SOCIAL SUSTAINABILITY OF NEIGHBOURHOOD MASJID DEVELOPMENT IN MALAYSIA

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SOCIAL SUSTAINABILITY OF NEIGHBOURHOOD MASJID DEVELOPMENT IN MALAYSIA

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“TO HUMANITY”
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ABSTRACT

Attendance in mosques has been observed to be seriously low in recent times. It is rare to find any mosque being more than 5% occupied to its capacity except during Friday congregational prayers and during other celebrations in the Islamic calendar. The current mosque setting differs from the concept adopted by the Prophet Muhammad (pbuh), during which time the mosque was used as an ummah development centre. Matters relating to the performance of the congregational prayers is the only role reflected in the present-day mosque design and functions. Importance should be given to the mosque as a community building and platform for community assimilation. Therefore, this study is aimed at proposing a socially sustainable assessment model that provides for social sustainability in neighbourhood mosques, with a view to informing architectural design decisions. Accordingly, a pragmatic phenomenological approach was adopted to elicit data on social sustainability criteria correlated to mosque social functions. This was achieved through (1) intensive literature review and content analysis, (2) interview with 20 experts, (3) field observation, case study and scrutiny of architectural drawings of existing neighbourhood mosques, (4) survey questionnaire administered to 300 respondents, (5) analysis of data using thematic content analysis and descriptive statistics. The result shows that social sustainability is an integral component of mosque design and implementation of its criteria is inevitable in neighbourhood mosque design. The study revealed mosque social functions and identified their importance. The study further identified the spaces requiring design attention for mosque social functions. Consequently, analytical interpretation of the findings identified the core socially sustainable activities, mosque zoning and spatial considerations as the design indicators required to inform design decisions. The revealed assessment indicators were used for the development of assessment model. Expert validation was conducted to validate the developed socially sustainable assessment model for mosque development in Malaysia. This leads us to rethink how a neighbourhood mosque design can be restructured to allow for social sustainable criteria. Ultimately, based on this evidence-based approach, a socially sustainable assessment model for mosque development in Malaysia suggests that a redefined socially sustainable mosque typology is therefore achieved.
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<td>Compliant ‘slave’ of Allah</td>
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<tr>
<td>Adl</td>
<td>Justice</td>
</tr>
<tr>
<td>Amara ya ‘muru</td>
<td>To establish and enliven for the purpose to attain divine.</td>
</tr>
<tr>
<td>Aqiqah</td>
<td>Ceremony of slaughtering a goat at the time of birth of a Muslim child.</td>
</tr>
<tr>
<td>Aql</td>
<td>Intellectual</td>
</tr>
<tr>
<td>Ammar maaruf nahi munkar</td>
<td>Encouragement of good deeds and prevention of evil deeds.</td>
</tr>
<tr>
<td>BayatAllah</td>
<td>House of Allah</td>
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<tr>
<td>Da’wah</td>
<td>Preaching</td>
</tr>
<tr>
<td>Deen</td>
<td>Faith/way of life</td>
</tr>
<tr>
<td>Dizkir</td>
<td>Glorifying Allah</td>
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<tr>
<td>Fard Ain</td>
<td>Moral duty of an individual in Islam.</td>
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<td>Fard Kifayah</td>
<td>Moral duty of community in Islam.</td>
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<td>Fasad</td>
<td>Degradation</td>
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<tr>
<td>Fiqh</td>
<td>Islamic Jurisprudence</td>
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<tr>
<td>Hablumminallah</td>
<td>Relationship between man and Allah.</td>
</tr>
<tr>
<td>Hablumminaalam</td>
<td>Relationship between man and the environment.</td>
</tr>
<tr>
<td>Habluminannas</td>
<td>Relationship between man and man.</td>
</tr>
<tr>
<td>Hijrah</td>
<td>Migration of Prophet Muhammad (pbuh) from Mecca to Madina in 622 AD.</td>
</tr>
<tr>
<td>Ibadah</td>
<td>Worship</td>
</tr>
<tr>
<td>Ihsan</td>
<td>Kindness/charity</td>
</tr>
<tr>
<td>Iktikaf</td>
<td>Sacred (area/place)</td>
</tr>
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<td>Term</td>
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<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Ilm</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Iman</td>
<td>Faith</td>
</tr>
<tr>
<td>Imam masjid</td>
<td>Leader of prayers in a mosque</td>
</tr>
<tr>
<td>Islah</td>
<td>Reform</td>
</tr>
<tr>
<td>Isnad</td>
<td>Volumes of Prophet Muhammad’s (pbuh) traditions.</td>
</tr>
<tr>
<td>Islam</td>
<td>The Truth</td>
</tr>
<tr>
<td>Isra and mi’raj</td>
<td>The ascent and journey of Prophet Muhammad (pbuh) to paradise.</td>
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<td>Isyak</td>
<td>Night (prayers)</td>
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<td>Jahiliah</td>
<td>Ignorance</td>
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<td>Jami’ masjid</td>
<td>Community or neighbourhood mosque</td>
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<td>Jamaah</td>
<td>Congregation</td>
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<td>Jihad</td>
<td>Struggle</td>
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<td>Jum’ah</td>
<td>Friday</td>
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<td>Ka’aba</td>
<td>The square building at the canter of Masjid al-Haram in Mecca.</td>
</tr>
<tr>
<td>Kariah</td>
<td>Parish</td>
</tr>
<tr>
<td>Khalifah</td>
<td>Vicegerent</td>
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<td>Khat</td>
<td>Calligraphy</td>
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<tr>
<td>Khayr</td>
<td>Concept of good</td>
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<td>Maal</td>
<td>Wealth</td>
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<td>Madinah</td>
<td>Madina</td>
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<tr>
<td>Madrasa</td>
<td>School of Islamic teachings</td>
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<td>Maghrib</td>
<td>Sunset (prayers)</td>
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<td>Makkah</td>
<td>Mecca</td>
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<td>Maqasid</td>
<td>Objectives</td>
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<td>Masjid</td>
<td>Mosque</td>
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<tr>
<td>Maslahat</td>
<td>For the greater good of society.</td>
</tr>
<tr>
<td>Mawlid</td>
<td>Celebration of Prophet Muhammad’s (pbuh) birthday.</td>
</tr>
<tr>
<td>Mihrab</td>
<td>A niche in the wall in mosque facing Ka’aba in Mecca.</td>
</tr>
<tr>
<td>Mimber</td>
<td>Pulpit in a mosque</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Mu’amat</td>
<td>Dealings between humans</td>
</tr>
<tr>
<td>Muhajarin</td>
<td>Migrants</td>
</tr>
<tr>
<td>Mu’azzin</td>
<td>The person who calls (adhan) call for prayers five times a day from mosque.</td>
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<tr>
<td>Muqarna</td>
<td>Decorations inside the niche wall in mosque.</td>
</tr>
<tr>
<td>Musalla/Namaz gah/ Surau</td>
<td>A small space used only for prayers in a commercial or Residential area.</td>
</tr>
<tr>
<td>Nafs</td>
<td>Human self</td>
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<td>Nasl</td>
<td>Posterity</td>
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<tr>
<td>Pbuh</td>
<td>Peace be upon him (abbreviation)</td>
</tr>
<tr>
<td>Qadi</td>
<td>Magistrate/Judge of Sharia court</td>
</tr>
<tr>
<td>Qibla</td>
<td>Direction of Ka’aba in Mecca</td>
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<tr>
<td>Ramadhan</td>
<td>The month of fasting in the Islamic calendar.</td>
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<tr>
<td>Rasul</td>
<td>Allah’s Executive</td>
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<tr>
<td>Salah</td>
<td>Prayers</td>
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<tr>
<td>Salam</td>
<td>Peace and harmony</td>
</tr>
<tr>
<td>Shariah</td>
<td>Islamic Law</td>
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<tr>
<td>Shura</td>
<td>Public participation</td>
</tr>
<tr>
<td>Suffah</td>
<td>A shaded structure in the Prophet’s (Pbuh) mosque for His companions/travellers to reside.</td>
</tr>
<tr>
<td>Sunnah</td>
<td>Prophet Muhammad’s (pbuh) actions and sayings (Traditions).</td>
</tr>
<tr>
<td>Souq</td>
<td>Mini mart</td>
</tr>
<tr>
<td>Taffakur/Tafaquh</td>
<td>Meditation</td>
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<tr>
<td>Takmir</td>
<td>Development</td>
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<tr>
<td>Tarawaih</td>
<td>A type of congregational prayer during the month of Ramadhan.</td>
</tr>
<tr>
<td>Tawhid</td>
<td>God’s Oneness</td>
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<tr>
<td>Ummah</td>
<td>Community</td>
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<td>Waqaf</td>
<td>Trust</td>
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<tr>
<td>Zakat, Sadaqah, Fitrah</td>
<td>Different types of charity contributed by Muslims.</td>
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<td>Acronym</td>
<td>Description</td>
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<tr>
<td>ADUN</td>
<td>Ahli Dewan Undangan Negeri (Member State Legislative Committee)</td>
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<tr>
<td>A/V</td>
<td>Audio Video</td>
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<tr>
<td>BAHEIS</td>
<td>Bahagian Hal Ehwal Islam (Islamic Affair Section)</td>
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<td>BBU</td>
<td>Bandar Baru Uda</td>
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<tr>
<td>DFID</td>
<td>Department for International Development (UK)</td>
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<tr>
<td>DO</td>
<td>District Officer</td>
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<td>BEQUEST</td>
<td>Building Environmental Quality Evaluation for Sustainability.</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>ES</td>
<td>Environmental Statement</td>
</tr>
<tr>
<td>FTI</td>
<td>Fakulti Tamadun Islam (Faculty of Islamic Civilization)</td>
</tr>
<tr>
<td>GIS</td>
<td>Graphic Information System</td>
</tr>
<tr>
<td>IAP</td>
<td>Integrated Assessment and Planning</td>
</tr>
<tr>
<td>IAIS</td>
<td>Institute of Advanced Islamic Studies</td>
</tr>
<tr>
<td>IDB</td>
<td>Islamic Development Bank</td>
</tr>
<tr>
<td>IIUM</td>
<td>International Islamic University Malaysia</td>
</tr>
<tr>
<td>IPD</td>
<td>Ibu Pejabat Polis Daerah (District Police headquarters).</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organisation.</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of nature</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>JAKIM</td>
<td>Jabatan Kemajuan Islam Malaysia (Department of Islamic Development Malaysia)</td>
</tr>
<tr>
<td>JAIJ</td>
<td>Jabatan Agama Islam Johor (Johor Department of Islamic Affairs)</td>
</tr>
<tr>
<td>JAIS</td>
<td>Jabatan Agama Islam Selangor</td>
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<tr>
<td>JKR</td>
<td>Jabatan Kerja Raya (Public Works Department)</td>
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<td>KEJORA</td>
<td>Lembaga Kemajuan Johor Tenggara (Central Johor Development Authority)</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Mechanical and Electrical</td>
</tr>
<tr>
<td>MAIJ</td>
<td>Majlis Agama Islam Johor (Johor Council of Islamic Cooperation and Development)</td>
</tr>
<tr>
<td>MJBBU</td>
<td>Masjid Jamek Bandar Baru Uda</td>
</tr>
<tr>
<td>MOSTI</td>
<td>Ministry of Science Technology and Innovation.</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PBUH</td>
<td>Peace Be Upon Him</td>
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<tr>
<td>PLUS</td>
<td>Projek Lebuhraya Utara Selatan (North South Expressway project)</td>
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<td>PPNJ</td>
<td>Pejabat Pembangunan Negeri Johor (Johor State Development Office)</td>
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<td>PWD</td>
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<td>QFA</td>
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<td>Rancangan Malaysia ke-9 (9th Malaysian Plan)</td>
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<td>C&amp;S</td>
<td>Civil and Structure</td>
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<td>SIA</td>
<td>Social Impact Assessment</td>
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<tr>
<td>SILENT</td>
<td>The Sustainable Infrastructure, Land-use, Environment and Transport Model.</td>
</tr>
<tr>
<td>SDP</td>
<td>Social Development Programme</td>
</tr>
<tr>
<td>SIRIM</td>
<td>Department of Standards Malaysia</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<td>SWT</td>
<td>Subhanahu Wa Ta’alla</td>
</tr>
<tr>
<td>UDA</td>
<td>Urban Development Authority</td>
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<td>Acronym</td>
<td>Abbreviation</td>
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<td>-------------------------------------------------</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UKM</td>
<td>Universiti Kebangsaan Malaysia</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Plan</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UPM</td>
<td>Universiti Putra Malaysia</td>
</tr>
<tr>
<td>UTM</td>
<td>University Teknologi Malaysia</td>
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<td>WCED</td>
<td>World Commission on Environment and Development</td>
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CHAPTER 1

INTRODUCTION

1.1 Introduction

The institution of mosque as an important *Ummah* or community development building, appropriate consideration must be given to its multi-functionalities. Based on this, mosques are to be designed and developed to provide the enumerated functions. These functions will provide the necessary needs of modern Muslim world and ensure the role of mosque in line with its initial concept. According to the Quran, *Ka’aba* was given many important fundamental functionalities.

*Ka’aba is the first community building appointed for mankind*

Al-Quran Surah 3, Verse 96

*it was a resort, a place of safety (sanctuary), and worship*

Al-Quran, Surah 2, Verse 125.

When Prophet Muhammad (Pbuh) migrated to Madinah from Macca, his first assignment relating to the development of Muslim *Ummah* was the building of the Prophet’s mosque. The mosque from the very initial stages acted as a real community centre and quickly grew into a complex of various functions. The main
roles and functions performed by the mosque were as a centre for congregational prayers, an education centre, a welfare and charity centre, Prophet Muhammad’s (Pbuh) administrative centre, a place for medical treatment and nursing, a detention and rehabilitation centre and a place for some leisure activities Omer, (2002), (2011b), Rasdi (1991), (1999), (2000), Mustari (2013). The Prophet’s (Pbuh) mosque was a nerve-centre of wide range of the happenings, ambitions and hopes of the fast-evolving Muslim community.

Thus, there are several lessons that can be learned and transferred from that to the development of mosques today. Adhering to the eternal idea of mosque, bracing the concept of the mosque as a community development centre or as a socially sustainable complex is crucial. The revival of the institution of mosque operating as a centre of attention of Muslims’ lives, physically, mentally and spiritually, must feature prominently in the ‘educational contents’ of the Muslim Ummah. “In Islam, the Muslims worship as a lifestyle, the idea of a mosque as a community centre is not separate from one another for their proper functioning and continued existence” Omer S. (2011a). Rasdi (1998), strongly considers placing numerous religious, welfare, educational, communal and economic roles and functions under the dominion of the institution of mosque and its perimeters.

The above factors and the other comparable facts are to be strictly adhered to and meticulously observed during the process of concept, planning, architectural design, construction and operations of mosques. Mosque architecture, must primarily be related to multidimensional world of functionality. The mosque is a small-scale version of Islam and Muslims. The stakeholders in the design and construction of mosques must seriously relook at the concept, design and functions of a mosque as a socially sustainable complex. The mosques must be designed to meet the needs of the modern Muslims to popularise its use amongst the masses. The institution of mosque therefore must lead the way in transforming, invigorating and galvanising the Muslim Ummah.

The Mosque should always contain as many purposeful facilities to function as a vibrant and effective community centre which benefits and provides facilities to the users. A mosque should be resourceful, valuable, relevant, and lively and alluring
to all members of the society. Mosques are to be people’s assets. Mosque is a house of Allah (BayatAllah), it must be conceived, designed, built and operated only as such.

1.2 Problem Statement

The current design of mosques fails to meet up to its initial concept and its eternal idea as a community development centre. The problem of mosque design relates specifically to the functions it must cater for. The functions of the building relate, in turn, to the main purpose of that building. Today, conducting of congregational prayers is the primary role and function of mosques. Thus, the spaces provided take into consideration mosque only as a place of worship in which meditation to god is its aim in terms of action and space (Rasdi 1998; Isa 1985). The attendance during the five daily obligatory prayers has been observed to drop down seriously. It is rare to find any neighbourhood mosque being more than 5% full to its capacity except for Friday congregational prayers and during the Eid celebrations. The two primary reasons for this problem could be; firstly, the true concept of the mosque is misinterpreted and the other reason being, the present-day mosque layout plan itself is unable to cater for the concept of community (Omer 2011a, Rasdi 1998, Isa 1985). The state of affairs is such due to the criteria for mosque design only considers the number of congregation to fit all sites.

For a building whose origin is rooted in a certain worldview, it is important to understand what that idea is in relation to its initial philosophy. A clear comprehension of the initial concept and the eternal idea of mosque is the only way to solve the issue of mosque design today. The Prophet Muhammad’s (Pbuh) conception of the mosque is very important because it represents the essence of the model of the Islamic way of life. The design of the modern mosque must be centred on the affiliation between the eternal idea of the mosque and the requirements of the present Muslim society.
The view that mosque is nothing more than a place of ritual religious worship is based on the independent judgement of its followers centred on various cultural, personal, social, and circumstances, Rasdi (1998). The values of Prophet Muhammad (Pbuh) and that of mosque patrons and stakeholders should learn to view the mosque project from a value centred perspective rather than the simplistic object-centred one. It is imperative to look at mosque design from the perspective of Islamic values in correlation to socially sustainable architecture. We are in dire need of a ‘value-centred’ discourse on mosque design and architecture rather than be trapped in an ‘object-oriented’ one. The community or neighbourhood mosque design and development needs to be improved to meet the challenges of present and future generations, this issue motivated this research.

Based on these problems, it became pertinent to have a framework that will guide the provision of social functions in neighbourhood mosques. This will ensure the needs and preferences of neighbourhood community that relates to social functions and community development. Furthermore, it will provide an environment for embracement of eternal idea of mosque that is based on the true spirit of Islam.

1.3 Research Gap

How mosques are designed and configured has significant implications on the development of the Muslim community, since the initial concept of mosque is the development of the ummah. Thus, social functions in neighbourhood mosques are crucial issue that cannot be undermined (Omer, 2002, 2011b; Rasdi 1991, 1999, 2000; Mustari, 2013). This corroborates the Islamic Tawhidic principles of mosque development which acknowledges that mosque is place for the development of Muslim brotherhood or ukuwah. Hence, it is important to study and evaluate social sustainability in mosques to appropriately manage human activities in them as well as prepare the design criteria that ensures that they conform to the eternal idea of mosque.
Based on the present-day mosque designs and functions and literature review, there is little or no attention given to social functions in a neighbourhood mosque design as was identified during field observation and documentation review of JKR Mosque Standards 2011. Furthermore, no major index or indicators have been developed to assess the social sustainability for mosque development in particular. Here it should be noted that, mosques should not be assessed for their contribution to sustainability but to determine, they are in themselves sustainable.

The task which this author has undertaken is, how we design for the future in a period of fast-tracking social, economic and technological change to propose a socially sustainable mosque assessment model which will be recognised and acknowledged today and followed by future generations.

1.4 Aim of Research

The main aim of this research is to develop a Socially Sustainable Assessment Model for Mosque Development in Malaysia

1.5 Research Main Question

How can the Malaysian neighbourhood mosques be more socially sustainable?
1.6 Research Objectives

The following objectives have been set out to achieve the aim.

a. To identify criteria of social sustainability compatible to mosque development in Malaysia.
b. To investigate mosque social functions compatible to social sustainability criteria.
c. To establish weight of social sustainable criteria in correlation to mosque social sustainability.
d. To propose a social sustainable assessment model for mosque development in Malaysia.

1.7 The Research Sub Questions

Four research questions that will cover the research context of developing an assessment model were generated and asked as below;

1. What are the criteria of social sustainability compatible to mosque development in Malaysia?
2. What are the mosque social functions compatible to social sustainability criteria?
3. What is the relationship of social sustainable criteria to mosque social functions?
4. How can social sustainable criteria be adopted for mosque development in Malaysia?
1.8 Research Methodology

In responding to the problem statement outlined and the research objectives, a process by which these objectives could be achieved efficiently is needed. This research adopted mixed mode methods where both qualitative and quantititative data was collected as in Newman (1998). The study employed in-depth literature review, observations, interview and questionnaire survey as procedure of data collection. The study further used close group discussion using synetics. This was done to identify and prioritise the importance of specific social sustainable criteria compatible to mosque social functions. Both types of data collected were analysed and synthesised to develop the assessment model. The research procedures are outlined as follows:

The steps involved are expended as follows:

i. Initial secondary data was collected through intensive literature review to identify the criteria of social sustainability compatible to mosque development in Malaysia by:
   - Reviewing literature on social sustainability and content analysis. This is to understand social sustainability, its role in determining the design of a public building and the physical spatial characteristics.
   - Follow up interviews were conducted with academicians, experts and professionals involved in mosque design and development. This was to understand mosque compatibility to social sustainable criteria.

ii. To investigate the mosque social functions compatible to social sustainability criteria by:
   - In depth literature review was carried out on extant literature to investigate mosque social functions compatible to the criteria of social sustainability.

iii. Field observation on existing neighbourhood mosques in Johor was conducted. This is to examine to what extent the neighbourhood mosque design in Johor is related to the social sustainability criteria and mosque social functions. A Case study of two National level award winning neighbourhood mosques was also conducted.
iv. Questionnaire survey was administered to stakeholders and professionals in different fields of mosque development, to establish weight of social sustainable criteria in correlation to mosque social sustainability.

v. The series of data collected was analysed using thematic content analysis for the qualitative data and descriptive and inferential statistics was used to analyse quantitative data.

Subsequently, expert validation was conducted to validate the developed socially sustainable assessment model for mosque development, using structured interviews. The detail methodology is presented in Chapter Four.

1.9 Significance of Research

There have been works carried out previously that describe the social functions of a mosque and mosque as a community centre, there are no studies that explain the design and development of mosque in Malaysia with respect to it being a socially sustainable institution. The importance of this study on the neighbourhood mosques in Malaysia can therefore be valued from two distinct aspects.

Firstly, this study is important as it will enhance the literature about mosques in Malaysia by showing how the current neighbourhood mosque design and development has not taken into consideration the social sustainability aspects. Secondly, through this study, a distinctive methodology is developed that will enable the stakeholders in neighbourhood mosque development to look at the design from multiple perspectives.

This methodology is noteworthy as it allows the amalgamation of socially sustainable criteria embedded in the neighbourhood mosque design. This study relates social sustainability and initial concept of mosque in mosque design to analyse neighbourhood mosque architectural spaces and functions. A description of the design guidelines of the modern mosque based on the socially sustainable
consideration of the characteristics of the eternal idea of the mosque and the consideration of the social needs and lifestyles of the modern Muslim society.

This demanding and organised method of scrutinising the design of a socially sustainable neighbourhood mosque, therefore, can be used as reference or guideline for mosque design in Malaysia as well as other similar studies.

1.10 Scope of Research

The scope of this research is limited to a review of principles and sub principles of social sustainability, mosque and its social functions-from the historic perspective and the Tauhidic vision of Islam in relation to the mosque design. Thus, this study focuses on the extent to which and how certain socially sustainable assessment model can be developed and introduced into the design of neighbourhood mosques in Malaysia to make them more community friendly.

It is crucial to identify the type of mosque and other parameters for this study. There are four general types of mosque found in the Muslim countries. For the purpose of this study and the most appropriate mosque for the greater benefit of the ummah is the neighbourhood or community mosque. The measurement parameters determined for the community mosque is to propose a socially sustainable assessment model.

1.11 Outline of the Thesis

This thesis consists of seven chapters. A summary of each chapter is outlined below.
Chapter One: This chapter develops the course of this study. It introduces the problem statement, purpose of research, scope of research, aim and objectives, research methodology and significance of the research.

Chapter Two: This chapter reviews the literature and addresses the current state of knowledge on social sustainability. It covers the concepts, definitions, criteria, principles, sub-principles and assessment criteria of social sustainability. The chapter concludes by discussing a matrix of assessment models and model development strategies.

Chapter Three: This chapter reviews the literature on history of mosque development, the concept of mosque in Islam, the functions of mosque, the concept of Tawhid in relation to mosque design and the role of mosque as a community development centre in Islam. The chapter concludes by reviewing Islam and the concept of sustainable development.

Chapter Four: This chapter covers document analysis of the neighbourhood mosques design and development in Johor and a comparative analysis of a mosque in Putrajaya, Malaysia. Johor State Islamic Affairs Department’s guidelines, criteria, policies and affairs for mosque development. The case study of two award winning mosques in Malaysia is also presented. This chapter helps to formulate the framework investigation for the study and recognises the gap in the related fields of knowledge that needs to be addressed.

Chapter Five: This chapter describes the research methodology comprehensively and includes the theories behind the research design, data collection methods and modes of data analysis. Semiotics (Appendix A1) is used as the basis for analysing the data on social sustainable criteria and mosque social functions. Hermeneutics (Appendix A1) approach is used as a reference for analysing data on existing neighbourhood mosque in Malaysia. Data from all sources is subsequently mapped, categorised and arranged in tables.

Chapter Six: This chapter presents results and discussions gathered from analysis of social sustainability criteria compatible to mosque social functions. Field
observation of neighbourhood mosques and the lessons learned the analysis of data and discussion on results. Strategies and design guidelines for socially sustainable mosque development, assessment framework and architectural description of the spaces that can be formulated based on the above findings. Development of social sustainable assessment model and expert validation.

Chapter Seven: This chapter presents the conclusions based on the findings. The chapter clearly demonstrates the research claim and makes recommendations for further research.

References: This present the outline of cited works in the dissertation.

Appendices: Consist of supporting documents that enhanced the conduct of the study.
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**Al-Quran:**

