Analysis of Planning Guidelines on the Integration of Muslim Cemetery and Recreational Areas

[1]Putri Haryati Ibrahim, [2]*Mohamad Reza Mohamed Afla , [3]Azila Ahmad Sarkawi

ABSTRACT --Recent studies suggested cemetery to be a dual function to accommodate the needs of open spaces that are gradually diminishing. In Malaysia, the Planning Guidelines for Muslim and Non-Muslim Cemetery need to be referred in developing a burial site because a cemetery is an important social infrastructure in the same way to a recreational park. The focus of this research is to analyze the identification of cemetery as an alternative space for social activities that are compatible with the sanctity of Muslim cemetery. This study attempts to reveal how Muslim cemeteries that are often considered as a dead space can be integrated as part of the city's recreational park without marginalizing the spiritual values of the space. The methodology employed comprises of (i) comparative analysis on the contents of the cemetery and recreational planning guidelines, and (ii) site observation of the selected case studies as a mean of data collection. The finding exhibits summative points extracted from both the planning guidelines and the physical elements observed that could transform and revolutionized Muslim cemeteries beyond its norm. This article concludes by providing some recommendations that will help to align the planning and design practice of Muslim cemeteries for future development.

*Keywords-- **Muslim** Cemetery; Open Space; Recreation; Spiritual; Social Aspects*

I.   INTRODUCTION

The issue of land shortages especially in urban areas is not a new thing. This happens as the outcome of rapid and continuous development. The intensity of development that occurs in the city has led to the sacrifice of more green areas. In each development that is to be undertaken in Malaysia, the developer is subject to certain conditions; to provide facilities for users/buyers such as open spaces for recreation, reservoirs and water catchment areas and provision of cemeteries in certain cases. The demand for housing and commercial areas causing developers to develop existing land in urban areas to meet this demand. As a result, urban areas are experiencing serious land shortages for other types of land uses that also equally important besides residential and commercial uses such as burial grounds and open spaces for recreational activities. Open spaces that are intended for greenery, parks and recreational areas for urban dwellers need to be provided and protected. This is because, study shows that urban community regards open spaces as important (Mansor et al. 2012). Other than to accommodate the needs of urban

---

[1] *Assistant Professor, Department of Landscape Architecture, Kulliyyah of Architecture and Environmental Design, International Islamic University Malaysia*

[2]**Senior Lecturer, Cluster of Urban and Regional Planning, School of Housing, Building and Planning, Universiti Sains Malaysia, rezafla@usm.my.*

[3] *Associate Professor, Department of Urban and Regional Planning, Kulliyyah of Architecture and Environmental Design, International Islamic University Malaysia*

---

dwellers for modern settlements, local authorities are responsible in allocating areas for cemeteries or burial grounds.

It is time for the Malaysian public to rethink its position on to the conventional use of cemeteries in helping to alleviate this alarming situation by taking consideration on the SDG 11. The SDG11 is emphasizing on the idea of seamless integration between urban dwelling and its inhabitants. This vision will also demand some radical approach in changing the norm of Malaysian urban fabric. One of the strategies to achieve this goal is to make green and public spaces within reach of users regardless of their background by 2030. This has been outlined under Target 11.7 by the UN Sustainable Development Solutions Network (SDSN, 2019). The SDSN has also come up with a proposed indicator to ensure this target will be met by setting up for equal distribution of area between metropolis and public space (SDSN, 2019).

The study investigated the possibility of integrating cemetery and recreational areas into one functional space that can benefit urban dwellers since land scarcity is experienced in many cities around the world. Thus, the study is looking at factors and conditions that could help to reinforce the social function and recreational values of Muslim cemeteries. The aim of this paper is to analyze existing planning guidelines on the integration of Muslim cemetery and recreational areas. In order to achieve the aim three objectives were outlined:

[1] to examine both the existing guidelines for cemetery and recreation in Malaysia

[2] to identify recreational activities that are compatible with the sanctity of Muslim cemetery

[3] to identify the physical design elements that link to the social aspects within Muslim cemetery

II.   LITERATURE REVIEW

2.1   *Recreational as Part of Open Space in Malaysia*

The meanings of open space vary in term of physical nature of open space, functional aspects and activities conducted. Section 2(1) under the *Town and Country Planning Act 1976* (Act 172) define open space as *"any land whether enclosed or not which is laid out or reserved for lying out wholly or partly as a public garden, park, sports and recreation ground, pleasure ground, walk or as a public place"*. The interpretation of open spaces according to the *Town and Country Planning Act 1976* (Act 172) clearly showed that open space is a public space and it is a place for people to conduct recreational activities. Moreover, the Planning Standards and Guidelines for Open Space and Recreation (2000) also use the same definition of open spaces enacted under section 2(1) of the *Town and Country Planning Act 1976* (Act 172) with an addition – there should not be any fee or charge for the public to use an open space.

There are various categories of open spaces with different sizes and functions. Kenyon Henderson and Song (2008) indicated that ownership, type, function, location and land use differentiate the dissimilarity of open spaces. Serenity and harmony among communities can be achieved through a sufficient amount of open spaces for urban residents to correspond and interact (Md Dali, 2003, 1998). The author also pointed out that, one of the objectives of urban development in Malaysia is to achieve the target of providing 25% to 30% open spaces for the use of urban dwellers (Md Dali,1998). Therefore, since 10% of open space provision comes from the proposed development, the author highlighted that the remaining 15% to 20% is under the responsibility of the government and local authorities to make open spaces available for public use. This showed that the responsibilities of

providing open spaces are not burdened on the shoulders of the developers alone but also the government. In order to provide more open spaces for the Malaysian public, the study believes that, there is a need to shift the paradigm and move forward towards research that examines on how to further extend the usage of Muslim cemeteries and how can it be planned and integrated into a park-like design that focuses on a spiritually oriented recreation.

2.2 Can Cemeteries Function as Recreational Areas?

A recent study shows that the increase in population led to a high-density area experiencing a shortage of space to be used as a cemetery (Klaufus, 2014). Due to a shortage of open spaces experienced by many cities around the world, the study believes that cemeteries can provide an alternative as a recreational area for urban dwellers. In order to make cemeteries function as an alternative to the recreational areas in the city, the authority needs to ensure the area is accessible to the public. At present, the public is not allowed to conduct activities in Muslim cemeteries in Malaysia except for burial and visiting purposes.

In Taiwan, the government has taken initiative to transform public cemeteries into a recreational area (Huang, 2007, Henderson, 2012). Previous researches suggested that, in dense urban areas, cemeteries can be a place for urban dwellers to be close to nature and conduct recreational activities (Coutts et al., 2011, Basmajian and Coutts, 2010, Huang, 2007, Barrett and Barrett, 2001). Cemeteries have potentials to be considered as part of urban open spaces as well as restoring and enriching the natural habitats in urban areas. The areas have been identified as areas with "potentially high levels of biotic diversity," as well as provide habitats for wildlife, especially in urban areas (Kowarik et al., 2016, Clayden et al., 2017, Tryjanowski et al., 2017).

In addition, it can also help to increase the ecological sensitivity among community and social acceptance of death as a natural process. A study by Kalufus (2018) highlighted cemeteries in Medellı´n that has the concept of an open-air museum aiming to preserve, conserve, and educate visitors about the city's history and cultural meanings of death and burial. In Singapore, other than a burial space, the cemetery has become a place for learning and tourist attraction while the Bukit Brown Chinese Cemetery in Singapore is well known to be an open-air museum and park. The area was chosen by the National Heritage Board (NHB) and Singapore Heritage Society for their outreach program to foster 'nationhood, identity, creativity through heritage and cultural development' (Handerson, 2012). However, it should be noted that the recreational use of cemeteries as open space for public parks should not supersede its primary role which is, a place to bury the dead.

2.3 Common Issues Related to Cemetery Planning

Cemetery is a social necessity and becomes one of the municipal lands uses. As described by Bennett and Davies (2015), cemetery is an important element of social infrastructure, a sacred and everlasting fixture in the landscape. As a part of land use, cemeteries are more than a place to bury the dead as they provide a public service, contribute to open spaces and provide a place for expressing sorrow, connection with religious views and marking of social status for the descendants. However, rapid development especially in the city causing the provision of cemetery space is becoming complicated. This is compounded by the existence of problems such as the high value of land in the city, location of the cemetery and beliefs and customs of people of all races. Small and compact countries like Singapore, Hong Kong and Japan are experiencing a land shortage. On average, every inch of land that stretches in the country is considered valuable and used as best as possible.

The identity of burial ground or cemetery is still viewed as negative and often moulded in the mind of the local community. Cemetery is seen as a scary area, which ultimately makes it mundane, desolate, and uninhabited (Coutts et al., 2011). As a result, some cemeteries were left without properly maintained (Basmajian & Coutt, 2010). Many cultures all over the world, regard cemetery as a place of spiritual and cultural reference. In Malaysia, some people still believe in superstitions that associate cemeteries with supernatural activities, resulting the area is rarely visited except on certain major celebration like *Eidul-Fitr* (Mohamed Afla, 2012). This is because most of the cemeteries in Malaysia are not well maintained and have not been fully optimized especially for the potential to benefit others. The study believes that this problem arises from public perceptions and the environment of the cemetery itself. Most visitors will only stay for a while and left quickly as they feel uncomfortable and sadden by the loss of their loved ones. It is a missed opportunity of land use since most of the time, space is left abandoned and only visited on special occasions. Thus, cemetery should not only function as a resting place for the death but also as a space for leisure activities as part of its alternative use. It has the potential to integrate and enrich the cultural landscape of a place (Davies and Bennett, 2016, Henderson, 2012). Other than that, land use activities for the purpose of burial should be made multi-function (Klaufus, 2016).

2.4   *Expanding the Social Aspect of Muslim Cemetery*

Muslims play their role as part of a community burial by taking part in visiting the bereaved family as well as managing the deceased. A funeral ceremony is still very much organized by local communities, particularly members of the deceased's *kariah* and this is expected to continue for many years to come. This is because Muslim funeral ceremony requires the accomplishment of certain tasks from *kariah* members to carry out the interment at the grave according to religious practice. The *talqin* recitation which took place after the burial is usually led by Imam and joined by the *kariahs* members signified a collective effort.

However, the role of *kariah* in Islamic society has to shift beyond the provision of funeral ceremonies. This social aspect associated with Muslim cemeteries could be expanded to non-related burial activities to benefits the *kariah* members. In a manner similar to urban parks, cemeteries should be more open, even contributing to the sense of belonging shared by members of a given community. At the moment, the link between Muslim communities with their burial spaces is barely realized in Malaysia. The sense of attachment between cemetery and *kariah* should be promoted by allowing the kariah members to indulge themselves in light recreational activities. Undoubtedly Malaysians will find it awkward to spend time by the graves, even though it is nothing extraordinary among their counterparts in Jakarta. As a matter of fact, the social aspect of the cemetery is not something uncommon in this populated metropolis. In the case of Jakarta, general cemeteries like Karek Bivak has become a public realm by providing access into its green open space to immediate surrounding communities (Hunt, 2019). Therefore, there is a need for local authorities in Malaysia to consider on this correlation.

2.5   *Public Amenities as the Magnet for Social Aspects of Muslim Cemetery*

In his study, Bougas has observed that the man-made structures are a common feature in every Muslim cemetery in the region of Patani (1988). There are two types found in Muslim cemeteries: ritual related Balai Hantu and also the ordinary gazebo known as Rumah Wakaf. These pavilions can be looked at as the basic amenities in

a similar way as landscape elements inside Muslim cemeteries today. Bougas has not described the use of Balai Hantu other than to note its link to the animistic belief of local people prior to the arrival of Islam in Patani. Balai Hantu literally means 'Ghost Hall' in Malay language and now it is the only remnant that is left of this animistic ritual. Even though the popularity of animistic practices has long been forgotten, nevertheless its presence can still be traced in many aspects of Malay traditional practices. Balai Hantu used to be the main element to Malay cemeteries but it is no longer relevant in the modern-day. Furthermore, such practice is forbidden from taking place in today's cemeteries.

The other type found in Muslim cemeteries in Patani, known as Rumah Wakaf, has no relation to any ritual other than to function in the same way as a common gazebo found in Muslim cemeteries. According to Bougas, in Patani, pious people normally donate these pavilions so that they can be used for the common good. This can be distinguished through its name which literally means 'Charitable House'. Contrary to Balai Hantu, Rumah Wakaf has a positive notion to its name and function. Visitors normally used Rumah Wakaf as a resting spot while spending time at the gravesite (Bougas, 1988). Therefore, the social aspect of Muslim cemeteries is found to be associated with more than just a burial community *(kariah),* but also through its landscape elements. In other places outside Malaysia, it is common nowadays for cemeteries to have building facilities that focus on the unity, multi-religious and wider aspects of social communities. This example can be found in a large-scale cemetery such as San Diego Hills Memorial Park (SDHMP) in Jakarta. Apart from providing recreational opportunities, the place also provides hotel, restaurants, convenience shop, and event venues for birthday celebration and weddings (Salmon, 2016). SDHMP has shown that the cemetery areas can be potentially turned into something more than just dead spaces.

III.   METHODOLOGY

The methodology employed in this study is based on qualitative methods which comprise of comparative analysis. It can be divided into (2) two parts as followed:

1. Examine the planning guidelines of present guidelines related to recreation and cemetery planning in Malaysia.

2. Site observation on the connection between social aspects and recreational use at Muslim cemeteries.

3.1   *Content Analysis*

The study has identified four (4) existing guidelines related to cemetery and recreational planning in Malaysia namely; Planning Guidelines for Muslim and Non-Muslim Cemetery (1997), National Landscape Guidelines (2008), Muslim Cemetery Management Guidelines from the Federal Territory Islamic Affairs Department (JAWI) and Planning Standards and Guidelines for Open Space and Recreation (2000). The analysis conducted was focusing on the aspects of space planning, facilities, landscape elements and activities that can be conducted at the cemetery and recreational areas in Malaysia.

3.2   *Case Studies Analysis*

Three (3) existing case studies have been selected namely Section 9 Kota Damansara Muslim Cemetery (S9KDMC), Kuala Lumpur-Karak Muslim Cemetery (KLKMC) and Taman Selatan Muslim Cemetery (TSMC).

Site observation was conducted in early 2019 based on the checklist consisting of two main components of social aspect at Muslim cemeteries which are spatial planning and facilities. Each component can be divided into two categories between indoor and outdoor as shown in Table 1.

Table 1: Social aspect components of Muslim cemeteries

Space	A. Spatial planning	B. Facilities
Indoor	- Administrative area	- Administrative building/office
	- Waiting/gathering area	- Prayer rooms
		- Multipurpose hall/room
Outdoor	- Parking area	- Walkaways
	- Landscape area	- Gazebos
		- Benches

IV.   RESULTS AND FINDINGS

The study started with the process of collecting published documents of guidelines commonly used for cemetery and recreational planning in Malaysia. Based on detail content analysis conducted, the study extracted contents related to space planning, facilities and landscape elements that is essential and important to initiate the concept of hybrid cemeteries with a dual function (a burial ground and a recreational area). Table 2 illustrates contents extracted from the four (4) guidelines related to recreational areas and cemetery planning in Malaysia.

Table 2: Contents related to recreational areas and cemetery
planning in Malaysia

		Planning Guidelines			
		Planning Guidelines for Muslim and Non-Muslim Cemetery (1997)	National Landscape Guidelines (2008)	Muslim Cemetery Management Guidelines from Federal Territory Islamic Affairs Department	Planning Standards and Guidelines for Open Space and Recreation
CONTENTS	**A. SPATIAL PLANNING**				
	1. Burial Ground/Burial Lot	▪	▪	▪	
	2. Administrative Area	▪		▪	
	3. Waiting/Gathering Area	▪	▪		▪
	4. Parking Area	▪	▪		▪

5. Landscape Area	▪		▪	▪
6. Buffer Zone	▪	▪		▪
B. FACILITIES				
1. Administrative Building/Office	▪	▪		
2. Toilet	▪		▪	▪
3. Praying Room (*Surau*)			▪	
4. Walkways	▪	▪	▪	▪
5. Gazebo		▪	▪	▪
6. Bench		▪	▪	▪
7. Regulation Signages	▪		▪	▪
8. Rest Room	▪			▪
C. LANDSCAPE ELEMENTS				
1. Flowering Trees/Shrubs		▪		▪
2. Fragrant Trees/Shrubs		▪		▪
3. Shaded Trees		▪		▪
4. Rooted Trees		▪		▪
5. Fruit Trees			▪	▪
6. Non-Fruit Trees		▪		▪
7. Non-Poisonous Species		▪		▪
8. Non-Invasive Root Species		▪		▪
9. Low Maintenance		▪	▪	▪
10. Dense Species		▪		▪
11. Close Planting		▪		

4.1 Planning Guidelines for Muslim and Non-Muslim Cemetery (1997

This guideline was gazetted in 1997 and has been used by all State Authorities, Local Authorities and the private sector for guidance in planning a burial ground in Peninsular Malaysia. Existing policies stated, burial grounds should be located far from the administration, commercial area, or the city center. Further, the study found that the location of cemetery areas, distribution of the population by race is an important factor in determining the cemetery layout. It should be noted that the planning of a cemetery should not be purely based on the ethnic settlements but also to consider the land use interests of the whole city. Perhaps, a dual-function cemetery that serves both as a burial ground and a recreational spot can help to minimize the problematic urban areas with a dense population and high concentration of land use. Facilities and landscape reserve are also included in the spatial planning of the overall cemetery layout. However, design and plant selections must comply with the National Landscape Guidelines (2008).

4.2   *National Landscape Guidelines (2008)*

The guidelines were developed to achieve balanced, uniform, and quality landscape development in Malaysia. The guidelines were set to guide implementing agencies in Malaysia including the Federal, State, Local Authorities, and the private sectors (consultants, developers and contractors) as well as individuals in implementing the government's vision to beautify the country towards 'beautiful garden nation' vision by the year 2020. The guidelines consist of seven sections related to landscape development and landscape works. Section 3.12 of the document stipulate the guidelines related to landscape for cemetery areas. The study found that, the design of the cemetery landscape outlined is based on the type of burial ground and beliefs held, in addition to the status of land use in the surrounding area. Detail selections of plant species are provided in the guidelines and suitable for all types of burial grounds to improve visual quality (refer Table 2). However, the study found that the requirements of the guidelines are most effective if they are applied to newly planned cemeteries.

4.3   *Muslim Cemetery Management Guidelines from the Federal Territory Islamic Affairs Department*

The study selected guidelines established by Federal Territory Islamic Affairs Department (JAWI) to explore the aspects of development, management and beautification of Muslim cemeteries in Kuala Lumpur from the "*e-pusara JAWI*" (e–grave) system. The system was introduced to facilitate users in identifying their beloved graves during the visit, as well as providing an overview of the overall Muslim cemetery management in Kuala Lumpur. The study found that the guidelines outline specific infrastructures provided at the Bukit Kiara and KL-Karak Muslim Cemetery (also known as Raudhatul Sakinah Cemetery) to accommodate visitors' convenience. However, the guidelines do not provide suggestions on the types of landscape elements suitable for a cemetery setting. The only information the study gathered about plant selections is from the National Fatwa Committee on the planting of fruit trees within the cemeteries area. On contrary with the National Landscape Guidelines (2008), the 7th National Fatwa Committee on Islamic Religious Affairs Malaysia Meeting held on April 11-12, 1984 discussed the issue of 'Planting of Fruit Trees in Cemeteries'. The *Muzakarah* (discussion among religious authority or *Mufti*) has decided that planting of fruit tree on the land dedicated to the graveyard is a must and the fruits obtained from it is considered lawful if they are meant for public consumption.

4.4   *Planning Standards and Guidelines for Open Space and Recreation*

The establishment of these guidelines is to assist planners, developers, and the general public to better understand the main issue of open spaces in term of allocation, definition, size, usage as well as the design requirements to be fulfilled. The objective of the 'Planning Standards and Guidelines for Open Space and Recreation' (2000) is to assist the State Government as well as the Local Government in achieving the government vision of "Garden Nation" which was as envisaged by the honourable Prime Minister, Tun Dr Mahathir bin Mohamad. The guidelines outlined seven categories of open spaces in Malaysia. The National Park ranks the highest category followed by Regional Park, Metropolitan Park, Community Park, Neighbourhood Park, Play Field, and Play Lot. It should be noted that cemeteries are not considered as part of open spaces. As mentioned in the literature studies, Section 2.0 in Act 172 provides a clear description of what constitutes 'open spaces' is, and this is vital as it serves as the basis of reference in defining the true meaning of open spaces in the Malaysian context.

Table 3: Components related to social aspects at selected case

studies

			Case Studies		
			Section 9 Kota Damansara Muslim Cemetery (S9KDMC).	Kuala Lumpur-Karak Muslim Cemetery (KLKMC)	Taman Selatan Muslim Cemetery (TSMC)
SOCIAL ASPECTS	**A.**	**INDOOR**			
		1. Administrative area	▪	▪	▪
		2. Waiting/gathering area	▪	▪	▪
		3. Administrative building/office	▪	▪	▪
		4. Praying room (*surau*)	▪	▪	▪
		5. Multipurpose hall	**X**	**X**	**X**
	B.	**OUTDOOR**	▪	▪	▪
		1. Parking area	x	▪	▪
		2. Landscape area	▪	▪	▪
		3. Walkways	▪	▪	▪
		4. Gazebos	▪	▪	▪
		5. Benches	**X**	▪	▪

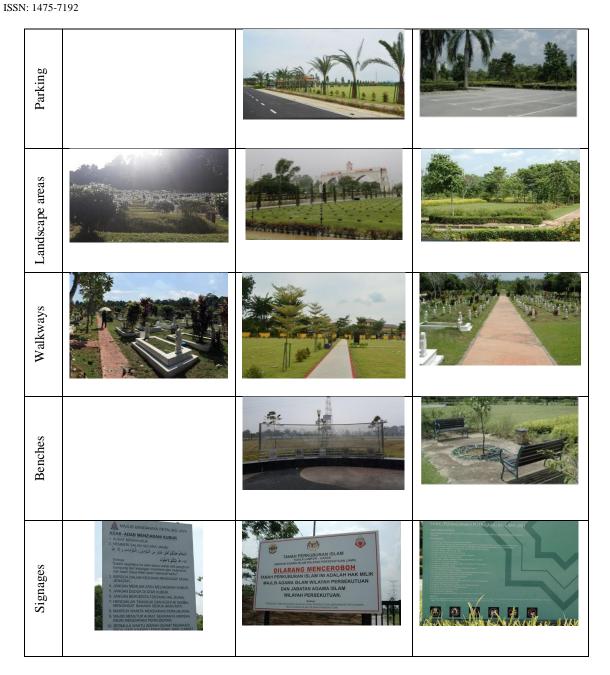### 4.5 *Spatial Planning and Facilities found at the Case Studies*

The study has observed some case studies that show the connection between facilities with the cemeteries in promoting social interactions. S9KDMC, KLKMC and TSMC have been built offering extensive facilities such as administrative building/office, prayer rooms and multipurpose hall that can be used for meetings. There is no doubt that the facilities provided here meet the needs and functions in assisting and conducting every stage of the burial process. This is because not every corpse has surviving family members, such as the homeless and unclaimed corpses from the hospital. Most of the activities that happen in these cemeteries are linked to the indoor buildings such as waiting area/gathering area and prayer room, whereas outdoor activities will become a secondary (refer Table 3 and Table 4). It is also noted that a prayer room has been provided as part of the facilities; this was a common thing in the past especially in the rural areas. The logical reasons behind this are to assist the funeral

ceremony by taking advantage of having cemeteries close to the mosque. By having a similar amenity inside the cemetery area, this promotes its use for social functions. The study also found that multipurpose hall was not present at the three case studies.

In order to control people's movement inside the cemetery, the concentration of human activity is normally kept to certain parts of the cemetery. This is to ensure that there will be less interference between the public and the graves. This is important so that the level of physical disturbance can be kept at a minimum. It should be noted that the deceased families expect the public to respect their graves, thus there should be a clear distinction between burial plots and walkaways in order to control their movement. Even though there are some outdoors activities being offered at the cemeteries, most happen around and nearby the building facilities. Based on observation conducted at the three case studies, there were not many people spending time there even though the cemetery areas have been furnished with adequate facilities. However, people would find themselves drawn into this space if there are human activities going on at the cemeteries. People only find themselves attracted to public spaces because of available facilities provided around the place. Amenities like gazebos (Rumah Wakafs) indicate a starting point for Muslim cemeteries to appropriately integrate social functions within public cemeteries that can be achieved through extensive infrastructures as shown by the three case studies. This has become the main rule to increase the chances for people to participate in the activities held inside cemeteries.

Table 4: Facilities provided related to social aspects at selected
case studies

	Section 9 Kota Damansara Muslim Cemetery (S9KDMC)	KL-Karak Muslim Cemetery (KLKMC)	Taman Selatan Muslim Cemetery (TSMC)
Administration buildings			
Waiting area			

Parking		
Landscape areas		
Walkways		
Benches		
Signages		

V.   DISCUSSION

In order to be legalized, all guidelines need to be gazetted by the implementing authority. However, circumstances and times have changed and some of the existing guidelines set out are no longer applicable to be implemented. In other words, some of the guidelines need to be modified to suit the current situation. This is no exception to the present guidelines related to cemetery and recreational areas in Malaysia. Several criteria of open spaces have been discussed in relation to the *Town and Country Planning Act 1976* (Act 172) (Md Dali, 2003, 1998). The author discussed that the scale of open spaces in Malaysia varies in sizes because each open space has different functions and purposes. Greenery, natural green areas, playgrounds, playfields, parks, barren spaces and recreational spaces were included in the discussion as part of the manifestation of the *Town and Country Planning Act 1976* (Act 172) based on the usage and physical classification of open spaces. It should be noted that, although open spaces may be different in sizes and usage, most importantly, open spaces must be accessible for all people to conduct various recreational activities. Due to the shortage of open spaces available for recreational purposes

especially in urban areas, the study found that there are possibilities to integrate recreational and cemetery planning. Size and function of open space can influence potential types of recreational activities conducted. Contemplating, sitting and reading are among the passive activities that use less space. On top of that, the study believes that passive recreational activities like walking or strolling is compatible with the sanctity of Muslim cemetery and can be conducted at cemetery areas because the activities encourage users to find solace and admire God's gift and creation. Table 2 indicates spaces, facilities and plant selections to be provided for a well-planned Muslim cemetery that is suitable for passive recreational activities.

However, if viewed in more detail, these policies only touch on the external aspect of a burial ground and does not emphasize the concept of cemetery as part of social identity such as the provision of funeral services to attract visitors and pay homage to the deceased. In order to realize such activities, this study believes that it is essential to provide specific need spaces such as placement of death-related departments such as *khairat* or funeral expenses and insurance at the cemetery. This indirectly enhances the function of burial grounds to a greater extent not only to a place to bury the dead but also to reminds the living of the dead. The definition of 'open space' in the *Town and Country Planning Act 1976* (Act 172) highlighted; open spaces must be accessible for all people to conduct various recreational activities. Thus, in order to revolutionize Muslim cemeteries to be multi-function and adapting with a contested urban condition, the area must be open to all. Currently, most of new and well-planned Muslim cemeteries are enclosed and guarded. The same phenomenon has been observed in all the case studies, S9KDMC, KLKMC and TSMC. This will be contradicted with the definition of open space in Act 172. Thus, this improvement should be made in present guidelines if the concept of dual function is to be realized for Muslim cemeteries soon. Based on the content analysis of conducted on existing guidelines for cemetery and recreation in Malaysia the study found that there are possibilities to integrate the usage of Muslim cemetery as recreational areas. The finding shows spatial planning and design elements provided can accommodate Muslim cemeteries beyond its cultural norm.

In terms of spatial planning and facilities, the design for urban cemeteries should be fully equipped with communal infrastructures that can be used by a wider group of users, and most importantly integrated with public parks as has been practiced in TSMC. In fact, the community facilities such as indoor sports and community halls could be located within the same planning area as cemeteries. This would increase the number of visitors to the park and make the most of the land that has been allocated for this kind of development. Integration between cemeteries and other social infrastructure will enable maintenance to be done at the same time, as we know that public cemeteries in Malaysia are having a hard time maintaining their surrounding landscape.

Over 20 years have passed, these guidelines are still in the process of improvement as there are some obvious flaws in the guidelines, including implementation policies, planning principles and cemetery layout. Existing policies outlined in the present guidelines may be effective during the situation in Malaysia back in the nineties. However, it is essential for these guidelines to be review and updated to address on the current urban issues in Malaysia such as urban flood, heat island effect, airborne pollutant mainly the haze, and particularly the diminishing of open spaces within the city. Thus, it is crucial to discuss and identify the next strategy towards developing a more functional burial ground that will deliberate public interest and benefit all. Cemeteries have a lot of potentials to incorporate public space into their design. There is no doubt this would offer some solution to the lack of public space in the city; however, it might take a while before Malaysians can adopt this as part of

mainstream culture. The study has also proven that there are elements of social interaction exist inside Muslim cemeteries; it has been happening in the past and it seems to be reappearing again at Muslim cemeteries here and elsewhere such as in Jakarta. The only thing that would hold Malaysians back from accepting this growing practice is the attitudes of the majority of Muslims, who still cling to old values and customs.

VI.   ACKNOWLEDGEMENT

REFERENCES

1. Barrett, G. W., & Barrett, T. L. (2001). Cemeteries as Repositories of Natural and Cultural Diversity. Conservation Biology, 15(6), 1820-1824. doi:10.1046/j.1523-1739.2001.00410.x

2. Basmajian, C., & Coutts, C. (2010). Planning for the Disposal of the Dead. Journal of the American Planning Association, 76(3), 305-317. doi:10.1080/01944361003791913

3. Bennett, G., & Davies, P. J. (2015). Urban cemetery planning and the conflicting role of local and regional interests. Land Use Policy, 42, 450-459. doi:https://doi.org/10.1016/j.landusepol.2014.08.011

4. Bougas, W. A. (1988). Islamic Cemeteries in Patani. Kuala Lumpur: The Malaysian Historical Society.

5. Clayden, A., Green, T., Hockey, J., & Powell, M. (2017). Cutting the lawn − Natural burial and its contribution to the delivery of ecosystem services in urban cemeteries. Urban Forestry & Urban Greening. doi:https://doi.org/10.1016/j.ufug.2017.08.012

6. Coutts, C., Basmajian, C., & Chapin, T. (2011). Projecting landscapes of death. Landscape and Urban Planning, 102(4), 254-261. doi:https://doi.org/10.1016/j.landurbplan.2011.05.005

7. Davies, P. J., & Bennett, G. (2016). Planning, provision and perpetuity of deathscapes—Past and future trends and the impact for city planners. Land Use Policy, 55, 98-107. doi:https://doi.org/10.1016/j.landusepol.2016.03.029

8. (JAWI) Department Federal Territory Islamic Affairs Department. (2019a). Penanaman pokok buah-buahan di tanah perkuburan. Retrieved from http://www.epusara.jawi.gov.my/epusara/webV5/content/127

9. (JAWI) Department Federal Territory Islamic Affairs Department. (2019b). Pentadbiran dan pengurusan tanah perkuburan Islam Wilayah Persekutuan. Retrieved from http://www.epusara.jawi.gov.my/epusara/webV5/index.php

10. (JLN) National Landscape Department. (2008). National Landscape Guidelines. Kuala Lumpur

11. (JPBD) Department of Town and Country Planning. (1976). Town and Country Planning Act, Act 172. International Law Book Services, Malaysia

12. (JPBD) Department of town and Country Planning. (1997). Planning Guidelines for Muslim and Non-Muslim Cemetery. Peninsular Malaysia, Kuala Lumpur

13. (JPBD) Department of town and Country Planning. (2005). Garis Panduan Piawaian Perancangan Tanah Lapang dan Rekreasi (JPBD 7/2000). Peninsular Malaysia, Kuala Lumpur

14. Henderson, J. C. (2012). The loss of a Cultural Heritage and Tourism Resource: Singapore s Disappearing Burial Grounds. South Asia Journal of Tourism and Heritage, 5(2), 1-14.

15. Huang, S.-C. L. (2007). Intentions for the recreational use of public landscaped cemeteries in Taiwan. Landscape Research, 32(2), 207-223. doi:10.1080/01426390701231614

16. Hunt, E. (2019). In Jakarta's cemeteries they're stacking the dead six-deep. The Guardian.

17. Kenyon Henderson, K., & Song, Y. (2008). Can nearby open spaces substitute for the size of a property owner's private yard? International Journal of Housing Markets and Analysis, 1(2), 147-165.

18. Klaufus, C. (2014). Deathscapes in Latin America's Metropolises: Urban Land Use, Funerary Transformations, and Daily Inconveniences. Revista Europea de Estudios Latinoamericanos y del Caribe / European Review of Latin American and Caribbean Studies(96), 99-111.

19. Klaufus, C. (2018). Colombian deathscapes: Social practices and policy responses. Journal of Urban Affairs, 40(2), 209-225. doi:10.1080/07352166.2017.1319220

20. Kowarik, I., Buchholz, S., von der Lippe, M., & Seitz, B. (2016). Biodiversity functions of urban cemeteries: Evidence from one of the largest Jewish cemeteries in Europe. Urban Forestry & Urban Greening, 19, 68-78. doi:https://doi.org/10.1016/j.ufug.2016.06.023

21. Mansor, M., Said, I., & Mohamad, I. (2012). Experiential Contacts with Green Infrastructure's Diversity and Well-being of Urban Community. Procedia - Social and Behavioral Sciences, 49, 257-267. doi:https://doi.org/10.1016/j.sbspro.2012.07.024

22. Md Dali, M. (1998). Persepsi terhadap kawasan lapang dan relevansinya dalam masyarakat kini. In M. R. Agus (Ed.), Pembangunan sosial dan ekonomi di Malaysia (pp. 180-189). Kuala Lumpur: Jabatan Antropologi dan Sosiologi, Universiti Malaya.

23. Md Dali, M. (2003). Development of Kuala Lumpur Urban Parks: The Past and Its Present. Sejarah: Journal of the Department of History, 11(11). doi:10.22452/sejarah.vol11no11.6

24. Mohamed Afla, M. R. (2012). Sustainability of Urban Cemeteries and the Transformation of Malay Burial Practices in Kuala Lumpur Metropolitan Region. Paper presented at the World Academy of Science, Engineering and Technology, United States.

25. P. Harnik, A. M. (2010, December 2010). Cemeteries Alive: Graveyards are resurging as green spaces for the public. Trade Magazine. Retrieved from https://urbanforestrysouth.org/resources/library/ttresources/cemeteries-alive-graveyards-are-resurging-as-green-spaces-for-the-public

26. Salmon, C. (2016). From Cemeteries to Luxurious Memorial Parks. Archipel.

27. (SDSN) Sustainable Development Solutions Network. (2019). Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable. Retrieved from https://indicators.report/goals/goal-11/

28. Tryjanowski, P., Morelli, F., Mikula, P., Krištín, A., Indykiewicz, P., Grzywaczewski, G., . . . Jerzak, L. (2017). Bird diversity in urban green space: A large-scale analysis of differences between parks and cemeteries in Central Europe. Urban Forestry & Urban Greening, 27, 264-271. doi:https://doi.org/10.1016/j.ufug.2017.08.014