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# CONTEMPORARY MATALE CITY: CHALLENGES AND OPPORTUNITIES IN URBAN DEVELOPMENT

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#### ABSTRACT

Matale city is the largest urban centre in the Matale district and has an important historical background in urban development in Sri Lanka. Although a long history has marked the early development of the city, the development has not made significant progress in later periods. It confronts various challenges in urban development, though various development potentials are existing in the city. Based on this, the study explores the contemporary status, challenges, and opportunities in urban development. Data for the study were mainly derived from secondary data sources and also through primary data collection methods such as field observation and interviews with the key informants. Results revealed that urban population shows an increasing trend while the overall population growth rate and the urbanization rate in the city remain at a low level. There has been no significant progress in spatial development over time. Both horizontal and vertical expansion of the city shows only a gradual increase. The study found that the city's valuable spaces have not been utilized effectively, and there is a lack of progress in commercial and industrial development. However, administrative and residential functions have developed well. With this, sizeable population, strategic location, space for economic and industrial development, historical background, and tourist sites are identified as important opportunities in the city. Therefore, the study highlights that urban development and planning should be carried out by prioritizing the identified challenges and prospective opportunities in Matale city.

Key Words: City, Challenges, Development, Growth, Matale, Opportunities, Urban

#### **1. INTRODUCTION**

In recent years, for the first time in history, more than half of the world is being transformed as urban area (Demographia, 2020). The burden on cities is increasing at a rapid rate as world cities attracting people with various opportunities. As urbanization accelerates, more people flock to the city (Li et al. 2015) seeking for better living opportunities. Today, it is estimated that

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approximately 4.2 billion people (55%) live in cities (World Bank, 2020). It is also predicted that the world urban population will continue to grow.

By 2050, the number of urban dwellers will double from its current level, and that about 7 in 10 people will live in cities (World Bank, 2020). Thus, urbanization is expected to be one of the most transformative trends in the 21<sup>st</sup> century, as a result of the doubling of the world urban population (United Nations, 2017). Hence, the contemporary urbanization model of the world is unsustainable on various bases and that most of the world cities are unprepared for urban challenges (UN-Habitat 2016). Maintaining the sustainability of cities has become a significant challenge for cities around the world as urbanization has a multifaceted impact on human and environmental well-being (Kookana et al. 2020). Especially in economic and social interactions of the population, the environment and human influences, expansion of the cities, enhancing the stability of housing, infrastructure, basic services, food security, health, occupational safety, security and natural resources (United Nations, 2017). However, it is noteworthy that the impacts of urbanization vary from region to region based on socio-cultural and environmental conditions (Kookana et al. 2020). The challenges associated with urbanization are increasingly seen in developing countries, and the situation is expected to worsen in the future. Because 60 per cent of the population in developing countries is, expected to be found in cities by 2030, especially in Africa and Asia (Demographia, 2020). More than half of the urban population (500,000 and above) is found in Asia, with mostly structured areas. UN DESA (2018) also pointed out that, the world urban population growth (approximately 90%) is expected to occur in South Asia and Sub-Saharan Africa, the two regions of the world where the urban population will double in the next 20 years. Despite this status and trend of South Asian urbanization, Sri Lanka urbanization is different. Significantly, Sri Lanka does not enjoy the same level of urbanization as other Asian countries (Van Horen & Pinnawala, 2006) because, the geographical transformation from rural to urban in Sri Lanka has been very slow (Peiris, 2006). However, urbanization in Sri Lanka has affected every sector of the country since independence (Van Horen & Pinnawala, 2006).

In the early period, the urban growth of Sri Lanka based on the migration from rural to urban areas, especially in the Western Province (MoE, 2010). The government undertook rural housing projects and other rural development programmes to improve the rural communities and bridge the gap between rural and urban and these efforts have paved the way for the development of small and medium-sized towns around major cities (MoE, 2010). Consequently, medium-sized cities with a population of 20,000 to 50,000 are seen as the fastest-growing segment of the urban sector in Sri Lanka (Van Horen & Pinnawala, 2006).

Statistics show that the increase in the number of urban dwellers over the past half-century has been slow in Sri Lanka. However, there has been a significant increase in the urban areas and urban population of Sri Lanka. Thus, the urban population, which was 15.3% in 1950, has now

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grown to 18.5% (UN DESA, 2018). In this context, many studies conclude that there is a complication in urbanization statistics in Sri Lanka. Bilesha (2016) has stated that there is a problem with the statistics regarding the urbanization level in Sri Lanka. Also, she has proposed the need and the guidelines to redefine the urban areas and urbanization level of Sri Lanka. The world urbanization prospects projected that the urban population in Sri Lanka would increase to 31.6% by 2050 (UN DESA. 2018). The annual urban expansion rate of Sri Lanka is estimated as 6.42%, and it is higher than that of the United States, Europe, India, and Africa, where annual urban expansion rate recorded as below 5% (GoSL, 2018). It is also noted that the urbanization process is vastly involved in the western part of Sri Lanka, especially in Colombo.

The rapidly growing trend of urban expansion has posed a significant challenge in Sri Lankan cities. Although systematically managed urbanization will bring out socio-economic improvement and better living standards (UN-Habitat, 2016), developing countries encounter the adverse effects of urbanization without proper management. The situation creates many challenges, especially during the process of urban planning and development. The current trend and patterns of urban development in Sri Lanka have paved the way towards many complex issues and interconnected with policies (Munasinghe, 2014). Saman Kelegama (2013) has pointed out that urban development in Sri Lanka confronts three key challenges such the structural characteristic of Sri Lankan cities, lack of urban infrastructure financing in terms of integrated policy and institutional structure, and lack of financial and technical resources to provide efficient urban service. Munasinghe (2014) also pointed out that lack of resources remains a major obstacle to the implementation of policies into practice, although a high level of autonomy is the interest.

UN Habitat (2017) pointed out that Sri Lanka encounters many challenges in urban planning and design, including strategic urban management, land and housing development, and infrastructure management and maintenance. Thus, a new agenda is essential to get advantages of the opportunities provided by the urbanization process and to address the challenges effectively. Moreover, it should be generated as ecologically sustainable, resilient and safe, non-violent and enhance economically productive and residential cities (UN-Habitat 2016). Sri Lankan cities are facing many constraints to achieve this status, though there have many opportunities are available for urban development.

#### 2. RESEARCH BACKGROUND

Matale is one of the cities in Sri Lanka with an important historical background in its urban development. It is not only the capital of Matale district but has been a municipality for over a half-century. Though Matale Municipal Council (MMC) is one of among two Municipal Councils (Matale and Dambulla) in the district, it falls ahead of the timeline. Although the early

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development of the city is associated with many aspects of historical significance, it is questionable why the city has been unable to attract the developments which other cities that have been developed in short-term since then. Despite the municipal status of the city, it faces several challenges in term of development. In particular, the gradual development trend of Matale town compared with the origin and early development of the city is subject to study based on its diverse physical, historical and socio-economic background. At this background, the study explores the current development status, challenges and opportunities in the urban development of Matale city.

#### **3. RESEARCH METHODOLOGY**

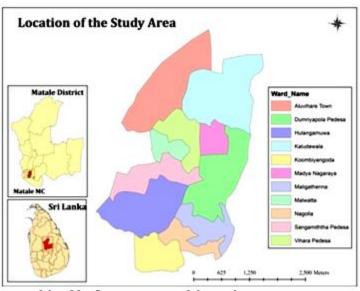
The main objective of this study is to assess the development of Matale city (demographic, spatial and functional development) align with its early development, challenges and opportunities in urban development. The study mainly derived necessary data from secondary data sources. However, primary data collection methods such as field observation and interview with the key informants were also accommodated. For this purpose, the researcher used the interview guide and observation list. The secondary data were obtained from Department of Census and Statistics (DCS), Sri Lanka, statistical handbook of Matale District Secretariat, records of Matale Municipal Council, reports of Urban Development Authority (UDA), Matale, research papers, books and web sources. Collected data were analyzed through quantitative and qualitative methods. ArcGIS 10.6.1 application used to generate necessary maps. The built-up areas of the city derived from Google Earth Pro. 2020.

#### 4. THE STUDY AREA

The study area, Matale city, lies in the centre of the Island and the northern part of Central Highland. It is one of the three districts of Central Province of Sri Lanka, namely, Kandy, Nuwara Eliya and Matale. The city located in the southwestern part of the Matale district. Map 01 shows the location of the city and its wards.

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Map 01: Location map of the study area

Matale is one of the second-order cities and situated 153.7 km North-East of Colombo, 47.9 km South of Dambulla and 26 km North of Kandy. The district consists of eleven Divisional Secretariat Divisions (DSD) namely, Dambulla, Ukuwela, Laggala Pallegama, Naula, Wilgamuwa, Rattota, Pallepola, Ambangange Korale, Yatawatta and Matale. Thirteen local government authorities administrate these divisions, including two Municipal Councils (MC) and 11 Pradeshiya Sabha (PS). Out of two Municipal Councils, Matale is one of the oldest municipalities in Sri Lanka. It belongs to Matale Divisional Secretariat Division, which has the highest population in the district and has long been as a district capital of Matale. The total area of Matale Divisional Secretariat Division is 71 km<sup>2</sup>, which includes 8km<sup>2</sup> of Municipal Council Area and 63km<sup>2</sup> of Matale Pradeshiya Sabha (DS, Matale, 2018).

#### **5. DEMOGRAPHIC DEVELOPMENT OF MATALE**

The Matale district has a relatively sizeable population, and the growth is continuing. In 1871 it had a population of 75,196, and over a century, it increased to 357,354 in 1981. Currently, the population has reached to 519,403. (DS, Matale, 2018). However, in comparison, the population of the district is less (18.8 %) than other two districts namely, Kandy (53.5%) and Nuwara Eliya (27.7%) in Central Province (Table 01). Similarly, the population density is also lower (248 p.p. km<sup>2</sup>) in the district as it has the largest land extent in the central province. In contrast, the average annual growth rate (1981 - 2012) is 1% in Matale district (DCS, Sri Lanka 2012).

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	Population		
District	1981	2001	2012
Kandy	1,048,317	1,272,463	1,375,382
Matale	357,354	442,427	484,531
Nuwara-Eliya	603,577	700,083	711,644
	Population Density (km <sup>2</sup> )		
District	1981	2001	2012
Kandy	554	664	717
Matale	180	227	248
Nuwara-Eliya	354	410	417

Table 01: Population and population density in the Central Province of Sri Lanka from 1981 – 2012 (Source: DCS, Sri Lanka 1981, 2001 & 2012)

With this basic demographic trend, spatial variations are apparent in population distribution. According to the census data of 2012, the major proportion (87.6%) of the population is residing in rural and estate sector, while 12.4% lives in the urban sector (Table 02). It is noted that the percentage of urban population is similar to the Kandy district, which is the second-largest city of Sri Lanka. However, the proportion of the urban population (12.4%) is lower than the proportion of the urban population (18.2%) in Sri Lanka (Table 02).

Country, Province &		Sector		
Districts	Population	Urban	Rural	Estate
Sri Lanka	20,359,439	18.2	77.4	4.4
Central Province	2,571,557	10.5	70.6	18.9
Kandy	1,375,382	12.4	81.4	6.2
Matale	484,531	12.4	83.6	3.9
Nuwara Eliya	711,644	5.6	40.9	53.5

Table 02: Population in Sri Lanka and Central Province by sector (Source: DCS, Sri Lanka, 2012)

Though the total population of the Matale district has increased over the last ten years, it varies by sector. The proportion of the urban population has increased from 8% in 2009 to 12% in 2018 (Table 03). Conversely, the percentage of rural and estate population has declined. The urban population has increased by 24,528 while the estate population declined by 3702.

Sector	2009	2018	Change
Urban	40086	64614	24528
Rural	425760	434337	8577
Estate	24154	20452	-3702
Total	490,000	519,403	29,403

Table 03: Temporal change in the population of Matale District by sector 2009 & 2018 (Source: DS, Matale, 2009 & 2018)

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The population, population density and area of local government authorities in the district have shown in Table 04. The estimated urban population of the district (64,614) includes the urban areas in Dambulla, Matale, and Ukuwela (DS, Matale, 2018). Among these, the urban area of Dambulla is rapidly growing with faster population growth in recent decades. Consequently, it has upgraded to the second Municipal Council of the district. However, the population density in Dambulla is low (175 people per km2) in comparison with Matale (Table 04) and this is due to that Dambulla (444 km2) is six times larger than Matale (71 km2) in terms of land extent. Current population density of Matale is 1130 per km2, and it was 1086 per km2 in 2009 (Table 04). It is noted that Ukuwela, Galewela and Rattota also consist of the sizeable population in the Matale district.

Local Government			Population Density
Authorities	Population	Area (km²)	per km <sup>2</sup>
Matale MC			
Matale PS	80,252	71	1130
Dambulla MC			
Dambulla PS	77,510	444	175
Galewela PS	75,083	187	402
Ukuwela PS	72,923	76	960
Rattota PS	55,050	99	556
Yatawatta PS	32,419	63	515
Pallepola PS	31,693	81	391
Wilgamuwa PS	31,617	256	124
Naula PS	28,968	276	105
Laggala Pallegama PS	17,120	385	44
Ambanganga Korale PS	16,769	55	305

Table 04: Population of Local Government Authorities in Matale District, 2018 (Source: DS, Matale, 2018)

#### 6. EARLY DEVELOPMENT OF THE CITY

Historical records related to Matale city traced back to the 18<sup>th</sup> and 19<sup>th</sup> centuries. According to the records of MMC, the early development of Matale city started with the initiation of the Local Board under the ordinance of 1876. The Local Government Board was established in 1888 in charge of the administration of the Matale district and since it has been the urban centre of Matale district. With the initial growth of the city, Urban District Council (UDC) was established in 1923. This system abolished, and Urban Council (UC) established in 1939. The function of Urban Council lasted until 1963 and Matale city upgraded to the status of the Municipal Council in 1963. The city gained much prominence during the British colonial rule as it was chosen as the administrative centre by them. It was considered as an appropriate hub for trade and service functions in the district. With this background, the city started to grow as the administrative and

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economic hub. It is noted that the economy of Matale underwent modernization by the development of plantation agriculture (Hettiarachchi, 1984). It has resulted in many associated developments in the city. Small and large-scale shops emerged in the city targeting the groceries of plantation workers, requirements of plantation managers, and essential needs of estate management such as fertilizers, equipment (Puwaji, 2001). Moreover, transport development also vastly took place due to the necessity of shipping agricultural products via road and railway transport. Matale - Kandy road (1831), Matale - Kandy railway road (1880), Matale - Dambulla road (1932) are some of the important progressions in the city which led to improved connections with other cities.

By 1900 Matale had become a significant centre with a commercial economy with local and foreign interest (Hettiarachchi, 1984). With the emergence of large businesses, several new business outlets were also aroused for plantation distributors. Thus, it strengthened the trade and economy, and by new employment opportunities were emerged in the city. By attracting the economic development and opportunities prevailed in the Matale district, many of the South Indian Tamil Chattier, coastal Sinhalese, North-East Tamils, oil merchants and other traders came and settled in Matale town and its vicinity (Puwaji, 2001). The increase in Sri Lankan Tamils in the 1930s also had an impact on the growth of the Matale city. Many Jaffna cigar shops were established in Matale town between 1920 and 1950 by Jaffna Tamils (Puwaji, 2001). Some of these shops are still functioning in the city. Besides, more new businesses were started by the people those who came here intending to do business and of professional purposes. After 1931, the number of government employees in the public sector has increased with the increase of government institutions in the town. Thus, the city has gradually developed into an important urban centre in the Central Province and has been providing urban services.

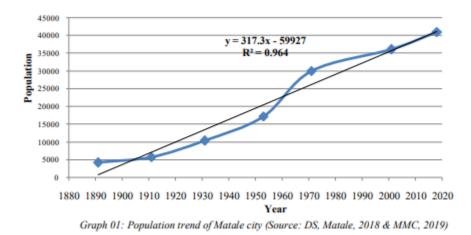
#### 7. RESULTS AND DISCUSSION

#### 7.1 DEMOGRAPHIC DEVELOPMENT OF THE CITY

The Matale city covers about 7.9% of the total population of the Matale District (DS, Matale 2018 & MMC, 2019). Being the district capital and one of the oldest municipalities in Sri Lanka, the city has attracted a sizeable population (Madduma Bandara, 1991). The population trend of city shows an increasing trend over time (Graph 01). It has increased from 4197 in 1891 to 41,057 in 2018 (Graph 01). However, the increase in 128 years indicates that the rate of urban population growth is slow.

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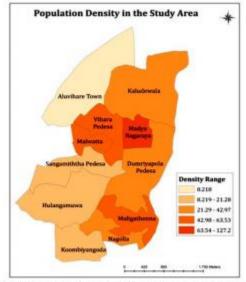


The population which was 4,197 in 1891 increase to 14,090 in the first 50 years and it doubled in the next 50 years. Thus, a significant increase from 1931 to 1971 was a salient feature of the population growth of the city (Graph 01). However, a negative trend occurred in 1981. The trend was partly due to the repatriation of estate workers in the 1970s, and this imbalance had, however, rectified by an influx of refugees from North and East regions of Sri Lanka (Madduma Bandara, 1991). With this fluctuation, the population increased to 36,103 in 2001. However, the last two decades, the population has increased only by about 5,000. Although the city had a sizeable population in the early years associated with the early development of the city, the population growth rate continues to increase at a lower rate (0.3%).

Population density of the city also varies spatially and temporally. In 1891 the population density was 5 people per hectare, and it has increased 35 in 1981(DS, Matale 2018). Current population density is 48 people per hectare. It indicates that similar to the population trend, no significant changes in the temporal trend of population density too. In terms of spatial distribution, the population density is high in some wards such as Madya Nagaraya, Vihara Pedesa, Malawatta and Maligathenna, while low in Aluvihara town (Map 02). Kaludewala, Nagolla, and Dumriyapola Pedesa have moderate population density (Map 02).

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Map 02: Spatial distribution of population density of Matale city (Source: Map prepared by the Author based on the data of MMC, 2019)

In terms of population composition, the city has an increasing trend of female and elderly population similar to the Sri Lankan trend. There were 20,183 (49%) males and 20,874 (51%) females in the city (MMC, 2019). In 1981 the percentage of the female population was 49%, and it has increased by 2% in nearly 40 years. Likewise, the elderly population is also rapidly increasing in the city. In 1981 there were only 6.3% of the elderly population, and it has increased to 22.3% (DS, Matale 2018 & MMC, 2019). It is two folds higher than the Sri Lankan status as the elderly population in Sri Lanka currently represents 11.8% (DCS, 2012).

Moreover, the city has a multi-ethnicity and multi-religion population with spatial and temporal variations. There were more Sinhalese (40%) and Muslims (36%) than Tamils (23%), and Christians (below 1%) reside in the city (MMC, 2019). However, there has been a decline in the proportion of the Buddhist population, while Muslim and Tamil population shows a growing trend. The proportion of Muslims has increased by 14% between the periods from 1981 to 2019. In contrast, the Buddhist population, which was 55% in 1981, has dropped by about 16%. Thus, the trend and spatial distribution of the population in the city will have significant changes in the socio-economic environment of the city.

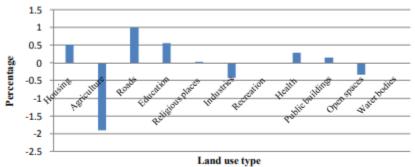
It is noteworthy that although the population of the city has different dimensions both temporarily and spatially; it still has the potential to develop with the highest population in the district.

#### 7.2 SPATIAL DEVELOPMENT OF THE CITY

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The spatial and physical development of the city is visible through its built environment and land use pattern. The study revealed that no significant development in terms of spatial and physical development over the last few decades. However, the horizontal expansion of the built-up area has been gradually developed than vertical development. The extent of the city, which was 5.3 km<sup>2</sup> in the 1960s, has expanded to 8.6 km<sup>2</sup>. It indicates that the spatial development of the city is also slow, similar to the population trend. However, demarcation has been made to city limit (Municipal Council Area). Earlier the city was structured into 13 wards and now it has been converted into 11 wards. Similar to the land extent of the city, no significant changes recorded in the land use types. However, some salient features that can be noticed in the current land use pattern. Housing and agriculture land uses are dominant (about 80%) in the city while the land utilized for other purposes is less. The changes occurred in land uses during the last two decades have been shown in Graph 02. No significant changes found except the land utilized for agriculture and roads.



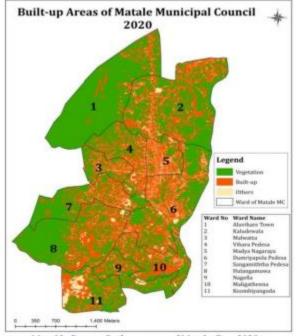
Graph 02: Land use changes in Matale City (Source: Records of UDA, Matale and DS, Matale)

Open spaces and the land utilized for agriculture and industry have declined while the land for residence, roads, education, health, public buildings are on a slight rise. The extent of the water bodies (0.5%) remained unchanged, and land allocation for recreational facilities has slightly increased. Present built-up areas of the city have shown in Map 03. It illustrates that buildings mainly concentrated in the central city, and scattered settlement pattern can be observed in other areas (Map 03). Public places, administrative buildings and commercial buildings mostly concentrated in the main city area. The Central Business District (CBD), which is the main commercial hub of the city, is the Madya Nagaraya (Central city) and the Gongawala area. Most of the city's business activities taking place on Main Street, King Street and Gongawela Street and some other parts of the city centre. Commercial activities, however, have been expanded in recent years towards North and south due to the linear development pattern of the city. Administrative buildings and recreational related features, including library, parks and playgrounds are located in the western part of the city. Likewise, most of the agricultural lands are found in Kotuwegedara, Koombiyangoda, Hulangamuwa and Kaludewala wards.

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Though the built-up areas of the city have not been recorded significant changes, slight expansion can be seen in line with the city's population growth over time and space. Even in the entire Matale district, the size of the built-up area is accounted for only 1.2% (DS, Matale, 2018). An increase can be seen mostly by houses in built-up areas. The number of buildings (including houses) has tripled since 2000 to present (MMC, 2010 & MMC, 2019). Of the city's total land use, about 140 ha land used for housing purpose in the mid of 1980s, and it has increased by four folds now.



Map 03: Present Built-up areas of Matale City, 2020 (Source: Prepared by the Author based on Google Earth Map, 2020)

Vertical development of the buildings is highly found in the southern and central part of the city. Two storeys with a ground-level portion are prominent in the city while 4 - 5 storeys are rare. Main Street of the city, where major commercial activities are taking place, has more vertical development than other areas. Gongawela Street mostly has small and medium scale commercial activities, mainly grocery shops and vegetable and fruit stalls. As the city has developed with a linear pattern, the expansion of the built-up areas can often be seen along the road and scattered pattern in southern areas. Saman Kelegama (2013) has pointed out that urban expansion in a linear pattern is one of the challenges in developing urban areas in Sri Lanka. Similarly, some natural features also confine the urban expansion in some cities. Although, the natural landscape of the Matale city enriches the natural and aesthetic value; it restricts the expansion of the city.

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Thus, the city confronts problems in urban expansion further to cater to the needs of the growing population.

Although the city has moderate physical development, many problems have identified in terms of spatial forms of the city. The construction of buildings (about 30%) without considering the rules and regulations in practice is a major restriction in urban development (Interview, 2020). Hence, the buildings have been expanded vertically with the different heights and shapes to suit the requirements of the owners without considering the urban spatial form. Besides, lack of architectural concern and aesthetic value, unattractive buildings and front views, poor maintenance and lack of renovation are found as important features except in some buildings in the city. Moreover, small plot sizes, closely located buildings and partially completed upper portion of some buildings are also shaped the spatial form of the city. However, after the road widening programme, vertical development of buildings has increased along Main Street with some modification.

The city faces space shortage for urban functions, while more vacant and abandoned spaces are available. Besides, ownership problems and underutilization of the space are major restrictions in the development of the city (Interview, 2020). According to the report of the development plan of UDA, 84% of the land in the city is privately owned. MMC and other government bodies own only a limited land (16%). Consequently, problems are encountered by the authorities during the planning and implementation process of public development projects and in urban land-use planning, which is a crucial aspect of urban development.

#### 7.3 FUNCTIONAL DEVELOPMENT OF THE CITY

In terms of urban functional development, commercial, industrial, administrative, education, residential, recreational, tourism, and cultural functions are important in the city.

**Commercial and industrial functions:** The economy of the city is mainly reliant on agriculture and services. It has long been the commercial hub of the district, and a variety of business ventures are taking place. With the population growth, agricultural land and the allied economy began to decline. Until the mid-1950s, lack of plans and resources had a significant impact on the urban economy (UDA, 2006). Although industry and other economic activities began to grow after 1977, the contribution of the industries for the sustainable economy of the city is still ineffective. According to the records of UDA, the economic growth rate, which was 2% in 2005, continues to decline. Lack of economic opportunities, declining industrial economy, lack of investment in new industries, lack of employment generation are identified as the important problems associated with the urban economy in the city.

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ESCAP (2015) found that population growth, urban expansion and the system associated with economic growth are main challenges confronted by the Matale city. In recent times, the urban economy has been declining in industries, while the service industry is growing. Lack of land allocation for industry and the commercial activities (below 4%) is the leading cause of its low contribution in the urban economy. The land used for industrial activities (below 5 ha) is significantly less than commercial land. Many small and medium scale industries which were functioned in the city have closed now. Currently, functioning industries in the city have shown in Table 05. In terms of industrial types, textiles, wearing, apparel, and leather are prominent while basic metal industries, metal products, machinery and equipment records as low (Table 05).

Type of Industries	Number
1. Food, Beverages and Tobacco	65
<ol><li>Textiles, Wearing, Apparel and Leather</li></ol>	118
<ol><li>Wood Production and Furniture</li></ol>	18
<ol> <li>Paper Products and Printing</li> </ol>	4
5. Basic Metal Industries, Metal Products, Machinery and Equipment	17
<ol><li>Other Manufacturing Industries</li></ol>	38
Total	260

Table 05: Type of Industries in the City, 2018 (Source: DS, Matale, 2018 and MMC, 201

The city has developed with facilities to provides essential goods and services to the city users. Despite the improvement in commercial activities over time, it confronts many challenges in recent decades. Thus, the commercial function has also been identified as one of the reasons for low contribution to the urban economy. The CBD where the commercial activities are mainly concentrated is also showing moderate growth. Michael Calavan. (2011) states that business has not expanded significantly in the city, but new businesses are emerging to some extent. Apart from the increase in shops, large market buildings were also established for the development of commercial activities. However, these buildings are not being fully occupied for economic benefit. Some buildings have expanded their storey while some shopping malls have been modernized in the central part of the city. However, the rate of growth and resources for the enhanced commercial functions are stagnant. Table 06 shows the number of registered businesses in the city.

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Туре	Matale MC	Dambulla MC
1. Boutiques	192	77
2. Restaurant and Canteens	149	48
3. Textiles and Footwear Shops	206	31
4. Fish and Vegetable Shops	117	111
5. Dispensary and Pharmacy	54	17
6. Wood and Iron Furniture shops	34	9
7. Electrical Items shops	28	13
Total	780	229

Table 06: Registered Business Places - 2018 (Source: DS, Matale, 2018)

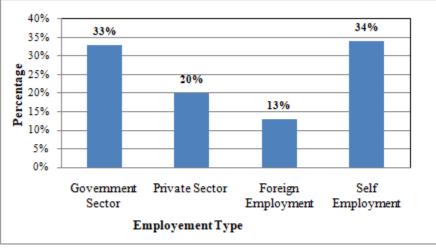
Accordingly, the textiles and footwear shops are prominent in the city following boutiques (Table 06). In comparison, the city has a large number of business ventures than Dambulla, but the trade initiatives are low when viewed as a major city of the District (Table 06). Despite the slow growth trend, commercial functions face many challenges in the city. Underutilization of commercial buildings, lack of investment schemes, low investment by private companies, lack of infrastructure required for business development and lack of initiatives to attract customers and traders are identified causes of the drop of the commercial economy in the city (Interview, 2020).

A study of Asia Foundation on the business environment in Matale town has also identified various problems such as declining demand of businesses, lack of infrastructure and low annual employment growth rate and low investment by the private sector, absence of traction factors to attract outside traders, expressions of distrust and self-doubt among the business community (Michael Calavan, 2011). However, business people are aware of spending patterns, investment plans, business practices of the people, and the growth pattern of the nearby cities (Michael Calavan, 2011).

As industries and commercial activities show backdrops, the rate of employment also remains at a low level. Thus, the employment rate has been declining while unemployment increasing. In 1981, the unemployment rate was 8%, and it has increased by three folds in this decade. For instance, about 23% of the city dwellers are unemployed in 2010. Similarly, the employment growth rate, which was 1.7% in the period between 1981– 2001, is gradually decreasing. In terms of employment type, most of the population in the city is either self-employed of working in the public sector (Graph 03). It is noteworthy, however, that the majority of the city's population is employed in technology and administrative sector.

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Graph 03: Employment Types in Matale City (Source: MMC, 2019)

Despite the growing population, the elderly population of the total population is 22.3% in the city. Thus, a lower proportion of economically active people in Matale city is also leading the urban economy to remain with a low-level of outcomes. Consequently, urban poverty is also a problem in certain areas such as Kaludewala, Kohombiliwela, Diyabubula and Oyapahala areas. Problems in accessing the basic facilities and improper housing are identified as major problems in these areas (UDA, 2006). Out of the total, 8.3% of the families are beneficiaries of the Samurdhi programme (MMC, 2019), and this indicates that a certain amount of city dwellers are low-income people.

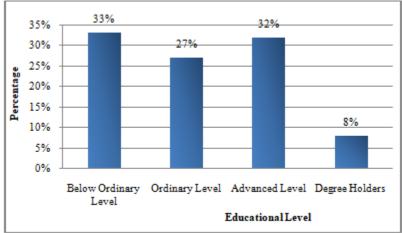
**Residential function:** Matale is considered one of the best residential cities in the country. According to the census, there were 5503 household units in 1981, and it increased to 7516 in 2001. According to the records of Matale Municipal Council (2019), currently, the city has 9142 household units; it is noteworthy that more than 1,500 housing units have increased in the city in nearly 20 years. Favourable weather condition, low land value, availability of services to urban dwellers, sacred places, cultural factors, lack of massive congestion, educational facilities and lack of unlawful activities are important causes for the preference of residential choice of city dwellers.

**Education and Health:** Educational and health functions of Matale city continue to increase. In terms of educational attainment, about 32% of the city dwellers have educational attainment up to Advanced level while 33% of the city dwellers are below the ordinary level (Graph 04). It is also noted that degree holders account for only 8%. These figures show that educational attainment in the city is at a moderate level. In terms of educational facilities, the growth in preschool, primary and secondary education is comparatively better in the city. It is evident by the sixteen government schools and a semi-government school, which provide education for city

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users. According to the records of the department of education of Central Province, out of total schools, eleven schools have up to Advanced level. Among these, ten schools offer diverse courses including Bioscience (10 schools) and Mathematics (9 schools) subjects for Advanced level. Moreover, eight schools provide English medium education. Some of these schools are well-known schools from 19<sup>th</sup> and 20<sup>th</sup> century, and Srimavo Bandaranayake Vidyalaya is a newly established public school in the city.



Graph 04: Educational attainment in the Matale city (Source: MMC, 2019)

It is noteworthy that the progress made in primary and secondary education has not been achieved in tertiary education and vocational training and education. Though tertiary education and vocational training vital for a high-quality workforce, absence of adequate opportunities increase the unemployment in the city. And this situation leads the youth to depart from the city to seek professional opportunities outside.

In terms of health facilities, the general hospital (established in 1871) and the health centre (established in Aluvihara in 1922) are important in the early development of health in the city. With the history of 150 years, the District General Hospital has been providing the services not only to the district but also to the surrounding regions. For instance, in 2018 only, there were 334,177 outpatients and 80,564 inpatients have been treated in the District General Hospital (Ministry of health and Indigenous Medical Services, 2020). The hospital has 825 inpatient beds (Ministry of health and Indigenous Medical Services, 2020). Moreover, many private medical centres provide services in the city, and their contribution is gradually increasing during the last two decades.

**Transport:** Due to the low population density, the infrastructure facilities are relatively satisfactory in the city. However, improvement is needed in certain areas. Since the city has

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developed transport service from the early period at a local, regional and national level, it has connected with magnet cities via road and railway transport. However, railway transport is not much developed in the city as bus transport. Although Matale has one of the oldest colonial period railway constructions, which was opened in 1880 (Hettiarachchi, 1984), it is standing to date without much modification. Bus transportation is the major transport mode of commuters and uninterrupted bus services available in the city. Apart from this, long trip buses from north, central and eastern regions to Kandy pass through Matale city as it is one of the gateways to Kandy.

Although the city has considerable transport services, traffic congestion has become major problems in the city in recent years (Interview, 2020). Thus commuters and city dwellers confront many challenges to fulfil their needs within a time-bound. Although main roads were expanded and the one-way system is strictly in practice, traffic congestion continues to increase. Lack of bus stop facilities, parking spaces, pedestrian walkways and three-wheeler parks, location of the bus stands in the city centre, location of schools along the main road in the central city area, narrow road near the nodes, the emergence of new shopping malls like Cargills Food City, KFC and Pizza Hut in the northern node are the important causes for increased traffic congestion in the city.

Administration: The city serves as an administrative hub for the entire district, and it is prominent for its administrative function from the historical period. Increase in human resources, enhancement of physical resources and allocation of more land for public buildings are some of the important progress in administrative functions. Thus significant improvement can be seen in administrative functions, and it has resulted in improved services to the public through more space and facilities.

**Tourism:** The ancient Matale district has long been a popular destination for local and foreign tourist. Knuckles mountain range (World Heritage Conservation Area), Aluvihara rock temple, Sri Muththumariyamman temple, Meemure, Sembuwatte Lake, Nalanda Gedige, Pitawala Patana, Bamabarakiri Ella, National Spice Garden, Sigiriya, Dambulla cave temple and Wasgamuwa National Park are some of the famous tourist destinations belong to Matale district. Apart from this, Matale has long been well known for spice and herbal gardens. Due to their proximity to the city, it is conducive for the development of the tourism sector.

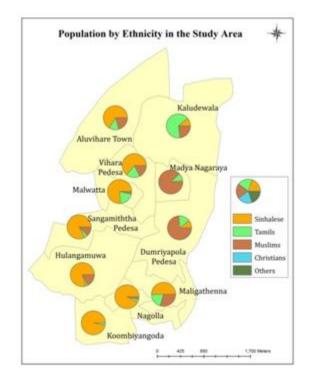
Although the city has many tourist sites, their contribution to urban development is minimal. There is a high potential to transform the Matale city into a popular tourist destination through its natural value and historical significance. However, lack of infrastructure development for accommodation and shopping malls, restaurants and lack of plans to attract tourists, and the development of other cities namely Sigiriya, Dambulla and Habarana with attractive tourism-

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based facilities adjacent to the tourist sites are identified causes which lead gradual growth of the tourism-based functions in the city. Moreover, the potential for the development of ecotourism in this area is also highly beneficial for the development of the city as it has many natural sites. Also, it can be supported to improve the urban economy and to enhance the cultural integrity of local people.

**Cultural diversity and sacred places:** The city has a multi-ethnic, multi-religion, multi-religious places and multicultural practices. Accordingly, sacred places and related cultural practices of diverse religions are also encouraging factor for the development of cultural diversity and social harmony in the city. Hence, spatial distribution of the city population is also reflecting on religious diversity, and it has been shown in Map 03.



Map 03: Population distribution by Ethnicity of Matale City (Source: Map prepared by Author based on the data of MMC, 2019)

Though variations appear, most of the wards have multi-religion. Thus, it is a place where people of a different culture, celebrate together the religious and cultural diversity. Pilgrims from all over the country visit Matale every year as it consists of several sacred places of worship belonging to the major religions (Madduma Bandara, 1991). This is further strengthened by the fact that most of the religious sites (location of the three Hindu Kovils, two Mosques, and a church) are located in the heart of the city or proximity areas. In particular, Aluvihara Temple,

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Sri Muththumariyamman temple and St.Thomas church are some of the notable shrines in terms of historical significance.

**Recreational functions:** Among recreational facilities, city excels in sports activities, especially in hockey. Nandamithra Ekanayake international hockey ground, Bernard Aluvihare sports complex, and Edward park hockey ground are some of the evidence for sports development of the city. Similarly, Public Park, Children Park (Kiddies Paradise), library, swimming pool, and theatres (Central Cinema Theater and Ama Cinema Theater) are also important recreational facilities. However, some facilities (resting places, parks, theatre) are inadequate and not up to the standard for the city population. Recreational land use had remained unchanged for more than three decades; however, only a slight increase has occurred in recent times. But, upgrading and maintenance of recreational facilities are relatively better. For instance, Bernard Aluvihare sports complex was upgraded in 2017 with the 400-meter synthetic running track, a new pavilion, indoor stadium and a swimming pool. Likewise, library and parks also have been upgraded under city development projects. Apart from this, the establishment of the Mahatma Gandhi International Centre is also an important initiative in the city.

The city has diverse and attractive topographic features, and it lies in a landscape with undulating features. It is surrounded by the two mountain ranges such as Makulessa and Knuckles. Besides, Suduganga River, which flows through the eastern side of the city, further enriches the natural significance of the city. Thus, the diversity of topography has influenced its climate and the biotic environment as well (Madduma Bandara, 1991). Being situated at an elevation of 1,194 ft above mean sea level, the city belongs to Mid Country Intermediate Zone. It has an average annual temperature of 21.8°C and an annual rainfall of between 2000 mm - 2500 mm. These conditions have resulted in an attractive green area in and around the city.

**Environment:** Although the surroundings of the city enriched with a vast green cover, shade trees and resting areas are minimal for urban users except in the southwestern part of the central city area. Except this, environmental problems are relatively less compared to other cities which are rapidly growing. Solid waste, land subsidence, slope failures, air pollution during peak hours, lack of proper drainage system, and reduction of vegetation cover are some of the environmental problems identified in the city. Among these, solid waste management is remaining as a major challenge, though initiatives have been taken place to ease the problem (Interview, 2020). The city collects about 25-30 tons of garbage a day. The problem is great in the densely populated Gongawela area. MMC has taken several initiatives on solid waste management with national and international collaboration. However, shortage of space, lack of financial and physical resources and lack of public contribution are important restrictions in solid waste management (Interview, 2020). Moreover, air pollution during peak hours is also becoming a problem at a minimal level in recent years due to traffic congestion.

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Hence, urban sprawl has led to increased pressure on the slope areas due to the residential needs in the areas like Kaludawala and western side of the city. In terms of natural hazards, land subsidence, slope failures and rockfalls are important hazards, and the city is highly vulnerable to land subsidence (Interview, 2015). The investigations carried out by National Building Research Organization in MMC area following the first subsidence incident recorded in 2005 found that almost all the wards of MMC are under direct threat (Wijegunarathne & Munasinghe, 2015). The land area under threat found in Gongawela (0.3451km<sup>2</sup>), Sinhala town (0.3061 km<sup>2</sup>), Hulangamuwa North (0.3868km<sup>2</sup>), Diyabubula (0.3950 km<sup>2</sup>), Maligathenna (0.3251 km<sup>2</sup>), Aluwihare (0.9524 km<sup>2</sup>), Mandandawela (0.3638 km<sup>2</sup>), and Parawatta (0.5602 km<sup>2</sup>) (Munasinghe & Wijegunarathne, 2015). This situation has resulted in the reduction of land value and demand for properties in those areas. Except this, houses located in hilly areas of Kaludewala are also vulnerable to slope failures as the pressure on the hill slopes is on the rise due to the human settlements. Besides, the threat of rockfall prevails in the western part of the town at foothills of mountain range.

#### 7.4. DECLINING ATTRACTION AND DEVELOPMENT

The declining attraction of the city is one of the major factors in urban development. As discussed above, the attraction of the city has been declining due to its slow growth. Hence, the rapid development of closer cities is also becoming an important cause. Despite the rapid development of Kandy, which is the capital of the Central Province and the second-largest magnet city in Sri Lanka, the speedy growth of Dambulla, also influences the centre of attraction of Matale city. Being the second-largest urban centre in the Matale district, Dambulla is rapidly growing as one of the major economic hubs in Sri Lanka. Rapid development taking place in this area is the main cause of the population increase (Madduma Bandara, 1991). The setting of Dambulla town, along the main economic corridor and the major junction of Sri Lanka, facilitates the fast urban development. Apart from this, Kurunegala town, which is located in the western part of Matale city, has also influenced the attraction of Matale city. Hence, the growth of the sub towns such as Ukuwela, Nalanda, Rattota, Palapathwela, Kaikawela, Pallepola, and Galewela also influence the development of Matale city.

Another important factor of attraction of Matale city is based on transport development. The city served as a transportation hub in the early days, and it was conducive for the city development in every aspect, as its central location facilitates fast interaction. For instance, bus services were available from Matale to Jaffna, Trincomalee, Hatton and Batticaloa in the early days (Puwaji, 2001). Currently, these transport services are based in Kandy and Dambulla. Although many long trip buses pass through the town, positive benefits to the city are minimal. Thus, it is imperative to recapture the central attraction of Matale city.

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In term of development aspect, various problems are encountered during the planning and implementation of urban development projects. Absence of large scale physical development projects is a major setback in the city as its central attraction gradually declining. For instance, the city has not covered by greater projects which are initiated in nearby cities like Dambulla and Kandy (Greater Kandy project and Greater Dambulla Project). This situation further declines the attraction and the number of urban users heading to the city. Moreover, lack of integration between institutions, lack of physical resources and political implication are important causes in this regard. Another important factor influencing urban development in the city is that some of the proposed development projects have not been efficiently implemented. With this backdrop, the reluctance of private companies to invest in key projects which are essential for city development is also identified as one of the major setbacks. However, there are some projects, which are based on particular problems, being implemented in the city. Accordingly, road development, expansion of the water supply scheme, development of public markets, upgrading of public facilities and modernization and renovation of old buildings are some of the important initiatives undertaken in the very recent years (Interview, 2020).

To summarize, the weak urban economy is one of the key challenges the city faces in recent decades. Administrative and residential functions are relatively better in the city while the urban economy, commercial, industrial functions are weak and that need to be developed further. Thus, the city should adopt the proper land use planning system, allocating more land on industrial and commercial functions to enhance the urban economy as urban economic development is mandatory in the development. It is essential for poverty reduction and to ensure the provision of adequate services to the city dwellers. Hence, encourage urban agriculture and agro-based industries, promoting the investment, tourism sector development, transforming the city buildings economically productive, generate employment opportunities, upgrading the social condition of the city dwellers, mitigate the transport problems and improved services for commuters are among the areas that need to be addressed in the urban development, tourist sites, cultural diversity, location and natural value are found as greater opportunities which can be used for urban development of Matale city and to recapture its previous status.

#### 8. CONCLUSION

The main objective of this study is to assess the opportunities and challenges in urban development in contemporary Matale city, Sri Lanka. Status of contemporary Matale city shows the diverse pattern in its demographic, spatial and functional development. The study revealed that, though the city has many potentials to succeed in urban development, it faces various challenges in recent decades. Being a major urban centre in the district, the city has a sizable population, and it continues to increase at a lower rate. Likewise, only a gradual increase has

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found in spatial and functional development in the city. The urban economy is declining as the contribution of commercial and industrial function is decreasing. Thus, the city faces functional transformation from economic-centred to administrative and residential. Although various measures are taken concerning urban development, the persistence of problems is understood to be related to several environmental, political and socio–economic factors. Therefore, the study highlights that urban development should be carried out by prioritizing the problems and prospective opportunities available in the city for urban development.

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