MUSLIM CEMETERY MANAGEMENT (MCM) IN MALAYSIA:
PRACTICES, ISSUES AND CHALLENGES

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ABSTRACT

Purpose - Cemetery needs is a basic facility that is as important as other basic facilities to the communities in Malaysia particularly to Muslim society. Recently, a lot of issues arise in Muslim Cemetery Management (MCM) caused by increase in human population and development booming. Land shortage for burials is one of the many issues that emerge out of accelerated urban growth in most developing Asian countries, including Malaysia. Furthermore, cemetery problem is not systematically managed causing the community become uninterested to make a visit and this support superstitions mentality among the community. Thus, this paper trying to discuss current practices; issues; and challenges arising from the traditional practices of Muslim funerary in Malaysia. It also provide recommendations that can be applied to counter the existing practices.

Keywords - Practices; Issues; Challenges; Muslims Cemetery Management (MCM)

I. Introduction

In highly dense cities it is often hard enough to find room for the living, let alone the dead. Cemeteries, devoid of religious affiliation, date largely from early 19th century and many were planned as spacious, landscaped gardens to house human remains (Moodley, 2009). Today's scenario shows the number of elderly is increasing. Demographic transition has been proved by the United Nations Economic Commission for Europe (UNECE, 2007) as follows;

“It is the result of the interplay of longer lives and fertility decline. It is part of long-term development called the demographic transition, which leads from a regime of high mortality and high fertility to one with low mortality and low fertility. As the large generations born during the time of high fertility are living longer, and the subsequent generations born at the same time fertility decline are smaller, the population as a whole is ageing…all countries experiences this sooner or later.”

Arokiasamy (2005) added, from 1980 until 2020, Malaysia population is projected to increase by 45 per cent. From this amount, increasing number of elderly is expected to increase by 80 per cent. As this cohort moves into old age and faces higher mortality rates, the absolute number of deaths will increase significantly, as will the subsequent demand for interment spaces (Basmajian, 2010). Disposal of the
dead is not typically considered an urban or landscape planning problem, but how we manage the deceased spans a set of public issues that planners and managers often encounter (Basmajian, 2010). In many major urban municipalities, the older cemeteries which were initially considered to be large often run out of space for new burials and vacant land is scarce to extend the cemetery or to develop new cemeteries (Basmajian, 2010).

Rapid urbanisation in towns and cities is also resulting in fierce competition for well located land. Further, compounding the shortage of cemeteries is the fact that a cemetery, among many cultures, is much more than a place of spiritual and cultural reference. As a result there is often resistance among communities to adopt alternatives ways of disposing the dead such as sharing the graves and reuse of graves among others hence addressing scarcity of land for cemeteries is proving difficult (South African Local Government (SALGA), 2012). Moreover, this problem has been exacerbated by the conventional practice of Muslim burial rites as well as lack of comprehensive planning in managing urban cemeteries by local authorities (Coutts et al., 2011). Therefore, this paper provides evidence and a brief discussion about current practice and that Malaysia is facing with an imminent shortage of cemeteries and other important issues and challenges with regards to Muslim Cemetery Management System (MCMS).

II. Current Practices Over Muslim Cemeteries in Malaysia

The main functions of cemeteries are:

1. Place of deposit and transformation of the dead bodies without dangers to the public health (Uslu et al., 2009).
2. Place of visit for those people wanting to remember a dead person and at the same time a symbol of the historical memory of a collectivity (Uslu et al., 2009).

The form of burial is the most important factor in formation of cemeteries. Such forms are determined, in great part, by religious rules and directive (Uslu et al., 2009). Generally, the corpses are cremated according to the methods are allowed or prohibited by the religions, or directly buried under the ground in coffins or without coffins (as in the case in Islamic cemeteries) (Uslu et al., 2009).

Funerals in Islam (called Janazah in Arabic) follow fairly specific rites, though they are subject to regional interpretation and variation in custom. In all cases, however, sharia (Islamic religious law) calls for burial of the body, preceded by a simple ritual involving bathing and shrouding the body, followed by prayer (Jabatan Kemajuan Islam Malaysia (JAKIM), 2014). The style of the grave and that of burial may vary from place to place due to different methodologies surrounding funeral procedures. The Islamic directive is restricted to respectful burial ground (Uslu et al., 2009). It is requested not to construct buildings over the graves and recommend cemeteries with rich vegetation. In Islamic cemeteries there are many trees, especially Cupressus s. (cypress), bushes and flowers in addition to naturally growing species (Uslu et al., 2009).

According to Islam, the deceased must be directly buried to allow rapid decomposition and transformation. Though, there is no clear provision in the Holy Quran, Islam requires avoiding from construction of ornamented and eye catching
graves (Uslu et al., 2009). The rules of burying the corpse and building the graves are specified. According to these rules, the corpse is put in the grave in the direction of Qiblah and then covered with adobe or straw whereafter the grave is filled with soil (Uslu et al., 2009). It is advisable to cover the grave with material like rocks, wood, etc. or to build a tomb using rectangular adobes, limestone or wood and the tomb must not be higher than a hand-span off the ground (Uslu et al., 2009). No pesticide or insecticide is used on the soil. However, the street trees and green areas in the cemeteries are treated with such chemicals (Uslu et al., 2009).

In Islamic religion, the grave itself should be align perpendicular to the Qiblah (that is, towards Mecca) (Baduroon, 2012). The wrapped body is placed directly in the ground, without a casket and grave should be raised up to a maximum to twelve inches above ground. Grave markers are simple, because outwardly lavish displays are discourage in Islam. Many times graves may even be unmarked, or mark only on a simple wreath. However, it is becoming more common for family members to erect grave monuments nowadays trend (Uslu et al., 2009). The direction of Qiblah is a determining factor in designing the cemetery and preparing the lot, parcel and circulation system (because the shorter sides of the graves are in the direction of Qiblah) (Uslu et al., 2009). Table 1 below shows the elements of Muslim grave in Malaysia.

Table 1: Elements of Muslim’s Grave in Malaysia
(Researcher’s Study, 2014)

<table>
<thead>
<tr>
<th>Elements of grave</th>
<th>Description</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Kepuk” (Blockade)</td>
<td>Horizontal slabs made of solid concrete and the surface is normally ornamented with various tiles used as finishes (nisanworld.com, 2013). Minimum measurement: Adult Size: 2.3metre x 3.0metre (8 feet x 10 feet) Height: 15cm (6inch) - 30cm (12 inch) Child Size: 2.0metrex 1.6metre Height: 15cm (6inch) - 30cm (12 inch) (JPBD, 2012)</td>
<td>It is typically used to keep the graves surface intact and to prevent the graves being dredge by wild animal. (Afla &amp; Reza, 2012).</td>
</tr>
<tr>
<td>Gravestone</td>
<td>Gravestones can be very diverse in shape, style and material (granite, marble, limestone, wood, &amp; etc.) based on their culture. In most cases they have the deceased's name, date of birth, and date of death inscribed on them, along with a personal message, or prayer.</td>
<td>A gravestone is a marker used to delineate the location of a burial site for an individual, family or other group. Furthermore, the grave will not accidentally be exhumed. (Uslu et al., 2009)</td>
</tr>
</tbody>
</table>
Shrubs

Flowering shrub or colored leaves is recommended. Shrub height not exceeding 1.5m. Example of shrubs:
(1) Codieum spp Puding;
(2) Jasminum sambac Melor;
&
(3) Murraya paniculata Kemuning

Jabatan Landskap Negara (JLN), (2008)

Muslims believe that trees and shrubs are praying to the dead, and such benevolent practice is going to benefit the deceased underneath.
(Ilmuulanamak.blogspot.com, 2013)

Landscape

Space in a cemetery:
(1) The assembly / waiting area
The main tree is cord rooted, flowering and fragrant, shady canopy, thornless stems and not easily broken branches. Planting fruit trees are not recommended.
(2) Pedestrian walkways
The main tree is cord rooted, thornless and not poisonous, not easily broken branches and serves as a shelter.

Jabatan Landskap Negara (JLN), (2008)

Muslims are encourage to grow plants over their graves in Islam in order to fulfill the religious requirement.
(Afla & Reza, 2012)

Grave’s pit

Minimum measurement:
(1) (Wide x Length) = 1.0metre x 2.0metre (3 feet x 7 feet)
(2) Depth: 2.0metre (7 feet)

(JPBD, 2012)

The deep opening in the ground as a place where bodies of the deceased are buried to prevent from the smell of the dead bodies coming out from the ground.
(JAWI, 2002)

III. Land Shortage for Burials

A. Demand and Supply for Interment Space (International Experiences)

With the booming growth of ageing population, the shortage of cemetery space is an immediate problem that need to be resolved. As "baby boomers" are ageing, demand for cemetery space is expected to increase in the years to come (Coutts et al., 2010). Demand for cemetery space is set to soar in the coming years in America, a suitable supply of cemetery space is already looking pretty scarce. For instance, according to Coutts (2010), right now roughly 76 million Americans are projected to reach the current age of average life expectancy, 78 years, between 2024 and 2042. If they were all buried in standard burial plots, it would require roughly 130 square miles of pure grave space, not counting roads, trees or pathways. That is an area about the size of Las Vegas.

Globally, cemetery evolution, similar to housing, is determined by land supply. As time goes by, burial method gradually alters and in a small place like Hong Kong, the critical motivation of changes is the limited availability of land. Kong (1999) describes
how commemorative practices in Hong Kong, Taiwan and China have changed in response to shrinking amounts of physical space for the dead. The shift from earthly graves to cremation, and now to scattered ashes and even online memorials which mark a graduation from “spatial competition to spatial compression and then to spatial transcendence”.

Kong (1999) ends her survey with a look at online memorialization in cities of mainland China. By 1985, density pressures had made cremation compulsory by law, and alternatives like woodland and sea burials have been introduced over the years. In addition, the country has introduced online mourning sites, through which relatives of the deceased can set up a page dedicated to a loved one’s memory (Kong, 1999). These contestation for space are also reflected in Singapore which led to government in 1960s adopting a utilitarian view of burial space, highlighting the insanitary nature of burial grounds and their consumption of space that could or should be better deployed for developmental purposes (SALGA, 2012).

The same issue has reached its climax in the neighbouring city of Jakarta, which has been reported by the local media (The Jakarta Post, 2011). Head of Central Jakarta Burial Service Agency said in the report, the municipal administration was offering the stack burial method, which is limited to members of the same family. Another option is burying bodies in other graves after leases had expired and were not renewed. The city face contestation of space where there has no more space for new cemetery plots as both the population and office construction activity continue to increase.

B. Demand and Supply for Interment Space in Malaysia

Death is inevitable. It is also one of the major social challenges we now face in Malaysia. The issue of land shortage for burial represents a pressing concerns especially in the capital city of Kuala Lumpur and Johor Bharu. This problem has been reported intermittenly in the local newspapers (Khalid, 2007; The Star, 2012). The migration of Malays from rural to urban districts throughout the last few decades has also contributed to the escalating Muslim population into major cities such as Kuala Lumpur (Ahmad et al., 2009). With a growing population, the issue should not be taken lightly as it could become a potential threat to Kuala Lumpur in accomodating sufficient burial spaces in the near future. Moreover, with such migration into capital cities, the government must provide sufficient burial facilities for the growing city’s inhabitants.

For Muslims, the things that must be done on the deceased is bathing, enshrouded, performed the funeral prayers and bury (JPM, 2013). Unlike other religions, Islam does not permit cremation (Jabatan Agama Islam Selangor (JAIS), 2011)). Therefore, it is a necessity having land for burial spaces exclusively for the Muslim community. However, burial space in Malaysia is increasingly limited and full especially in large cities (JAIS, 2011). Meanwhile, undoubtedly, the problem of supply and demand for interment space still not seen as a serious issue in the Muslim community and other related agencies in Malaysia.
In densely populated areas, this phenomenon is seen occurred as Selangor Islamic Religious Department (JAIS, 2012) revealed that, “In recent years, a few states in Peninsular Malaysia such as Pulau Pinang and Kuala Lumpur have been taking steps and implementing tiered tomb. This is due to scarcity of land and compactness of cemeteries”.

In Kelantan, as reported in a local newspaper (Sinar Harian Kelantan, 2012), Kampung Kubang Chenok Muslim Cemetery in Pasir Mas is a small burial place and cannot accommodate the needs of a growing population. Therefore, the cemetery committee seeking donation from public to buy a new land. The same situation also happened in Muslim cemetery at Kuala Rompin, Pahang (Sinar Harian Pahang, 2013) and also at Kampung Tengah Ampang (see Figure 1) where the cemetery is crowded and running out of room for burials.

As the Baby Boom generation ages and mortality rate increase in the general population, the desirable burial space is likely to increase accordingly. Thus, the main issue in MCM is the lack of supply of land for burial especially in the big cities while the number of elderly is steadily increasing (Sulaiman, 2012).

IV. Conventional Burial Practices

A. Hardscapes (graves)

Fundamental problems with the traditional rites of Muslim burial practices in Malaysia are mostly found on the graves’ surface. For example family plots, monumental structures, built-up personal demarcation and random planting are reflected in the landscape of Muslims cemetery. Some of the traditional burial practices performed over the graves give unique characteristics to the landscape. For example, family plots have existed for a long time in old cemeteries and it really had an impact on the amount of space utilised overall (Afla & Reza, 2012).

Monumental structures are not considered to be as sustainable, since they tend to monopolise space and reduce the land available for further burial plots. Thegrave structure is known as‘kepuk’ (refer Figure 2) and reflects a surviving Malay art form in Muslim cemeteries (Afla & Reza, 2012). Kepuk is an overlying structure that is commonly found on Malay graves. It consists of horizontal slabs made of solid concrete and the kepuk surface is normally ornamented with various tiles used as finishes (nisanworld.com, 2013).
Fig 2: Kepuk is typically used to keep the graves surface intact and to prevent the graves being dredge by wild animal.
(Afla & Reza, 2012)

Some people were also keen to have excessive built-up structures as a way to demarcate a particular grave (www.qsep.com, 2013). The structures that made up this boundary can be found either in a vertical or horizontal position, and they were made up of different material, from a piece of slab to perimeter fencing. Even though it is forbidden in Islam (JAIS, 2012) and strict regulation from authorities towards this issue (SALGA, 2012), this problem still exists in some areas (Jabatan Agama Islam Wilayah Persekutuan (JAWI), 2002).

In terms of arrangement of graves, old cemeteries are found to be loosely systematic (Afla & Reza, 2012). Accumulation of graves throughout years has resulted in dense burial grounds and overcrowding especially in the former Muslim cemeteries. A method known as ‘Silang Tikar’ which means weaving mats has been widely practiced in Malaysia (Afla & Reza, 2012). It is used to be as a guide in arranging the graves according to the grid layout within a cemetery’s compound. Even so, this method has its own flaws particularly in reserving burial plots for future use. The interval spaces between graves were supposed to be allocated for upcoming graves but in most cases (Sinar Harian Johor, 2012; JAWI, 2012) family members of deceased were likely to dominate the gap between the graves. The spaces are normally occupied by building structures such as seating and the extension from kepuk.

B. Softscapes (Vegetation and Planting)

In Malaysia, Muslims usually planted some trees over the graves as a way for dead bodies to receive blessing from their God. Traditionally, this practice originated from Islamic customs. This has resulted in many variations of vegetation, particularly shrubs and small trees are planted on top of the graves.

The problem with this practice is that shrubs are being planted randomly without any exact guideline (Afla & Reza, 2012). It does contribute to the green factors in Muslims cemetery but on the other hand there is an issue with visibility. A specific design intervention should be established to avoid confusion among visitors. Growth rate for shrubberies are happening at a fast pace and sometimes can create a visual barrier within the cemetery compound. Thus, visitors are finding it hard to find their way around. All these practices were performed as part of Malay funerary culture and rites, even though some of them are not considered to be obligatory in Islamic teaching. In Muslims cemetery, excessive ornamentation over graves serves no purpose other than to physically demonstrate personal attachment to the deceased.
V. Social Aspect

A. Public Space

Urban cemeteries possess their own unique biodiversity within the city. They are contributing to the ecological diversity of urban ecosystems. Moreover, urban cemeteries could also become a part of urban green network. Wong et al. (2008) stated that large green areas definitely have positive effect on the temperature of the city. However, a research conducted by Baharuddin et al. (2010) has somehow not incorporated the extra function that cemeteries already possess, which is part of urban green space. It is important for people to acknowledge public cemeteries as unique urban sanctuaries.

Malaysia could make full use of space in public cemeteries by making them accessible green areas. This would provide people with another alternative for recreational activities as outdoors public space in Malaysia is gradually diminishing (Tiun & Lim, 2010). In Taiwan, governments’ efforts in turning public cemeteries into a recreational area are moderately successful, even after three decades. People remain disinclined to consider the ‘park-like’ cemeteries as regular parkland (Huang, 2007). It is commonly understood that a cemetery is a place to dispose of dead bodies and this primary role is incompatible with its concomitant usage as public parkland. Yet, this step should be promoted in order to provide more open spaces for Malaysian.

Nevertheless, Muslims do not regularly go to cemeteries other than to visit the graves of their relatives on certain annual occasion. In Malaysia, Eidul-Fitr is the major celebration where it is common to see Muslims visiting graves around these times of the year. For the first few days of Eid, people will normally visit the cemeteries with their family members to offer prayer as a sign of remembrance towards the deceased.

Furthermore, Malaysians generally still exhibit residual superstitions that associate graveyards with poltergeist activity (JAIS, 2011). This is proved by a report made by local media in Kota Bharu Muslim Cemetery in Kelantan (Sinar Harian Kelantan, 2013), 20 where 31 bags of sand were found buried in the cemetery. The discovery is believed to contain elements of superstition and worship purposes. In addition, the occurrence of aggression was reported at Kampung Bukit Balk Muslim Cemetery in Kerian, Perak where thieves trespassing and stealing iron fence of the cemetery. As a result, animals such as cow and buffalo entered the cemetery and damaged dozens of tombstones and graves structure (Sinar Harian Perak, 2012). Encroachment activities also occur in Miri, Sarawak where the criminals dig and break the tomb to find valuable items (Harian Metro, 2012).

This cultural stigma has been firmly cemented into their perceptions, which are solidified by the existing condition found inside the graveyard itself. The atmosphere in public cemeteries is usually dead and in a gloomy state. The Federal Territory Islamic Affairs Department (JAWI) has taken their own initiative in eliminating this problem by trying to change the landscape of public cemeteries (JAIS, 2012). The KL-Karak Muslim Cemetery in Gombak has evidenced such effort by JAWI recently. JAWI's intentions in creating landscape cemeteries should be highly praised as a first step in improving the physical characteristics of urban cemeteries. But it has not been able to bring the public into the cemetery’s compound for recreational purposes. This is due to the regulation that prohibits people from entering the
cemeteries other than having intention to visit the graves. Malaysians are not keen to go and be there as it is not part of the Malaysian culture.

B. Cemetery and Religion Relations

Worldwide, religion provides important tenets for social attitudes and protective approaches of the communities towards environment as noted by Uslu et al. (2009). It is claimed that attitudes of different religions all over the world with respect to environment are important instrument in solving the environmental problems. Attitudes and views of the religion with respect to cosmos and environment determine, in a sense, the shape of the cemeteries as well as the form and ceremonies of burial (SALGA, 2012).

Each religion has a different tenor. According to Islamic burial, the deceased is taken for burial (Uslu et al., 2009). The style of the grave and the burial may vary from place to place due to different methodologies surrounding funeral procedures. The Islamic directive is restricted to respectful burial ground. It is requested not to construct buildings over the graves (e-fatwa, 2013). No pesticide or insecticide is used on the soil and the dead body must be buried directly to the ground without casket for decomposition to occur at a faster rate (SALGA, 2012). Therefore, it is a necessity for burial space for the Muslim community.

C. Resistance By Communities

Other issue regarding cemeteries is resistance by communities to adopt alternatives forms of burial such as reuse of graves, renting space or grave sharing. Recycling the old graves is another technique that can be introduced into Muslim cemeteries without having to clear out a vast area of new land in the city. In fact, this technique has already been practiced for Muslim burial in neighboring cities such as Singapore (CBC News, 2005). In Singapore, bodies from old graves have been exhumed and transferred to new smaller burial plots. Both Pusara Abadi and Pusara Aman for instance are Muslim sections at Chuo Chu Kang Cemetery that have demonstrated this technique. The exhumation process was carried out under religious observance with the surviving family members from beginning to end of the process (CBC News, 2005).

Based on the report project for Bukit Kiara Muslim Cemetery (Perak Today, 2013), authorities’ intention to recycle the old graves has not been practice, as it is believed to be inappropriate with the local Muslim culture. Perhaps it is about time for Muslims communities to be open to this radical approach. At this moment, this extreme procedure is a missed opportunities in sustaining Muslim burial facilities in Malaysia.

VI. Environmental Aspects

A. Drainage System

Even though some cemetry like Bukit Kiara Muslim Cemetery and Seksyen 9 Muslim Cemetery were built on the hilly grounds (Afla & Reza, 2012), however both sites do not take advantage of the site's natural landform to mitigate the water run off. Instead of working with the existing landform, the standard practice of developing land for burial in Malaysia normally begins by clearing the land and then flattening it. As a consequence, such practice would normally require extensive works for the purpose of drainage, for example in Tasik Selatan Muslim Cemetery (Afla & Reza, 2012). Typically, surface and subsurface drainage were normally used to channel the water out of the cemeteries area. In KL-Karak Muslim Cemetery, drainage
system is found to be less efficient with several water ponds existing around the cemetery area. This situation also happened at Kampung Sengat Muslim Cemetery in Perak (Perak Today, 2013) where the cemetery is frequently flooded during heavy rain caused by the construction of drainage channels that are not systematic.

B. Exploitation of Reserved Forest

Rapid development appears to necessitate the sacrifice of reserved forest and protected land. In the case of Seksyen 9 Muslim Cemetery (Sahabat Alam Malaysia, 1992), the exploitation on some parts of Sungai Buloh Forest Reserve to be developed into a burial space has created a controversial issue among the public realm. There is a conflict of interest occurring with the use of this precious forest divided between two parties. Some people insist that this natural environment should be preserved from any kind of development apart from the government's plan, while others see the need for a new cemetery as an answer to the escalating problem on lack of space in nearby Muslim cemeteries. In regards to this event, the local authority must seriously investigate this matter as a public issue by taking a step forward in planning for burial grounds.

VII. Maintenance and Regulation

A. Maintainance

It is understood that the migration of people into cities such as the metropolitan area of Kuala Lumpur is progressive. Hence, the numbers of cemeteries will continuously add up along with the size area. At present, authority’s back-up plan constitutes providing more land to be used as cemeteries (Afla & Reza, 2012; JAWI, 2012). Even though this seems to be a logical step in handling the issue of land shortage for burial, it is important for authorities to reassess the impacts and consequences.

By increasing the total area of new cemeteries there will be more burial grounds to manage. This definitely demands a higher level of maintenance and supervision especially for a public cemetery with a huge scale area such as KL-Karak Muslim Cemetery. By learning from the examples of old cemeteries, the authorities have found it is challenging to maintain the quality of the surroundings. The physical conditions in public cemeteries are usually found to be poor and this is something commonly known among Malaysians.

Even with the involvement of ‘kariah’ members taking care of their own burial grounds, it would be very difficult to ensure the cleanliness of public cemeteries, as this communal activity is not normally carried out on a regular basis (Afla & Reza, 2012). Besides, it is hard to get kariah members to take part in this voluntary work, as some people do not perceive it to be necessary. They strongly feel that maintaining public cemeteries should be the responsibility of the authorities.

VIII. Planning For the Disposal of the Dead

A. Projecting Demand For Burial Space

Projecting demand for burial space present a difficult task for planners. Through prevailing cultural and religious beliefs structure and overall picture of death in Malaysia, local conditions can strongly influence after death practices. While planners regularly make land use projections based on existing conditions, information about burial space is frequently unavailable Coutts et al. (2011). The
number of cemeteries gives no indication of the actual amount of land devoted to interment. Information about population of existing facilities, the dimensions of cemeteries, and whether they are filled to capacity or not, are fragmented and rarely publicly available. With no central source from which to obtain burial information, no standardized format for reporting, and widely mixed ownership patterns, planners are typically left to cobble together data and generate projections of land use needs as best as they can (Afla & Reza, 2012).

Law, codes and zoning procedures governing interment vary widely, as do agencies responsible for procuring and maintaining public and private cemetery space [6]. Although tools such as Geographic Information System (GIS) are increasingly being used to identify and manage plots at the cemetery site level (JAIS, 2012; JAWI, 2012) such tools are infrequently used to manage local and regional capacity. Creating cemeteries may be one of the lasting land use decisions a community makes, fraught with all manner of wicked issues (Rittle & Webber, 1973) associated with death and the handling of human remains. The geography of burial is essentially permanent: difficult to move and difficult to move around. It is at this point that interment becomes a public issue with significant planning implications.

The fact that not all of the people living and ageing in a given place will die and/or be interred in that place further complicates projections (Coutts et al., 2011). This problem is exacerbated by the fact that late life mobility is hard to predict. Some segments of the adult population experience low levels of residential mobility, while others move frequently. Projecting death and burial among a highly mobile population remains a potentially serious issue, and could yield under and over-projections for land use need (Coutts et al., 2011).

Under-projection of land use need result from not taking into account persons who do not currently reside in the location of interest but who expect to be buried there (Coutts et al., 2011) Over-projections of land use needs occur by counting people who reside in the location of interest but who plan to be buried elsewhere (Coutts et al., 2011). Historically, extended family often choose to be buried together, but this practice has changed (Sloane, 1991) making this potential indicator not as helpful as it once might have been for forecasting a rate of return to the family plot.

IX. Conclusion and Recommendation

Cemeteries remain one of the sectors faced with challenges yet not much attention has been paid to it on a national scale. Although the demand for more land for cemetery is high, it is important to note that the cultural and religious belief attached to cemeteries and burial method to communities cannot be undermined. This balance can only be achieved if burial methods used are not a threat to development of sustainable communities.

With the expansion of suburban area outside the cities, it is important to take notice of the impacts that it has in accommodating for burial facilities as a whole. If authorities are not careful in locating urban cemeteries, the landscape of cemeteries in Malaysia could end up deteriorating on a manner similar to former Seoul where the graveyards were dominating the city’s landscape because close monitoring from the government is absent (Park, 2010).

The options are only available in the adoption of environmental friendly interment, space intensive methods and in the multiple uses of cemetery spaces. Undoubtedly
so, Malaysia context reflects the same picture. It is therefore recommended that the following be considered in cemetery planning:

(1) Widely use of Geographical Information System (GIS) software for cemetery management;
(2) Intensive use of re-cycling of graves, grave leasing and tiered graves;
(3) Multiple-use approach to cemeteries such as recreational area, open space, green space and many more;
(4) Compactness; create and preserve higher density, compact form;
(5) Employing a variety of cost effective alternative methods to traditional/ in-ground burial (example: concrete vaults, moderate parcel size).

However, the above recommendations require political willingness and community buy-in for them to have an impact on the sustainable development in Malaysia.

REFERENCES


