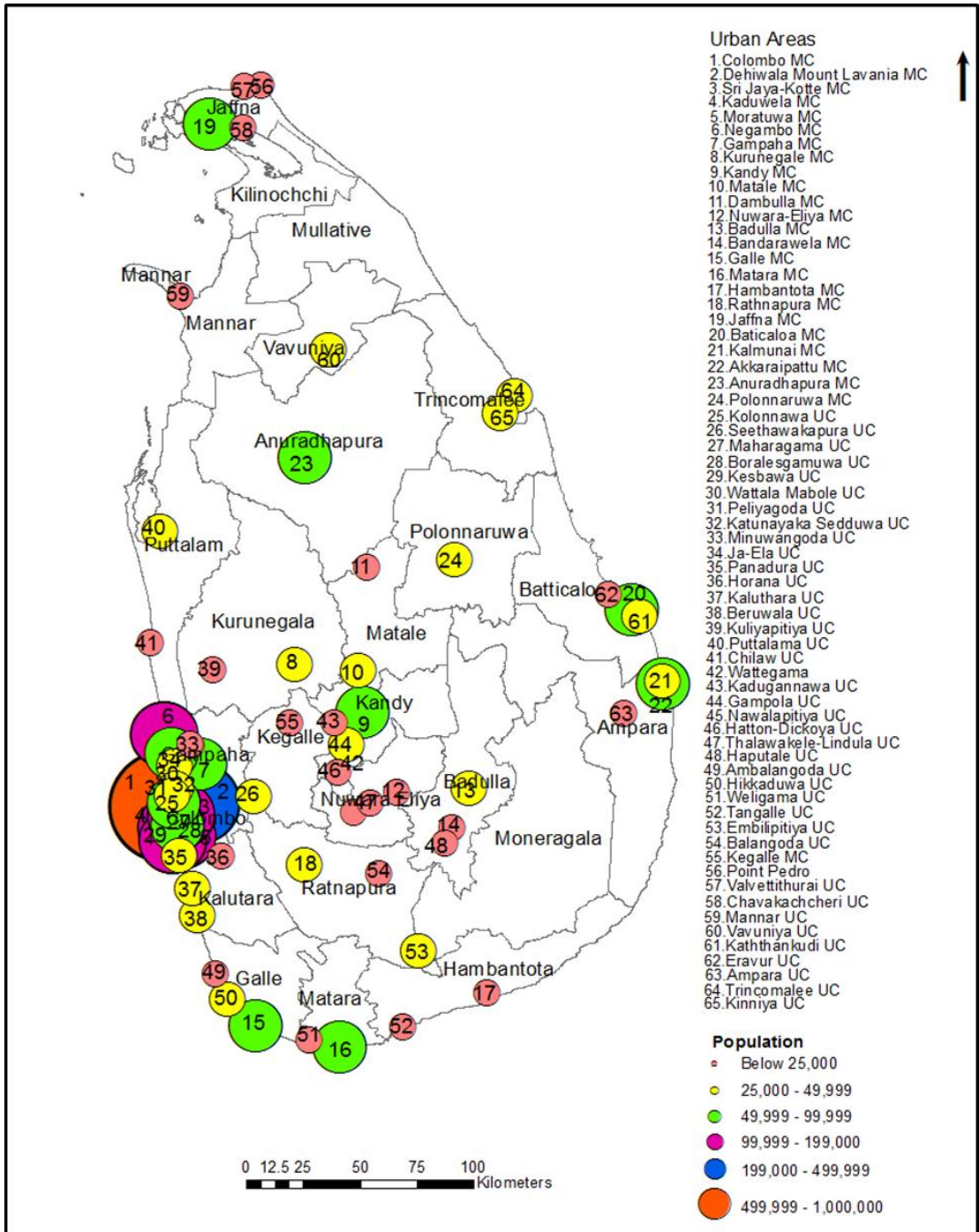


Figure 5: Size Class Distribution of Cities in Sri Lanka, 2020

Source: Created by author based on the data of Department and Census and Statistics, 2020

Which accounts for 15 per cent of the total urban population in the country. Most all the urban recentres in the category of 100,000 to 500,000 population are in Colombo districts and most of the regional capitals in the peripheral regions are in between the size class category of 50,000 -100,000. 25 urban areas are under the category of below the population of 25,000 and account for 10.39 per cent of the total urban population. 21 urban recentres are under the category between 25,000-49,999 and account for 19.89 per cent while 11 urban recentres are under the category of 50,000-99,999 which account for 21. 83. As Figure 05 indicates, urban centres coming under these three categories are spread throughout the country. All the urban centres with exceed 100,000 population are concentrated in the Western Province which is the core region of

the county and accounts for 43 per cent of the urban population.

Considering the future trend of the share of urban population in the country, the United Nations depending on the past population data of the existing urban areas has projected Sri Lanka's urban population. According to its future projection, by the year 2025, the share of the urban population in Sr Lanka will reach 20 per cent, by the year 2035 it will reach up to 23.1 per cent and by the year 2050 it will reacha percentage of 31.6 (Figure 05, Figure 06). However, if the country uses a comprehensive methodology to capture the real picture of urbanization rather than administrative status urban population of Sri Lanka inevitably will be higher than the UN projection.

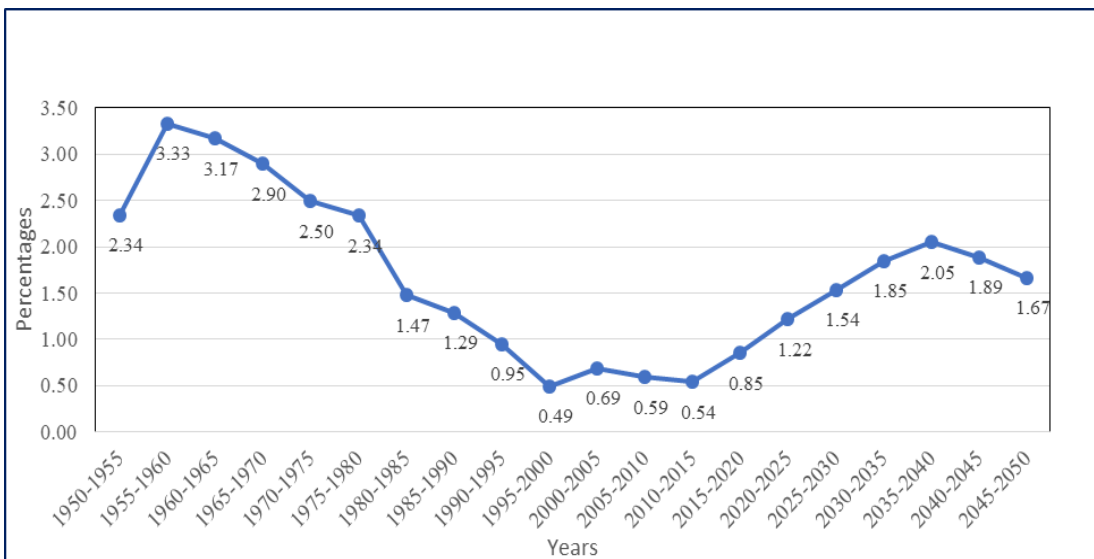


Figure 6: Urban Population Growth Rate in Sri Lanka according to UN Projection, 1955-2050

Source: Based on UN, 2018

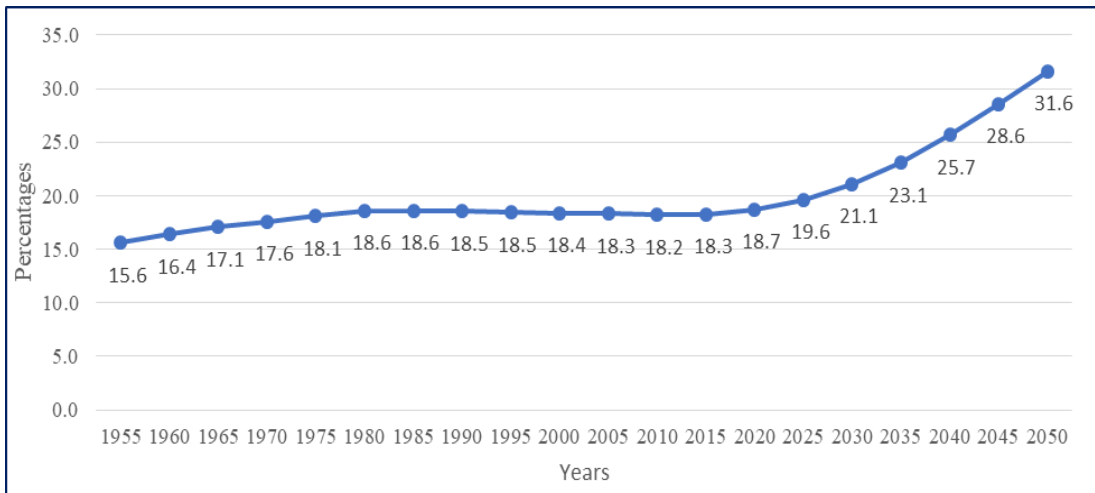


Figure 7: Share of Urban Population in Sri Lanka according to UN Projection, 1955-2050

Source: Based on UN, 2018

### 3.3.4. Emergent Patterns

#### 3.3.4.a Hidden Urbanization

In the developing world, processes of urbanization sometimes remain hidden in official statistics and urban populations are thought to be substantially misread. Hidden urbanization refers to urbanization which is not captured by the official definition of urban or which is not shown in the official statistics. As World Bank in 2016 stated that population growth in South Asia's cities has placed substantial pressure on infrastructure, basic services, land and housing and the environment that have been exacerbated by the failure of policy as well as of the market and these congestion pressures are contributing to hidden to a process of hidden urbanization. Hidden urbanization of this region is reflected in the large share of the South Asian population living in settlements that although they look and feel urban, nevertheless remain officially classified as rural (World Bank, 2016).

Hidden urbanization in Sri Lanka has been

long studied by several researchers. Indrasiri (2000) doing a comprehensive analysis of urbanization in Sri Lanka has estimated the percentage of urban population based on the criteria of Population size, developed area, rate of growth of population, residential density, percentage share of nonagricultural employment, housing density and household connection level to the water, sewerage/ sanitation, electricity, and telephone as 46.0 per cent. Uchida and Nelson in 2010 introduced the Agglomeration Index for detecting urban concentration based on multiple indicators, which has attempted to measure the urban population in Sri Lanka as between 34 per cent and 44 per cent). At the recent LBR/LBO Infrastructure Summit 2015 held in Colombo, former Minister of Megapolis and Western Development, Champika Ranawaka argued that Sri Lanka's urban population share is probably as high as 48% which is two and a half times higher than the current figure. He has mentioned as examples Pradeshiya Sabha areas like Homagama, and

Beruwala that are administratively classified as 'rural' despite having many urban characteristics (<http://www.lankabusinessonline.com>).

Weeraratna (2016) developing an alternative method to capture the urban growth in the country has estimated that the share of the urban population in Sri Lanka is 43.8 per cent. In this research, the author has defined a Grama Sevaka division as urban if it has a minimum population of 750 persons, a population density greater than 500 persons per sq.km, firewood dependence of less than 95 per cent of households, and well water dependence of less than 95 per cent of households and 3659 Gramaniladari Divisions have been identified as urban. In addition, Public Investment Program in Sri Lanka, 2017-2020 has assessed the urban population in the country as much as 50 per cent (GoSL, 2017a) of the total population. UN also revealed in 2018, that there is considerable evidence of the spreading of urban characteristics in Sri Lanka but official data on the urban sector masks the true extent of the country's urbanization. Presently, some unconventional data such as night light data and remote sensing earth observation data have become a more popular data source for capturing spatial characteristics of urbanization. Figure 03 shows strong evidence of spreading urban characteristics around the major cities and it is beyond the officially estimated 18.2 percent of urban.

### **3.3.4.b. Dispersal/Sprawl**

Urban sprawl is one of the key challenges facing Sri Lanka's cities today and it has been identified in the Government's Public Investment Program, 2017-2020 as a priority issue faced by urban planners. Sprawl development, typically defined as

uncoordinated, low-density urban expansion, involves rapid land consumption as cities expand and swallow up surrounding rural areas (Bhatta, 2010, Peiser, 1989). Urban sprawl is generally linked to a range of negative characteristics in cities, such as traffic congestion and the loss of vital natural habitats on the outskirts. The main drivers behind urban sprawl include rapid population growth, the expansion of urban influence into rural areas, and the increasing demand for housing, industry, and business spaces. This expansion often leads to the takeover of agricultural land and forests. Typically, this growth is unregulated and haphazard, hindering regional sustainability efforts. Additionally, the conversion of green spaces into residential areas reduces permeable surfaces, disrupting the environmental equilibrium. As urban sprawl continues, it diminishes open spaces, amenities, natural habitats, and water quality, while also raising the costs of public services and living. It also contributes to higher traffic congestion and an increased risk of flooding in urban regions. A precursor to sprawl is ribbon development, which involves low-density expansion along transport routes. Ribbon development progressing to sprawl is a typical mode of expansion in Sri Lanka's cities (GoSL 2017a.)

As UN-Habitat in 2018 has shown Urban sprawl is not just an issue in the capital of Sri Lanka but such urban expansion is typical in many of the island's other cities including all nine provincial capitals. UN-Habitat has assessed the spatial dynamics in Sri Lankan Urbanization in 9 provinces in the period 1995 to 2017. According to the findings presented by UN-Habitat in the report of State of Sri Lankan Cities-2018 Sri Lankan



cities have expanded rapidly since 1990 and the trend of urbanization of the capital city Colombo shows unprecedented expansion in the country's history. It states that the

Colombo build-up area has increased from 41km<sup>2</sup> in 1995 to 281km<sup>2</sup> in 2017 (Figure 08) and the non-build-up area has been diminished from 125km<sup>2</sup>-10km<sup>2</sup>.



Figure 8: Urban Sprawl of Colombo City, 1995,2001,2012,2017

Source: UN-Habitat, 2018

According to the statistics of UN-Habitat (2018), 9 provincial capitals also have expanded at a rate of 6.42 per cent per year which is again remarkably high compared with other countries and areas of the world (Figure 09). Figure 10 shows the annual growth rate of built-up areas in 9 provincial capitals from 1995 to 2017. All the provincial capitals have expanded considerably higher growth rate. This growth was driven by the economic growth and urban-rural migration that occurred in

the country rather than natural growth since the population growth of the county has been low for a long time (UN-Habitat, 2018). In this connection, recent large development projects such as the port city project, change in trade and investment climate in the country as Colombo emergence as a regional hub for trade and investment. In addition, an increase in the per capita income of the population also is a demanding factor for urban living.

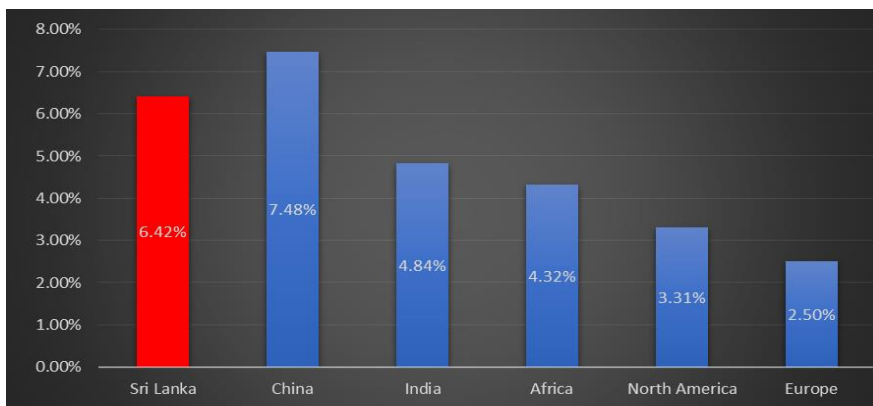


Figure 09: Rate of urban sprawl per year in the World, 1995-2015

Source: Based on UN-Habitat, 2018

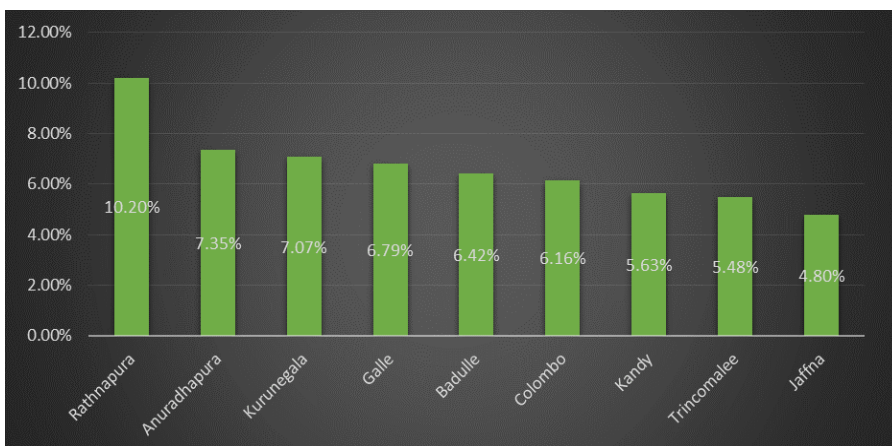


Figure 10: Annual Growth Rate of Built-Up Areas per Year in 9 Provincial Capitals, 1995-2017

Source: Based on UN-Habitat, 2018



Over the past two decades, while all provincial capitals in Sri Lanka have seen significant growth, the urban population density remains notably low. According to the United Nations' World Urbanization Prospects (2014), Sri Lanka is ranked as the fifth least urbanized country out of 233 nations. Only 18.2% of Sri Lanka's population, or approximately 3.9 million people out of 21.2 million, live in urban areas, as reported by the World Bank. This phenomenon of "hidden urbanization" indicates that a large portion of the population—around one-third—resides in areas that exhibit urban characteristics but are officially classified as rural. This situation stems from unplanned urban development and the tendency for people to settle near city centres. Economic activities and workplaces are typically concentrated in the main urban centres, leading to greater congestion and rising land prices in these areas. As a result, the population gradually expands outward, encroaching on green belts.

### **3.3.4.c. Functional Relations**

Urban areas play a crucial role by providing functions which are essential to the socio-economic development of the people living in surrounding areas. Cities are forces to drive socio-economic development across the country opening opportunities and widening access to public needs and services for residents in some parts of poor regions. They offer convenient locations for decentralizing public services via field offices of national ministries, agencies, or regional and provincial government offices, improving access to services and facilities for both urban and rural populations. These areas function as local or regional hubs for various basic social services such as healthcare, education, and welfare. They typically provide a wide

range of consumer goods, along with commercial and personal services, through small enterprises and the informal sector. Many also serve as rural marketing centres, offering distribution, storage, brokerage, credit, and financial services, either through regular or periodic markets and bazaars. They foster conditions that support the growth of small- and medium-sized manufacturing and cottage industries, meeting local demand for affordable goods. Numerous urban areas function as agro-processing and agricultural supply centers, providing services to surrounding rural populations. These recenters facilitate agricultural commercialization and boost productivity and income in nearby rural areas. They also offer non-farm employment opportunities and supplementary income for rural residents, with remittances from migrants contributing further income to rural towns and villages. Additionally, they often act as transportation and trade hubs, connecting rural communities to larger cities and regions.

The following Table (Table 05) is important for understanding the functions of major cities in Sri Lanka. It shows the land use pattern related to different functions in municipal areas in provinces in Sri Lanka, in 2017. According to the table, all provincial cities provide a wide range of services that are crucial to the functioning and development of the country. All the provincial capitals include economic and social service, and administrative functions that are especially important for their residents and surrounding rural areas. As revealed by UN-Habitat (2018) these services and functions serve large populations beyond the administrative boundaries. Most of the Municipal Councils and Urban Council

boundaries often only account for a small proportion of the urban-built areas but a

large population living in fringe areas also uses these services and functions.

Table 5: Land Use Related to Different Functions in Municipal Areas in Provinces in Sri Lanka, 2017

Function Type	Municipality								
	Colombo	Anuradapura	Jaffna	Badulla	Galle	Kandy	Kurunegala	Rathnapura	Trincomalee
	As a percentage								
Residential	38.65	53.85	65.52	76.98	69.67	59.58	59.5	75.68	56.51
Commercials	8.57	6.71	8.04	6.32	6.2	13.87	10.86	5.39	8.72
Institutions									
• Education	4.06	3.35	3.92	2.21	3.7	7.41	6.63	1.97	2.39
• Heath	1.31	0.58	0.68	0.89	0.62	1.45	2.54	0.96	0.71
• Administrative	4.83	7.07	2.46	2.14	5.06	1.71	4.79	4.69	11.13
Industrial	7.22	0.99	0.51	0.34	1.43	0.29	0.25	0.35	0.63
Transport	22.51	7.13	11.1	7.08	6.63	6.06	9.4	7.59	8.51
Public spaces	6.60	3.91	3.53	2.71	2.43	6.62	2.27	2.03	6.23
Cultural	2.61	16.44	4.06	1.33	3.33	2.76	3.81	1.25	4.01
Under constructions	3.64	0.00	0.36	0	0.39	0.24	0.01	0.09	1.0

Source: Based on UN-Habitat, 2017

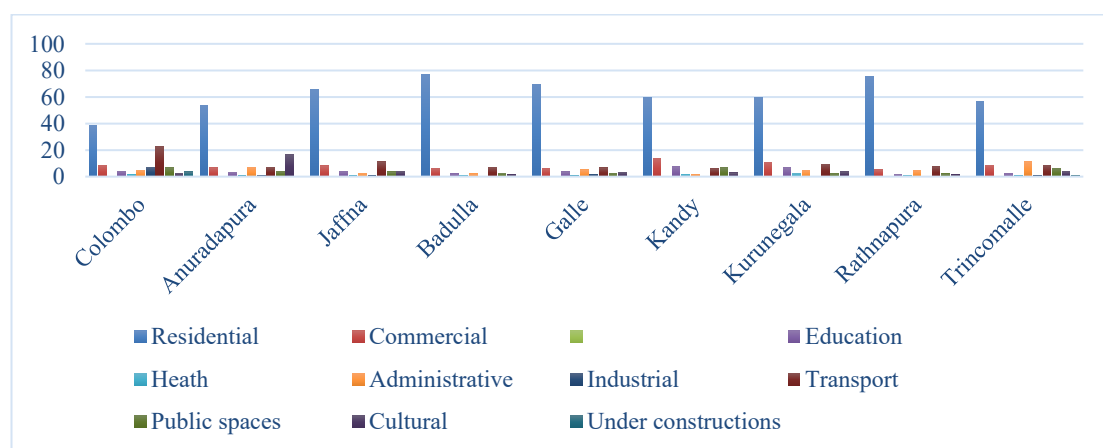


Figure 11: Land Use of Different Functions in Municipal Areas in Provinces in Sri Lanka, 2017

Source: Based on UN-Habitat, 2018

As the above table shows, although the provincial capitals include all the functions which are essential for the socio-economic and cultural development of the people, notable differences in the distribution of land use across municipal areas, according to the different functions of the provincial capitals can be observed. A striking aspect of this connection is that Colombo municipality includes the greatest proportion of the land allocated for non-residential purposes (60 per cent) including a diversity of commercial, transport, industrial, social and cultural functions. However, Kandy and Kurunegala municipalities include the greatest proportion of lands in relation to education while Kandy and Kurunegala municipalities include the higher proportion of lands in relation to health. In addition, Anuradhapura, Galle and Trincomalee are in the front in relation to administrative function. These Municipalities are located outside the Colombo Metropolitan Area and a high concentration of these functions benefit the population living in the surrounding areas.

#### **4. CONCLUSION**

Urban areas" in Sri Lanka are not based on any definite criterion. "Urban status" is conferred on an area by the Minister in charge of Local Government purely for local administrative purposes and there are no definite criteria to guide the ministerial discretion and it seems to be based on "the nature of the development of the locality or its amenities and urban character" Accordingly, decision of upgrading of towns or downgrading of towns is based only on the political consideration and no any attempt to consider morphological, demographical, sociological or economic factors which are prerequisite in the process of urbanization. The current definition of urban status in the

country is based on the administrative status and there is no consistency in applying this definition due to the changes made in the administrative status from time to time by the government. The present official definition of urban centres in Sri Lanka considers only Municipal Councils (MCs) and Urban Councils (UCs) as urban. Even though, many settlements in the country have attracted more population as well as urban-type characteristics they are not shown by statistics. This has led to underestimating the country's level of urbanization. As many researchers pointed out, today this has become a major issue in planning and measuring urban development in the country. Therefore, there is a great need to introduce a proper definition of "urban" to capture the real picture of urban growth of the country.

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