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THE GROWTH OF URBAN CENTRE IN KUALA LUMPUR: GROWTH CENTRE DEVELOPMENT CONTROL

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Abstract

The challenge in identifying the limit of the boundary of development growth in Kuala Lumpur is quite difficult. From the development control which create the growth of Kuala Lumpur define that allocation of development control for City Centre Commercial (CCC) development within the District Centre Commercial (DCC) development gave different priorities and growth for some area, unbalanced land use distribution within Kuala Lumpur areas, different plot ratio given by the authority for every centre base on the importance direct the growth focusing to the CCC area only and low enforcement on determining the distribution of floor space. Meanwhile, the lower plot ratio set for District Centre has lowered the densities/price for some project. The objective is to identify the urban growth pattern and to examine the influence of built up to the development. The allocation of intensity development in defining the growth of urban centre in Kuala Lumpur. The analysis is made to study the intensity, and the built-up area correlates to the floor space optimisation, total plot ratio, gross development value and the density requirement. Analyse on the implementation of intensity development, zoning of land use, high-density development, and the correlative relation of development control with the growth centre. It also to establish land use management and physical development in Kuala Lumpur City Centre for sustainable urban growth and proper management of development control. It is resulting from the hierarchy of 11 growth centre chosen for this study in Kuala Lumpur.

Keywords: Urban growth, development control, built up area, growth centre, urban development.

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1. Introduction

In this study, there are 11 Growth Centre selected in Kuala Lumpur (243 square kilometres) contributing RM295 billion to the Gross National Income (GNI) and the first quarter of 2018 the population is recorded more than 1.793 million people (Department of Statistic Malaysia, 2018a). This study explains the analysis of intensity development for each growth centre and those growth centres need to be rank and classified it by doing the measurement for the urban economic growth to get the finding for each growth development. This research is to analyse urban growth, development control for a different hierarchy of urban centre in Kuala Lumpur. The objective in this study were identified the urban growth pattern that lead to the limitation of development border in Kuala Lumpur, examined the influence of development control towards the growth of urban centre, analyse the location decision and the intensity development area which using the tools of development control that give an impact to high-density development in Kuala Lumpur. Urban growth development is related to several themes, such as development control for intensity development. The intensity development which covers the development of the built-up area, building height, plot ratio, Gross Development Value (GDV), land use within cities, zoning of land use, floor space and development density. This related theme where the major aspect contributes to the urban growth in Kuala Lumpur.

2. Problem Statement

Kuala Lumpur (KL) is the federal territory for Malaysia and the highest cities population in Malaysia which located in Klang Valley/ Greater Kuala Lumpur. The population of Greater Kuala Lumpur has achieved 6 million where by its contributed RM263 billion to the Gross National Income (Jabatan Perdana Menteri, 2016). It is a part of the development that generate the urban economics in Kuala Lumpur mainly Kuala Lumpur City Centre. Kuala Lumpur has an achieved 1.79 million population in 94 square kilometres area (243 square kilometres) in 2017 (Department of Statistic Malaysia, 2018b). This result to the high population density of 6,890 people per square kilometre. Population ageing due to the residential preferences expedited by population shrinkage dramatically affects land consumption (Lauf, Haase, & Kleinschmit, 2016).

National Urbanization Plan 2 (NUP) (2016) mentioned the issue of urban sprawl and limitation of city borders for every city in Malaysia. The major problem is identifying the limitation of the boundary. Because of the high intensity of development, the sprawl of development towards suburb cannot be defined explicitly using the tools of development control. Base on (Draft Kuala Lumpur City Plan 2020, 2018) the growth of Kuala Lumpur City Centre or in the classification of land use zone called City Centre Commercial (CCC) as the workplace which expanding and links up to the suburbs area. From the extension has linked up to massive urbanise area occupied with the residential in District Commercial Centre (DCC). But somehow the limit of development between CCC and DCC still don't have proper identification of their development growth. The urban sprawl issue in Malaysia can be solved with National Urbanization Plan 2 (National Urbanization Plan 2 (NUP), 2016). In 2025, a total of 314 cities in Malaysia will have a clear urban boundary thus solving the problem of urban sprawl and public facilities provisions.

The allocation of development control for CCC Development within the DCC development gave different priorities and growth for some area. Some point we did not know where the actual area for the

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urban centre and which is district centre to be considered in KL City. Is it the district centre is more prominent than city centre because of the high density of development. This might occur the misunderstanding of the primary development area for CCC and secondary development area for district centre in KL City. From the (Draft Kuala Lumpur City Plan 2020, 2018), it is referred to the urban growth from the centre but the current situation on physical site, it seems that others location considered as the district centre also has high-density development and the built-up area is almost the same with the city centre. There are three tools use in development control to identify the issue of urban growth in Kuala Lumpur. First, it is based on how the authority defines the city centre as a focus built up area and how about the other district centre also improves on the built-up area. The urban economic not just focusing in the middle of the region which implemented as Central Business District but also spread by locating the market value and the importance of that area. There is traction force of economic (density and land value) base on location and the stress. It is based on demand for high-density development and consideration of business attraction makes the developers choose the area that has the importance of high land value may give more profit to those developers. The planned MRT project and other mega projects else well have attracted a lot of attention especially in the city centre and others district centre. This occurs more Transit Oriented Development in City Centre and attracts more development with high density of built-up area in Kuala Lumpur City Centre. The main project in Greater KL which is Tun Razak Exchange as in the iconic 70-acre development with an estimated of RM40 billion in Gross Development Value located at the strategic location in golden triangle and inside the CCC (Jabatan Perdana Menteri, 2016). The potential development of an urban area should be properly planned in line with technological changes and global challenges to maximise its contribution to national economic growth. By using some technological method, the urban growth can be defined systematically (New Straits Times, 2017).

Unbalanced land use distribution within Kuala Lumpur areas, it should analyse the spatial organisation in term of economic for each city. New challenges that require one planning and management of the city to be more systematic (National Urbanization Plan 2 (NUP), 2016). Therefore, the analysis of location choices of the firm in intra-city location and the households is the indicator to measure the patterns of land use. This allocation also will determine the land value and the different price for the separate area. Furthermore, it caused the spread of employment and land use control from City Centre to the outward city. This also proofs by (Flyvbjerg, 2013) which the big scale of the project was called mega project also referring to the location in the city. When those project often develops in the core area or city centre. He also said that this mega project would contribute to the economic gains for the city. Besides, it gives an opportunity for job creation, better public services and environmental benefits. Linkages of transportation (Transit Oriented Development) influenced the land use activity in urban economic. The massive amount of commercial area will lead to increasing need for services than higher taxes and traffic. Town's limited stock for land for new business and finding the most appropriate space for future commercial development.

The high intensity of development causes the issue of urban sprawl, and limitation of city borders for every city in Malaysia, the sprawl of development towards suburb cannot be defined explicitly using the tools of development control. In 2014, Land use area for Kuala Lumpur was getting bigger 2584.11 area in total compared to 2001 which is only 1824.16 area (National Urbanization Plan 2 (NUP), 2016). It shows that the growth of the city is expanding due to the land use distribution. There are urban functions for example mixed land uses and multiple-use buildings (Zitti, Ferrara, Perini, Carlucci, & Salvati, 2015).

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Kuala Lumpur city density is increased which urban expansion rapidly growth toward east side of the city showing the fast and slow stage of growth (Boori, Netzband, Voženílek, & Choudhary, 2015a). The built-up area from the city centre to 50 km outward the city is decreased in 2014 because of the high intensity and floor space in the city centre (Boori, Netzband, Voženílek, & Choudhary, 2015b). The purposes of urban growth are to understand how cities grow (economics, demographics, and politics) (Farrell, 2017). The link between a city's growth rank and urban land use expansion influenced by the urban hierarchy of the cities would result to the rapid urban growth in the country (Teriman, Yigitcanlar, & Severine, 2009). It is related to the approach of the intensity of land influenced the high-density development (Yaakup, Ludin, Sulaiman, & Bajuri, 2005). Land use optimisation is the vital characteristic that generates the efficiency of land use's intensity. The superior economy thus makes urban management more efficient, while maintaining the intensity of land uses was the critical part for planning development. Economic and land use utilisation or optimisation played an essential role in the management of intensity that influenced by the density development. The land use is the critical factor to maintaining the sustainable intensity of land; besides, it is comprehensive of built up development within the city centre. The planning permission is a part of the urban management procedures, and the current system for accepting or refusal of any development in every local authority in Malaysia (Quigley, 2006). In general, the development of urban economic can be seen from the point of land use optimisation in the context of the intensity of land uses (O'Sullivan, 2003) and (Siedentop, Fina, & Krehl, 2016). City centre represents the economic activity other than just focus on location decision of the firm as a factor in decision making (Siedentop et al., 2016). The increased built-up area in the inbound area and out-side the greenbelt area gives the result to the provision of green space and the regional patterns of urban growth in urban areas (Paulsen, 2014). While there is some indicator to measure the urban sprawl by using the density, pattern and also surface that contribute to the degradation of farmland or evapotranspiration and urban heat island (Siedentop & Fina, 2010) and (Gussol et al., 2015). The changes in development patterns of redevelopment of residential area reflected the interactions between market and geographic structures (Wu, Zhang, Skitmore, Song, & Hui, 2014). Urban form and urban sprawl can be categorised from the compactness, expansion rate, and the degree of sprawl (Huang, Wei, He, & Li, 2015). Furthermore, degree of urban sprawl can be used either for single or multiple cities which typically result in the rapid sprawl of the cities that can be seen during the second decade of the developed city (Jiao, 2015). Population ageing has affected the population in land consumption (Kuala Lumpur Structure Plan 2020, 2004). The affected area is in sub-urban area due to allocation of houses by senior citizen which reflect to the reduction of land consumption.

3. Research Questions

- What are the benefit using tools of Development Control to achieve sustainable economic growth of Kuala Lumpur City Centre?
- How can the relation between Land Use Control and built up area contribute to the proper development control?
- How to analyse the tools of development control in defining the allocation of growth for each Centre?

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- How can the strategies of creating sustainable urban economic growth of Kuala Lumpur enhance the good urban governance?

4. Purpose of the Study

This study explains the analysis of intensity development for each growth centre and those growth centres need to be rank and classified it by doing the measurement for the urban economic growth to get the finding for each growth development. This research is to analyse urban growth, development control for a different hierarchy of urban centre in Kuala Lumpur. Urban growth development is related to several themes such as development control for the intensity development. The intensity development which covers the development of the built-up area, land use within cities, zoning of land use, Gross Development Value, floor space and development density where the major aspect contributes to the urban growth in the city centre. The research objective is based on comparison between 11 urban growth pattern (City Centre and 10 District Centre)

5. Research Methods

The method used in this study is procedures and technique used in the development control of urban growth in Kuala Lumpur. Information gathered in term of growth development study to overcome and improve the urban centre's growth and development. The first stage is Preliminary Study on the development of the urban centre to know the development growth that occurs in the area that has built up area in term of the relation between urban centre with surrounding district centre in Kuala Lumpur. It involves determining the study area focus on the growth centre of Kuala Lumpur Federal Territory based on secondary information collected. The second stage is Literature Review with theoretical study related to the urban growth development and element in development control. This theoretical study is done using written materials such as the Kuala Lumpur Structure Plan, Kuala Lumpur City Plan 2020, Act and policies, Planning Guidelines and Standards, and related articles.

The third stage is Data Collection which both Qualitative and Quantitative approaches used throughout this research. Primary data involves observation and mapping (Qualitative Method) in order to know the intensity development of the urban centre which is to calculate the actual plot ratio for each building, gross development value for each building, building height in term of floor level, floor space of the building, and also built up area for each lot. This observation also relates to others area around city centre to see the difference in the built-up area that KL City Hall given which one will give high plot ratio and consideration of the importance of that place. Observation or surveillance method has involved with outdoor work like study area inventory to find the issue and problem in the study area. The other method used in this study is interview using a questionnaire (Qualitative Method) with government agencies perception to get the data related to the development control. The discussion also being carried out on the professional government worker (KL City Hall staff) to know the built-up area, defining the plot ratio, site decision for development and current situation about the urban development matters in Kuala Lumpur. The interview also has been done with target groups (Qualitative Method) with the municipal council in the development aspect of Kuala Lumpur and measuring and the placement of built-up area for city area.

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Some computer software that helps in the work of processing and analysing data is like ACAD, GIS application, Microsoft Office (Word, Excel and PowerPoint) and SPSS. It also sketches the results and information obtained from the survey will be processed in the form of plans using AutoCAD and MapInfo installer. The fourth stage is Data Analysis involves the analysing of the data that has been collected to respond for the issue and scenario of urban growth development in Kuala Lumpur, and its process occurs after field study. Analysis and data processing use descriptive analysis, comparative analysis, trend analysis, concentrate analysis SWOT analysis and matrix analysis.

The findings could help in the reserves in knowing the growth of urban centre through development control. Then a comparative study conducted on actual site to determine the measurement result of the element in land use optimisation to know the level of growth for each urban centre. While land use development also gives influence to urban growth. From this interrelationship, it creates the main element that responds to the development of urban growth for each urban centre and also economically influenced the urban growth. Six elements have been analysed and identified to know the growth of each urban area base on this development control element. That element is plot ratio for each building that has its importance base on its originality of growth centre. Built up area that been analysed from the total area of building floor area influenced with the level of the building. The Gross Development Value (GDV) for development intensity that comes from the estimation for each phase of development and the cost of the development. The floor space for each building that located in the urban centre usually been measured for the total floor space in square feet. The Density of each urban centre influenced by the high number of population and the development within the city. Lastly the mix land use for each urban centre that creates the pattern of growth.

6. Findings

There are 11 selected Growth Centre with the radius of the 1km study area for each urban centre. Those chosen areas in the district centre and neighbourhood centre is based on the importance of the commercial area in Kuala Lumpur. It has been selected for comparison with another growth centre. The difference between the growth centre will be measure base on the intensity development of the selected area that contribute to the urban growth and urban economic for the city (Table 01).

Table 01. Selected growth centre

Growth Centre	Urban Centre	Categories	Significance for Selection
KL City Centre	City Centre of Kuala Lumpur	Most intensive in land use, building height and plot ratio in City Centre	Selection base on KL Structure Plan has identified the growth centre
District Centre	Damansara, Bukit Jalil, Wangsa Maju, Bandar Tun Razak, Bangsar, Datuk Keramat, Sentul Raya	Commercial area in the boundary of District Centre that permissible within City Centre	
Neighbourhood Centre	Setiawangsa, Bandar Tasek Selatan, Shamelin	Commercial areas within the residential neighbourhood	Another urban selection base on the estimate by rank

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The selection of the case study base on the existing District Centre in KL which is Damansara, Bukit Jalil, Wangsa Maju and Bandar Tun Razak. 3 other District Centre analysed which is Bangsar, Datuk Keramat and Sentul Raya. Another 3 area from Neighborhood Center which is Setiawangsa, Bandar Tasek Selatan and Shamelin. The selection is based on the KL Structure Plan 2020 which has identified the City Centre and District Centre Neighborhood Center selected by the own selection because of the criteria and the growth development that it feels like can compete to be listed or rank in high growth centre. KL City Centre is already in Tier 1 or city centre growth area so that it can be estimated to compare with other growth centres. But for the rest 10 growth centre is measured with intensity development and growth development by doing observation survey to get the rank and comparison for each place.

6.1. Analysis on Population, Density and Floor Space

From Kuala Lumpur City Plan strategic zone shows that Wangsa Maju- Maluri and Sentul-Manjalara were the highest density in Kuala Lumpur with 8,163 person/square kilometre and expected increase to 9,525 person/square kilometre by the year 2020. That resulted in 116% increase rate of 2005 in population density while Lowest density is Damansara-Penchala with 3,521 person/ square kilometre, which clearly shows that people move to the greater urban area because of the market force and job opportunity close to workplace. Those commercial floor space show the high rise development along the main road and highways in the city where located many business and offices and other uses of commercial activity. KL Structure Plan 2020 has specified the total of 41 million meter square of floor space for commercial and projected the need up to a total of 65 million meter square by the year 2020 base on KL City Plan 2020. The committed Gross Floor Area (GFA) gained till the year 2005 is 14,916,008 meter square feet and expected to increase to 41,275,508 meter square feet by the year 2020. That resulted in 277% increase which tripled the rate of 2005 in commercial floor space demand. To calculate the aspect of urban growth, the value of acreage for each lot and building lot has to be defined to get the percentage of plinth area and non-built up area for the lot. All development in the selected urban centre has to be calculated to obtain the Gross Development Value (GDV) and to know the value of land.

Table 02. Urban Growth Analysis on Selected Growth Centre (1km radius)

Growth Centre	Urban Center	Land use (1 km from centre)			Total Built Up Area (Sqft)	Average Plot Ratio	GDV (RM million)	Floor Space (Sqft)
		Area (Acre)	`Highest	Lowest				
KL City Centre	Kuala Lumpur City Centre	625.1	Commercial (35.4%)	Industry (0.03%)	1,888,711	1: 8	11,726.4	17,668,700
District Centre	Damansara	581.4	Residential (39.4%)	Industry (0.20%)	1,109,287	1: 4	4,833.0	5,966,315
	Bukit Jalil	630.6	Facility (20.0%)	Utility (0.06%)	558,177	1: 3	3,265.4	3,878,451
	Wangsa Maju	558.1	Residential (44.6%)	River (0.05%)	590,884	1: 2.5	2,936.1	5,680,272
	Bandar Tun Razak	767.6	Residential (28.9%)	Facility (0.80%)	551,419	1: 2.5	3.294.0	3,213,700
	Bangsar	576.6	Residential (48.4%)	Facility (0.10%)	1,138,221	1: 5	5,318.4	7,274,800

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	Datuk Keramat	515.3	Residential (33.1%)	Facility (0.20%)	1,100,938	1: 4	4,952.3	5,607,700
	Sentul Raya	584.5	Residential (37.9%)	Amenity (0.40%)	1,102,809	1: 4	3,741.0	5,711,625
Neighbourhood Centre	Setiawangsa	552.7	Residential (28.7%)	Facility (0.20%)	548,205	1: 2	2,965.5	3,213,700
	Bandar Tasek Selatan	584.9	Residential (32.6%)	Facility (0.80%)	564,504	1: 3	3,374.0	4,031,476
	Shamelin	587.3	Residential (41.7%)	Facility (0.60%)	559,369	1: 3	3,849.3	3,957,900
Total								**9,712,524**

Table 2 shows the urban growth analysis for selected growth centre. It includes calculation and measurement on plinth area and building level and acreage to get the total number of built-up area. The data of plinth area and level of the building has been gathered from the site observation which conducted to estimate and measure the built up for every single development. Then the total up for every development has come with the total of built-up area for every urban growth centre.

The rank of built-up area base on the function of growth centre is different in order of growth which is the first rank is city centre: Kuala Lumpur (19.5%); second until the sixth rank is district centre: Bangsar (11.7%), Damansara (11.5%), Sentul Raya (11.4%), Datuk Keramat (11.3%) and Wangsa Maju (6.1%). Seventh and eighth rank is neighbourhood centre: Bandar Tasek Selatan (5.8%) and Shamelin (5.7%), while ninth and tenth rank is district centre Bukit Jalil (5.7%) and Bandar Tun Razak (5.6%) and the lowest rank of built-up area base on growth centre is neighbourhood centre Setiawangsa (5.6%). From the rank, the result shows that non-ordering of growth centre from the total built-up area for each urban centre. It shows that from the first rank until the sixth rank follows the natural order of growth centre but there are neighbourhood centre has been increasing their built-up area to been located at the seventh and eighth of the growth centre rank. Furthermore in the ninth and tenth rank of growth centre is still in the lower built up area and their position has been replacing by Bandar Tasek Selatan and Shamelin that has more magnificent built up area compared to them (Bukit Jalil and Bandar Tun Razak). Setiawangsa is still in the lowest built up area among other urban centres.

Matrix analysis used for each variable in growth criteria in Kuala Lumpur which is in plot ratio, GDV, floor space and built up area score to determine the importance and the rank for each urban centre with the total score for the growth in Kuala Lumpur is 220. The highest growth score is Kuala Lumpur City Centre with 40 total scores represent 18.2% of Kuala Lumpur growth. Damansara with 22 total scores by 10% of overall growth, Bukit Jalil with 16 total scores represent 7.3% from overall growth, Wangsa Maju with 16 total scores represent 7.3% from overall growth, Bandar Tun Razak with 13 total growth represents 5.9% from overall growth, Bangsar with 26 total score represent 11.8% of overall growth. Furthermore, Datuk Keramat with total growth score of 22 represents 10% of overall growth, and Sentul Raya with total scores 21 represent 9.5% of overall growth's score. Setiawangsa with total growth score of 11 represents 5% of overall growth, and Bandar Tasek Selatan with a total score of 16 represent 7.2% of overall growth score. Last but not least is Shamelin with a total score of 17 represent 7.7% of overall growth. The score of every variable of growth which is plot ratio score with 61 (27.7%) from overall variable growth score.

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Gross Development Value with a total score of 47 (21.4%) from the overall variable growth score. Floor space total score and built up area total score were both represent 54 scores (24.5%) and 58 scores (26.4%).

6.2. Urban Centre Growth Finding

From the built-up area, analysis analysed that non-ordering of growth centre from the total built-up area for each urban centre. There are neighbourhood centre has increased their built-up area to been located at the seventh and eighth of the growth centre rank. Furthermore in the ninth and tenth rank of growth centre is still in the lower built up area and their position has been replacing by Bandar Tasek Selatan and Shamelin that has more magnificent built up area compared to them (Bukit Jalil and Bandar Tun Razak). Setiawangsa is still in the lowest built up area among other urban centres.

The first rank of growth centre in Kuala Lumpur is Kuala Lumpur City Centre in City Centre Growth. Rank analysis defined the second rank is Bangsar followed by Damansara and Datuk Keramat share the position of the third rank, then the fourth rank which is Sentul Raya and fifth rank is Shamelin. But from the analysis show that the sixth rank is from the neighbourhood centre, so it shows that this urban centre is higher than urban centre in the seventh rank which is Bandar Tun Razak are in the group of District Centre. So that these two urban centres have their rank on actual site. Shamelin has potential to upgrade its growth centre from neighbourhood centre to district centre, while Bandar Tun Razak can be classified as a neighbourhood centre. While the remain two urban centres in the Neighbourhood Centre which is Bandar Tasek Selatan and Setiawangsa is still be classified as Neighbourhood Centre because their position both is in sixth and eighth rank.

The growth centre that has been affected by the significance of the growth with its rank in Kuala Lumpur. The area in KL CP 2020 (Bandar Tun Razak and Shamelin) and KLSP 2020 (Bandar Tun Razak, Datuk Keramat, Bangsar, Sentul Raya and Shamelin) is categorised as the area that has been affected to be transferred by looking at the growth rank. There is an area that supposedly being classified as Neighbourhood centre commercial in KLCP 2020 which is Bandar Tun Razak. Furthermore, Shamelin classified as Neighbourhood Centre Commercial in KLCP 2020 has significance by its growth rank to be located in the District Centre Commercial group. There is the centre which is higher growth compare to Bandar Tun Razak which is Datuk Keramat, Bangsar, Sentul Raya and Shamelin were supposedly being rank in the District Centre.

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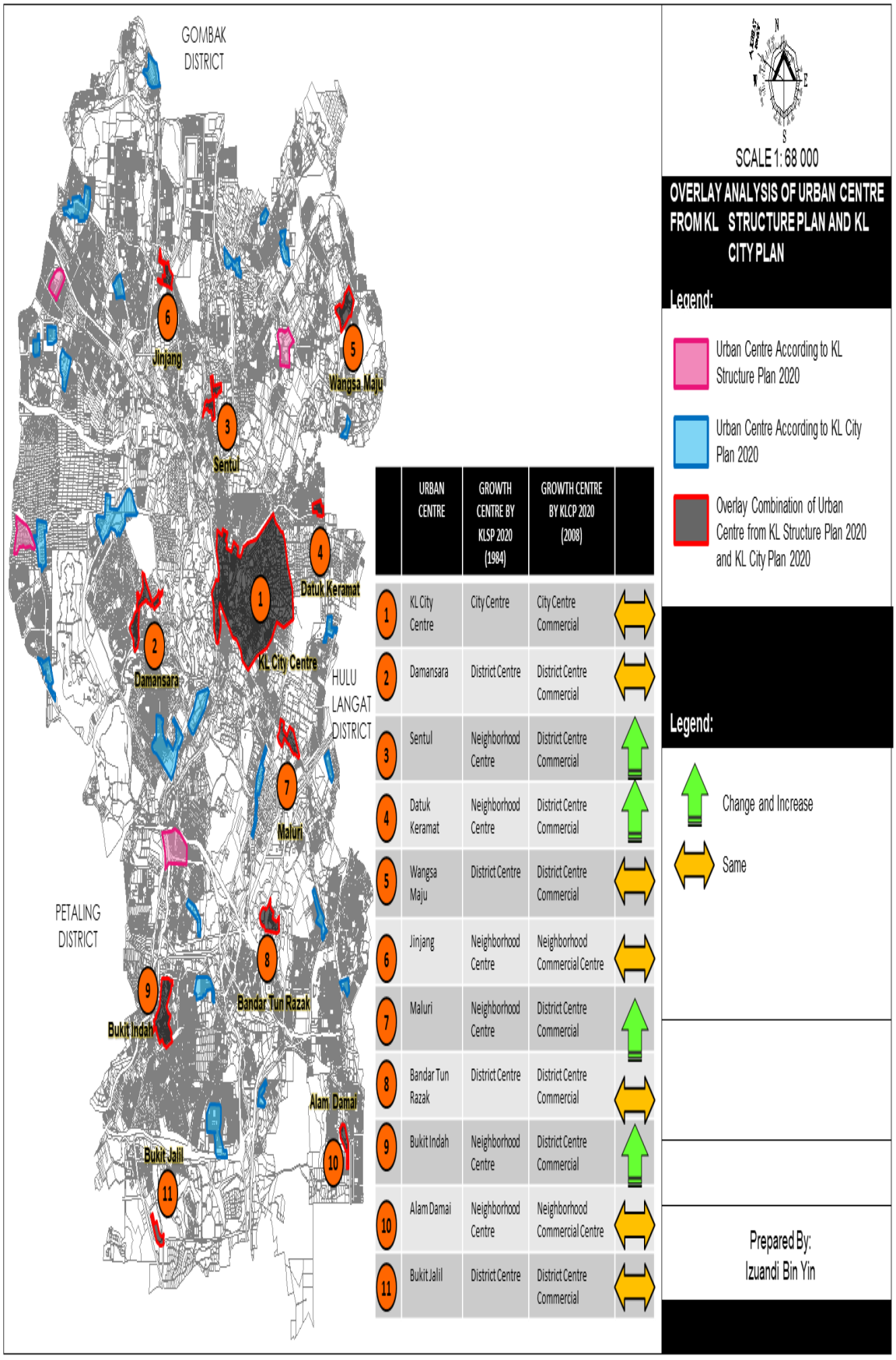

	URBAN CENTRE	GROWTH CENTRE BY KLSP 2020 (1984)	GROWTH CENTRE BY KLCP 2020 (2008)	
1	KL City Centre	City Centre	City Centre Commercial	⟺
2	Damansara	District Centre	District Centre Commercial	⟺
3	Sentul	Neighborhood Centre	District Centre Commercial	↑
4	Datuk Keramat	Neighborhood Centre	District Centre Commercial	↑
5	Wangsa Maju	District Centre	District Centre Commercial	⟺
6	Jinjang	Neighborhood Centre	Neighborhood Commercial Centre	⟺
7	Maluri	Neighborhood Centre	District Centre Commercial	↑
8	Bandar Tun Razak	District Centre	District Centre Commercial	⟺
9	Bukit Indah	Neighborhood Centre	District Centre Commercial	↑
10	Alam Damai	Neighborhood Centre	Neighborhood Commercial Centre	⟺
11	Bukit Jalil	District Centre	District Centre Commercial	⟺

Figure 01. Overlay analysis of urban centre from KL structure plan and KL city plan.

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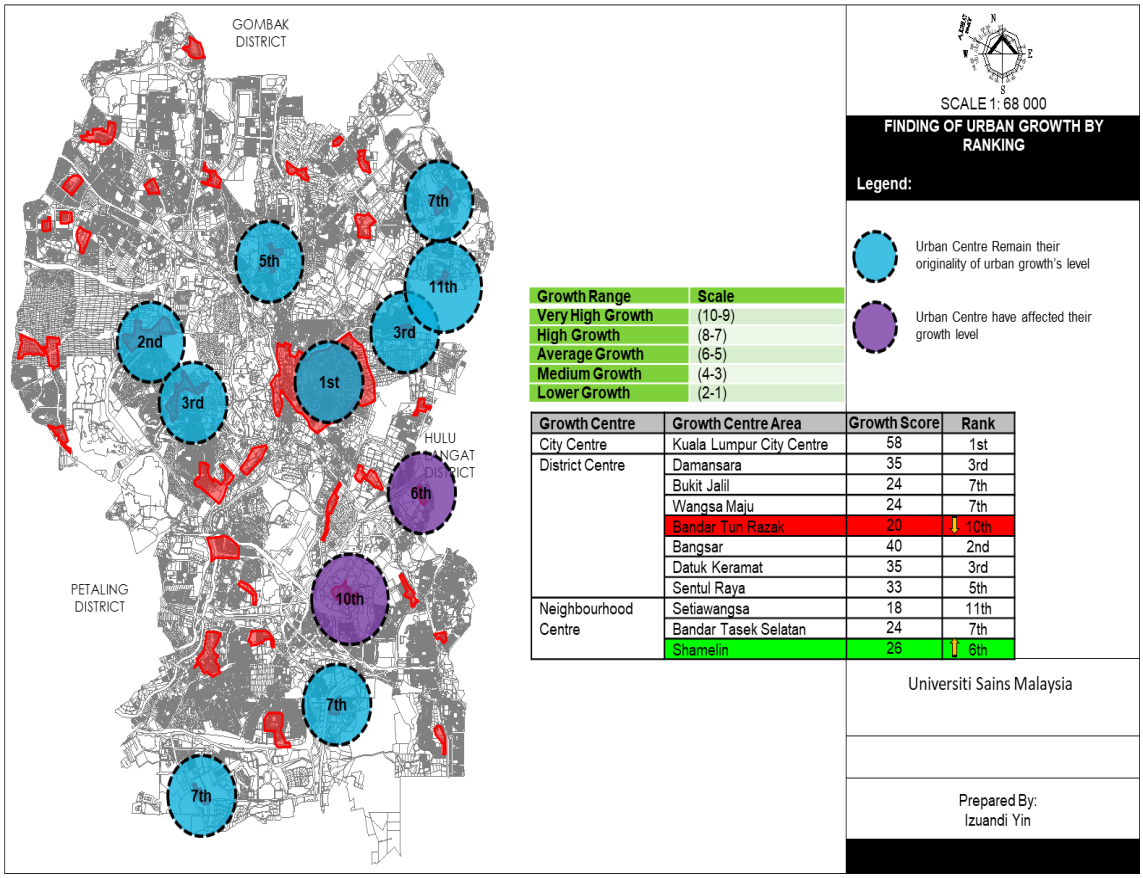

Figure 02. Finding of urban growth by rank

Figure 1 above is the result of overlay analysis for the urban centre from KLSP 2020 and urban centre from KLCP 2020. The result has identified 11 urban centres has been the overlay and show that the mismatch of growth centre that has been employed by Kuala Lumpur City Hall. This analysis also has answered a part of the main problem statement for this research. The result shows that 7 of the urban centre were remained and maintain with no changes while 4 other urban centres (Sentul, Datuk Keramat, Maluri and Bukit Indah) have increased their position of growth from Neighborhood Centre to District Centre Commercial. Next is the identification of land use for each urban centre were categories with its own use of land and building use.

7. Conclusion

From table 3 show the growth centre base on KLCP 2020 and KLSP 2020. It shows the growth centre that has been affected by the significance of the growth with its rank in Kuala Lumpur. The area that has been highlighted in the table inside figure1 and 2 both in KL CP 2020 and KLSP 2020 is categories as an area that has been affected to be transferred by looking at the growth rank. There is the area that supposedly being classified as Neighbourhood centre commercial in KLCP 2020 which is Bandar Tun Razak (highlighted in red) because ranked in the 7th centre in growth analysis of Kuala Lumpur. Furthermore, Shamelin classified as Neighbourhood Centre Commercial in KLCP 2020 (highlighted in

green) has significance by its growth rank (5th) to be located in the District Centre Commercial group. Besides, there is the centre which is more significant of growth (highlighted in green) compare to Bandar Tun Razak which is Datuk Keramat (3rd), Bangsar (2nd), Sentul Raya (4th) and Shamelin (6th) were supposedly being rank in District Centre.

From the analysis that has been done identify the growth of the Kuala Lumpur can be measured from the land use optimisation which is the estimation of plot ratio, floor space, measure the built-up area from the development and gross development value for the intensity development for each urban centre. From the finding clearly, show that there is the urban centre that has classified in KLCP and KLSP is outdated, and the results show there is neighbourhood centre area that needs to be classified in the district centre because of the growth is growing high than the area in district centre that still on the same growth.

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