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THE MANY BENEFITS OF URBAN GREEN SPACES

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ABSTRACT

Recently, the ideology of greenery city has received global attention, which aimed to address the issues of rapid urbanization, population growth, and climate change. Urban green spaces (UGS) seem like the essential asset that could help cities to mitigate the adverse effects of rapid urbanization and urban sprawl in a sustainable way. It plays a vital role in our cities as an urban lung, discharging oxygen to reduce the city's heat, the wall for harmful air pollution and offers most significant benefits in term of the environment, social and economy to a city. However, the presence of UGS as one of the critical sectors in urban planning are always neglected. Nevertheless, UGS is loved by everyone however when it turns to the need; then it is often apparent as a liability and claim as non-commodity goods in a planning development process. Hence, this paper aims to understand the many benefits of urban green space development in the contemporary of urban sustainability thought. The systematic review has been carried out through scientific online database, documentation and relevant related papers.

Keywords: Benefits UGS; Urban Planning; Sustainability

1. INTRODUCTION

UGS provides a wide range of usage and a significant effect on an urban setting. They are essential actors to make the cities calm from experiencing environmental stress, extreme noise, and traffic congestion. The enhancement of green space in urban areas is the principal approach should be taken in order to mitigate the adverse effects of rapid urbanization and urban sprawl in a sustainable way. The research on the benefit of urban green space has widely got attention by many scholars. The western scholars more concern on the quality of UGS as per definite by Miller (2005), where he has categorized the function and the quality of urban green space into three; engineering function, architecture and beautification function, environmental and climatic function. However, recently all worldwide, not only in the western nor Asia, the scholars are affected by the theory of sustainable development approach (Cilliers, 2017). Many thoughts have comprehensively expatiated on the benefits of UGS by using three classifications in sustainable development objectives; social enhancement, environmental protection, and economic growth. Unfortunately, even the sustainable agenda brings a new tangible goods to the UGS, however recently especially in a compact city; green space is often undervalued in planning development process (Waldner, 2009). The scarcity of land in the city has illustrated the green spaces as a barricade for the developments.

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Nowadays, cities are getting crammed. Human has tremendously managed and changed the natural's landscape. The unrestricted population moving into cities leads to the transformation of land use activity (Awang Besar et al., 2014). Urbanization is an extreme factor that manifests the population concentrated in urban areas and changing the land cover. In 2016, 54.5 percent of the world's population resided in cities for instances Tokyo, Delhi, and Hong Kong and there were 31 megacities globally has more than 10 million inhabitants; of which 15 of them are located in Asia and Africa (UN, 2016).

The urbanization has served an exerting pressure and shrank green space areas in most of the cities in Asia, North and South America and Africa (Abebe & Megento, 2016). This is generated by the demand for the new housings and modern infrastructure in the city (Kabisch et al., 2016). The changes of land use from natural vegetation into impervious surface were the most profound influences by urbanization phenomenon. The 'green' was extremely turn into 'black' with a hard surface, full covered with concrete and asphalt, no doubt there is no space left for the green to live in (Jiang & Tian, 2010). Therefore, this causes the changes in structure, form and the city's size that called as urban expansion existence (M.Nor et al., 2017). In his study state that, one of the factors contributing to the changes city's form is because of the feeble policy structure and lack of implementation on the urban monitoring management. An uncoordinated master plan, as well as lack of information for future strategies, has discriminated the green space planning structure.

As a developing country, Malaysia especially its capital city KL similarly experiences rapid urbanization. This phenomenon brings lots of value towards its economic development as well as improves the citizens' life (Isa et al., 2017). Unfortunately, today the new development and the injection of the population into KL were uncontrolled and ultimately altering the natural resources in the city (Elsayed, 2012). To be up-to-date, KL area has 1.7 million population and is projected to be increased to 2.2 million by 2020 (DBKL, 2013). With those consequences, the UGS in this city has been sacrificed to adequate more lands for new developments to supply more population demands. The outcome from this process has broadened the juridical boundary limits; thus expand the city hinterlands (Mohammadian et al., 2017). More megastructure was developed to meet the pressure of global economy for instances Kenanga Wholesale City and St Regis One KL that use the green space areas purposely for commercial development. According to Mohd Noor et al., (2013), two factors that contribute to the changes pattern of UGS in KL from the year 1990 to 2010 are significantly related to urban sprawl development pattern and the increment on built-up areas. The KL growth resulted in a horizontal form where the development starts spreading towards suburbs areas whichis involve more lands. This potentially will dissolve the left-over green spaces across KL boundary. On the other hands, Kanniah (2017) also reveal that one of the biggest parks in KL knowingly as Kepong Metropolitan Park has been partially cleared to allow for the affordable housing development in order to cater the continually increasing populations. This all happens because green space is always claimed as the liability and non-profit sector in the planning development.

2. METHODS

This study reviews research on the benefit offered by the green space towards cities under urbanization process. As a background, debates on urbanization issues in several developing countries including Kuala Lumpur (KL), Malaysia provide a brief account of how the phenomenon impacts urban green space developments. The next section provides a brief context and a general overview of what two significant challenges faced by many developing countries in order to preserve and maintain their green spaces. Then the literature on the many benefits of green spaces is reviewed to reflect and counter the barriers of urban green space development in a city. The final section touches on strategies to make cities under urbanization

process intelligently maximize their green space areas.

This study intention is to apply for a systematic and structured review from various field of research concerning the question of what UGS offer to a city under the urbanization process. The first task was to find the area of research by using information sources such as Scopus, Web of Sciences and ProQuest, defining the information needs in keywords and screening the words in abstract and the title. The author then broke the value and benefits of the green spaces down into three categories according to the three main elements of a sustainable approach which are a benefit through the environment, social and economy. Most of the information was accumulated from the year 2000 until 2017 from multiple areas of research for instance in urban planning, urban environmental engineering, landscape architecture, society, and space as well as sustainable development. The general output and relevant finding were identified and restructured according to this study purpose. The related government initiativesblue-print and strategies also were included to get a valuable, different meaning and practices information regarding on 'benefit' or 'value' of UGS. In addition, urban green space defined in this research is 'the element of greening area covered in urban setting form including reserved forest, undeveloped land, green corridors, recreational area, open land within the built-up areas, riverside, golf course and public amenities (institutional green areas and cemeteries) (DBKL, 2013).

3. UGS DEVELOPMENT BARRIERS

The importance of UGS was already known in decades, it can be proven by many collected reviews where most of the discoveries gave a high credit to the green space in enhancing city's ambiance, improving urban dweller's well-being and sustainably generating a positive monetary asseta sustainable ways. It is not only seen as natural hardscape with the purpose to provide recreational activity space but also other functions beyond our appraisal. Many studies claimed that the presence of UGS could help a city combat urban heat islands thus improve all elements in a city's body, for instance, its heat, improve air quality as well as promote biodiversity growth. However, how far the presence of urban green space remains sustain and makeup in the city? Even though everyone loves UGS, but when it turns to a need, it often appears as a liability and is claimed as non-commodity goods in a development process (Mohd Noor et al., 2015).

3.1. Cost for Maintenance

The cost of maintaining green spaces in a city is a challenge for the local authority (Ibrahim, 2016). According to his study, the rapid urbanization has increased the demand for more modern infrastructure and mega facilities in order to cater to the needs of the population resided in a city. The green spaces seem as crucial to provide and sustain if there is no or less revenue return to the local councils. Therefore, the allocation budget gain from the tax revenue is prioritized to be used for infrastructure developments and facilities improvement rather than use to developed or maintaining the green spaces. Furthermore, the intangible benefits offered by green space are always neglected, and sometimes the budget needs to cut-off in order to consider the space for the actual proof revenue developments (Cilliers, 2015).

A report in UK public parks published in 2014 claim that 45% of local councils are considering selling their green space because of the strain cost spent on the maintenance aspect. They find that the total cost for maintaining urban parks per year is from 0.28 to 1.34 euro per m2. It kept ongoing maintenance including the costs of replanting and removal plants, human resources as well as management fees; thus gives a trapped cost to the local council. Similar with KL, referring to Table 1, the local authority has allocated about 9 million ringgit for the year 2017 particularly for public open space maintenance as well as 21 million ringgit for high-risk plant conservation and the budget are getting higher when the plant or trees become beset by disease

(DBKL, 2017). The high maintenance cost has put some pressure on the local authority to provide excellent service and upgrading facilities in all parks. Thus, they have a plan and more focusing on allocating extra budget in open space, public park, and playground which are more frequently used by urban dwellers besides the most area which needs a continuous maintenance work.

Table 1 Allocation budget for KL green space conservation and maintenance for the year 2017

Item	Allocation Budget 2017 (RM)
Plant pesticides	50,000
Maintenance of main state parks	2,000,000
Maintenance of public parks	9,000,000
Maintenance of open space and playground	9,000,000
High-risk plant conservation	21,000,000

Ibrahim (2016) underlines that the local council also has a burden with the maintenance cost once the developers handed over the master plan projects that includes parks. Even though the planning guidelines require a certain amount of green space provision in a master plan, but with the lack of human resources on technical maintenance and limited allocation budget for green spaces has resulting in the poor greening areas. These will increase the potential for the use of green spaces into another valuable land use activity. Therefore, due to the limitation in the financial aspect, Haaland & V.D. Bosch (2015) state that the provision of green spaces in cities undergoing densification is amongst the topmost issues has been debated and discussed. He questions the poor quality greening because of the low maintenance with minimal cost expend has to lead to the abandoned space that is not used. This guaranteed to the green space transformation land into more profitable return sector, thus increase the impervious surface in a city.

3.2. Land Ownership

Land tenure could be one of the significant obstacles to urban greening in many cities (Sorensen, 1997). His study states that the land owned by any individual is complicated to control and manage, and the public is not likely to care for trees or even the vegetation planted on it because of the authorized area. However, commonly the private landowners tend to develop the area into more profitable usage rather than wish to keep it as natural resources. Besides, they face with the budgeted maintenance cost as well as sources of funding and tax payments. This is the different situation under the state land which is the areas designated to be protected and preserved, have annual allocation budget for maintenance, technical support to clean up the place and variety services to keep the areas beautiful.

The maturity in designing private urban green space in a city has limited the citizen's link with nature. The case of disappearing access of urban green space to the public because of the disaggregated in private land ownership, offer wrong perceptions towards the presence of UGS in their neighborhoods area (Derkzen et al., 2017). These reflect social change behaviors that make the urban green space moves into mono-function and nonfunctional as well as strengthen the citizens' presumption that green space was providing to only cater to high-class community demand and beneficiaries.

Mensah (2014) asserts that the land ownership has caused the massive destruction of green spaces in Kumasi, Ghana. The left-over space that owned by individuals who are related to government political ties has tremendously shifted the land into a new development. There is no control, protection and can progress without compound even though someway the spaces are in some high-risk development zone areas (nature reserves). This is because chiefs (traditional leader in the community authorities) control 60% of the green space areas in Kumasi and the local council of the city does not control it. Therefore, the conflicting regulator over green spaces land has limited the efforts by the government of Ghana in protecting their natural reserves areas because of the title of land ownership.

In KL, the green space land acquired by federal or the private land which is controlled by the local authority are obviously could transform through development order compliance particularly for the affordable housing scheme development projects (KWP, 2016). This is because the zoning plan inserted in KL City Plan 2020 (2013) is still not been approved by the federal territories which were first put on public display in 2008. The unstable land zoning activities have tremendously generated a barrier for the potential green space to be gazzeted and preserved. The scarcity of land in the city is the significant challenges in providing residential progress as well as to maintain green area reserves in KL. Thus the development has hits to enter the gazetted green space boundary. The power of the political decision and land ownership has to neglect the green space functions and benefit to the city.

In general, local authorities should be more flexible in managing the resources. All planning schemes should take into consideration the right of use into land ownership and to what extent need to be respected before planted or protected those areas. The two-way communication between the city planners and owners are needed to manage the frequent use of green space in the city. The private land ownership should grant good benefits in term of funding, technical aid or even reducing the taxes when they wish to turn their undeveloped land into public parks or as gardening areas.

4. RESULTS AND DISCUSSION

The empty green space, particularly in urban areas, is like losing our soul and humanity. The barriers on UGS growth only come with a little destruction toward the whole environment and can be modifiable by human empowerment, but disregarding its presence in a planning process, it is a forfeiture for the whole world ecosystem. The green spaces in a city are drawing by nature to serve humanity with a good quality of life. Just imagine a city without green spaces, only chockfull with concrete jungle where there is no place for recreation and human interaction hence entirely possible to live in anxiety and revoltingness. Therefore, it is essential for us to understand and appreciate urban green space presence and its contribution to the city environment, social and economic enhancement.

4.1. Environmental Benefit

4.1.1. Improve urban climate

Many scholars, especially from Asia, report that the presence of UGS can reduce heat ambient, lowering wind speed, seizing rainfall and could help cities to adopt climate change phenomenon (Isa et al., 2017; Kim et al., 2016; Liu & Shen, 2014). Urban areas covered by impervious surface and mainly artificial structures such as pavement that are covered by asphalt, concrete, bricks, and stone have a smaller thermal capacity thus absorb the high intensity of radiation energy from the sun. These lead to the increment of energy consumption and generate a different range of temperature distribution in urban areas thus causing the problem of Urban Heat Islands (UHI) phenomenon. Plenty of research has proved that the green space in urban areas can perform as natural cooling effects called as Green Space Cool Island (GCI) or Urban

Cool Island (UCI) (Buyadi et al., 2014; Du et al., 2017). The research conducted by Liu & Shen, (2014), found that the size of green space patch, shape and types was strongly significant to reduce the temperature in the district of Taipei Metropolitan area. The changes of urban green space aggregation give a significant correlation with the temperature in this city with the influence on smaller rainfall pattern data and less air pollution index.

The proportion of UGS also was revealed to be the most significant factor of heat temperature reduction in the Shah Alam district, Malaysia (Buyadi et al., 2014). In his study, the analysis shows that the location with a high density of green space contributes to the lowest temperature which is 25.8°C whereas 30.8°C respectively increase in the built-up areas. The implication of urban development by placing new parks and preserving forest areas can potentially balance the air temperature in a city.

4.1.2. Eliminate noise and reduction of air pollutants

Soft walls are acknowledged as natural barriers for noise pollution. It is not only functional as boundary shape and beautification aspect but also functioned as noise isolators (Nezar, 2010). The presence of thousand motor vehicles in urban areas per day like Beijing in China can produce a high decibel range and effects on resident's health when it is over 70-decibel (Manlun, 2003).

By allocated a UGS at appropriate location with good quality as well quantity, it can help the city to reduce the noise range by 6-decibel by 4.4meter width green belt from the source of the chaotic sound (Haq, 2011). Therefore, one of the zero-cost effective methods to eliminate noise pollution is by offering a suitable amount of green space in a hectic city. Air pollutant is the significant impact to human health, and one who lives in urban areas suffers to inhale the quality oxygen (Lee & Maheswaran, 2017). His literature study found that areas with lower exposure to green space have the highest number of stroke mortality. On the other hand, the World Health Organization (WHO), 2014 estimated around 3.7 million deaths in 2012 due to excessive exposure on outdoor air pollution from transportation, energy, waste management, and industry activities. Desikan (2017) revealed that people who are living <100m from high traffic areas had a 20% higher mortality rate rather than those who stay <400m. His study exposes the air pollution containing finer particulate matter (PM) with diameter <2.5 μm has potential deeper penetration into the lungs and causes the stroke mortality and morbidity, and these was recorded occurrence in urban center areas. Green areas conventionally not only function as magnificence elements but they can improve the air quality for a city. According to Mohd Noor et al., (2013) a tree can eliminate 26 pounds of carbon dioxide per year, and it is equal to 11,000 miles of car emission. Thus the green areas should be allocated more in urban settings to clean the air breath and should be as valuable assets to the cities.

4.1.3. Natural hydrological management

Rapid new developments content with the non-evoparatives and smooth building surfaces contribute to the increment of water volume and velocity of the run-off thus cause flooding, erosion and water quality deterioration (Mohd Yusof, 2012). M'Ikiugu et al., (2012) study carried out 121 questionnaires related to, and it was distributed among municipalities and neighborhood respondents in Tokyo. They were agreed with relative value 4.51 out of 5, that green areas are mainly functioning as disaster prevention and natural resistance in reducing the run-off via increased infiltration. The temporarily amount of waters will hold before it can release then re-use among urban residents. Besides, the study was done by Kim et al., (2016) in Seoul, Korea claimed that existent green space in gentlest sloping areas could reduce over 50% flooding volume depending on its types and location where green spaces were introduced. The valuable function serves by green space should not be overlooked especially for a city like KL

who has received heavy rainfall and flash flood. Therefore, it is essential for developing countries to preserve and manage the green areas as necessary as other land use types.

4.1.4. A 'home' for biodiversity growth

According to Myers et al., (2013) a millennium developments goals has transformed nearly all of the natural land. The functioning of the ecosystem continues to be degraded and relatively pint-sized the attention on how the changes in these natural might be harmful to human health. Myers's states that the reduction in population sizes of species because of the deforestation activity has highly exposed human with an infectious disease for instance malaria in Africa. Karuppannan et al., (2013) claimed that KL's city also encrustation with the declining on urban wildlife. Karupannan's claimed that the quality, scale and ecological design of UGS plays an important role to conserve and protect species. The larger size of green space will be promoting various in biodiversity (i.e., preserving diversity; more types of species and landscape types surrounding the areas) and contributing to preserving green space rather than small patches (M.Nor et al., 2017). However, regardless of the scale of the green spaces in KL's city has been resized due to the demand for new development.

According to the National Policy on Biological and Diversity 2016 - 2025, people who are living in urban areas should help to maintain the biodiversity and environmental quality by close contact with nature. The urban, regional planning should address the needs to protect urban green space for desirable species habitats and encourage the community to enhance the biodiversity in their land by providing training, adequate tools, and funds.

4.2 Social Enhancement And Psychological Benefits

4.2.1 A place for human interaction and integration

The concept of inclusiveness in planning doctrine has strongly reflected in the spatial arrangement within the areas that should promote society value and interest in the planning process of UGS (Van Herzele & Wiedemann, 2003). According to Mansor & Said (2008), residents in Taiping, Malaysia use the green spaces as a place for them to meet and empowering the bonding between the community for instance by having community sport's day. These physical experiences associated with the interaction will create a new integration amongst the green space's user. Roberts (2017) use the Twitter data to understand the use of UGS location with the human interactions. In his study, most of the visitor in Cannon Hill Park and Sparkhill Park, England will use the twitter as a medium to attract peoples to join various of activity for instances music festival, foods festival, and summer fetes. These generate integration especially for young people from a range of different background and culture to greet. The zero-cost of marketing and promoting providing by twitter significantly can increase the use of UGS as well as empowered human interactions.

An interesting finding of a recent Hong Kong and Singapore study suggested that spatial arrangement of the UGS can influence the human interactions. The place with more shading facilities and various types of landscape will encourage people's intention and comfortable for them to stay longer and do social networking. The previous study by Marzukhi et al., (2012) agreed that the scale of the green space should meet the population needs in term of types and density of the neighborhood areas. The green spaces location also are essential to well-planned in order to optimize the positive effects of community social interactions and enjoyment.

4.2.2. Outdoor Fitness and Health Improvement

UGS can act as natural fitness place. The wide range of areas offering multiple physical activities for city's dweller to do their exercise. According to Lee & Maheswaran (2017), green spaces with good accessibility and localize near to neighbor areas tend to be used frequently by residents. They are more consistently to do an exercise accompanied by their relatives and

friends when the level of barriers to reach the green spaces is low. This aspect will influence the use of green spaces and therefore effects the enhancement of social networking activity. Mansor & Harun (2014) states that the availability of the green spaces near home will increase people's spirit to continue doing an exercise and retain their good health. Various type of green spaces provided in the proximity of the neighborhood areas such as the park, playing fields, jogging trail and tree-link streets, stimulate resident's feeling thus can enjoy their outdoor fitness track. Stigsdotter (2014) noticed that people who access or frequently visit even at the small garden would have fewer stress occasion.

There is a significant relationship between the time spent in green areas with a health condition. The study also found that peoples in the workplace that experiencing or having access to an outdoor environment are less anger and depress thus showing a good quality of work. According to Karuppannan et al., (2013), respondents in KL urban parks expressed that urban green space in a hectic city can give some space for them to clean breath air, a place to reduce stress after the traffic congestion and relaxed their mind by seeing its magnificent natural scenery.

4.3. Economic Benefits Thru Green Space Beautification And Safety

4.3.1. A valuable asset to economy improvement

Chiesura (2004) believes the presence of green spaces in a city is benefits not only for the individuals who are living surround it but the municipalities that manage, control and plan for the green spaces also will get an equal profit. Mohd Noor et al., (2015) claimed that the property located 400m radius from the green space areas has a higher price between 3-12 percent. The study using hedonic valuation modeling to measure the property value in Subang Jaya, Selangor and they found that the proximity to green space influencing the land value range. In Canada, the Department of Environment, Land, Water, and Planning, 2004 identified and quantified a range of benefits of green spaces into economic business care. Its claimed that property within 200 meters located from green areas had achieved a 4.4 percent increment in its price. The retail value also increases due to the tree canopy. It is fascinating to know that, people in the Victoria district, Canada is willing to pay 9 to 12 percent more for goods when the retail activity is placed under a high-quality tree canopy. It is because they tend to stay longer and feel comfortable; thus they pay for both the goods and ambients.

A fascinating study by Santos et al., (2016) claimed to show that green spaces as known can be functioning as natural disaster prevention has benefits to residents in Philadelphia, PA, USA. This is because the local governments are offering a various form of fund and sponsorship to those who can manage and maintain their green spaces area. The residents can apply to reduced stormwater taxes and get financial incentives for them to preserve the ‘valuable assets'. The United States Environmental Protection Agency (EPA), 2014 also states that trees can help residents to reduce their utility bills for air conditioning by 15-50 percent; indeed the green spaces can act as a natural cooling device for human comfort.

A lesson from KL and Singapore, Haq (2011) claimed that the main factors attracted foreign investments in these cities is because of the distribution of green spaces across the city boundary. They believe that the financial and property value will increase between 5 to 15 percent when developed new projects proximity to the green spaces area. According to Crompton (2011), the park with passive activities and offered beautiful scenery, well maintained and less deafening could increase 20% on housing price. However, the new housing developments near to the heavily used park with active recreational facilities, for instance, athletic fields and swimming pool may reach 10% lower on its price. Besides, in China, the variance range of housing price for flats is determined by the locality of accessible green space

as well as providing a beautiful view of water bodies and greenery to the residents (Jim & Chen, 2006). Homes near to green amenities are more exclusive in pricing and more desirable.

4.3.2. Beautification and attractive

In the Urban Design Guidelines KL City Centre (UDGKL, 2014), all the developments within the city center of KL should comply with these guidelines in term of the landscape planning procedure. It is essential to stimulate a significant urban design and movement architecture that blending considerably with nature. This is because the KLCH believes, the greenery aesthetic will promote a high quality of city character and improve wayfinding as well orientation in a city. Azzah (2014) remark that to pushed Malaysia to achieved its vision to become "The Most Beautiful Garden Nation" by the year 2020, the quality of the natural environment through well-planned landscaping and green areas should give special attention. The effective plan to meet the vision by enhancing the city image with natural greenery appearance should be proactive and creative. This will significantly attract more tourist because of the magnificent scenery offered by KL's city.

The Social Program and Sustainable Development Department in Washington, D.C in 1996 has outlined the approach for good practice in urban greening. They state that green areas can be significant and improve the aesthetic in the city thus increase the sense of civic pride. They trust green areas can tone down the city hardscape and balancing the harshness of the concrete color. A lesson from Tehran study conducted by Valipoor & Dehkordi (2016) found that most of the citizen are strongly response that the presence of UGS make their city looks more beautiful and attractive. They support the authorities to enlarge the role of green spaces by expanding the aesthetic significance more than has been supplied at the moment. This shows human naturally love the beauty, and green space is one of the factors making human life more happiness and liveliness.

4.3.3. Green spaces as safety tools

In a study by Kuo & Sullivian (2001), greenery is capable of reducing crime through several approaches and tactics. This study suggests that the more greenery in the buildings, the fewer number of crime occurred. It is because peoples will tend to do their activity together outdoor and make the place more lively thus discourage criminals. This study as well found that apartment buildings surrounded by green areas had 48 percent crime cases lower rather than other areas. Similar concern by Locke et al., (2017) mention that community greening could help to reduce crime in New Haven, Connecticut. The community participants and effort to enlarge the street tree planting in the public right of way, beautification on vacant land and remediation in private yard generate the low potential for crime to occur in their neighborhood. However, more scholars claimed that the dense vegetation or green spaces might host for criminal activity (Fisher & Nasar, 1992; Michael et al., 2001). This is because the criminals tend to use the green spaces block as a place for them to hide then ‘break the window’.

The theory of "broken window" defined by Wilson & Kelling, 1982 states that the visible place provides by bushes and trees can be as a suitable medium for criminals to keep out of signal is low. Therefore proper planning, design, and location of the green spaces are essential factors that need to be considered in order to create a comprehensive approach to reduce crime through environmental design. Green spaces not only can reduce the crime but it is also can reduce or slow the traffic movement.

According to Montague, Canada Precinct Structure Plan (2004), the provisional of high-density vegetation with linear public park beside the roads will significantly reduce the traffic speeds thus increase citizen's safety. They call the Buckhurst street as a ‘Green Spine' where the green space is dominated the area while the traffic should respect the people's well-being. Similarly, KL City Plan 2020 (KLCP 2020, 2013) concerns on pedestrian and motorcyclist safety,

especially along the local roads. The new developments should provide appropriate landscapes that can act as safety barriers and give a sense of traffic calming alert. A widen road should be sufficient to allow for a landscape design rather than for driveways.

5. CONCLUSION

The development of green space should be a prime agenda and goal for all local authorities as well as government administrative. The green space must stand in line with the other land use sector to compete in a city development process. It should be seen as a commodity goods and profitable to the city growth. Apart from the benefit offered by green spaces towards the whole planning system in term of the social and economy, it also could help the world to sustain its environment for the next generation's life. Green space is not only could increase our health improvement by improving air condition, eliminate noise pollutant but also can be a device to stabilize our city's ambiance. It could be as a generator to reduce heat in a city, slow down the run-off and provide a home for our biodiversity.

In order to make the green space more valuable and functional, the allocation needs to be more specific according to the community needs, a form of space and the neighborhood characteristics. The guidelines and policy need to be formulated and involve multiple levels of community background during the preparation and development. For instance, the disaggregation of open space provisional between public and private area should be dismissed. The functionalities, services, linkages, and facilities are designed similar and parallel but then respect the individual rights. Moreover, the private land should get more incentives in term of taxes fees and grant funding, for them to maintain the areas thus could share the benefits to all. Therefore, it will create a more heterogeneous space rather than monotonous green spaces. People will feel more inclusive, being together and comfortable to interact with any level of individuals. For a city experiencing urbanization, green space is not always the best solution to make the city green enough because of the competition to have land. However, it is not a reason to eliminate its presence in a city. Making new parks can be expensive especially in the city center. Reducing the cost of the maintenance as well as taxes, planners should think more creatively, for example, converting the grey spaces into green areas. The grey space can turn into green space by enhancing its structure and function. Grey space define as impervious surfaces such as roads, building, parking lots and each concrete structure presence in a cityscape (Pill Kim, 2009). Even though the grey spaces could be massive to the city environment, managing the functions by allocating some spaces for greenery purposes can be more beneficial rather than building up a single land for a new park. According to Depietry & McPhearson (2017), grey infrastructure could be more suitable to increase the green spaces in a city, tend to require limited amounts of land, replicable and to some extent could be more comfortable to monitored and controlled.

In New York City, for example, the old railways have converted into a linear public park that consists of green zones and cultural venue. On September 20, 2012, the New York City Planning Commission approved the changing of land use zoning text for this High Rail Line into a public park.

The cooperation between the local councils, park's board landscape, and the community had raised the annual budget for maintenance, facilities, and beautification to 98% in 2015 (NYC EDC, 2016). This study has drawn a challenge for urban planners together with an urban landscape designer to provide a stronger urban fabric. The green space can be developed in some part in a city according to the community's cultural and context of its spatial design. Human right and power could modify the obstacles of the green space development but to neglecting its benefit is a loss for whole life system. This kind of constraint is minor

destruction, by adjusting, encouraging innovation and making ‘space' as a togetherness can positively affect the cultural, human behavior and improve our space into the greenery.

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