

# ASPECTS OF SUSTAINABLE ARCHITECTURE: AN ISLAMIC PERSPECTIVE

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## ABSTRACT

*This paper argues for a much broader role of Green Building by emphasising the relevance of spiritual aspect to its practice values. It focuses on a worldview that is grounded in Islamic intellectual tradition that promotes a holistic vision of sustainability with three major aims. Firstly, it is to present a critical evaluation of the secular view of current Green Building practice that relies on rating systems as a measurement of value. Secondly, this paper seeks to highlight the fact that the spiritual aspect is absolutely essential, which seems to be the underlying quality that is missing in today's society. We have lost the spiritual understanding of nature that has been embedded in our tradition, particularly in the traditional Malay architecture. Lastly, it is to provide an alternative worldview by learning from the tradition that holds the most promise for sustainability. It connects revelations that contain a spiritual message for humans with its symbolic cosmology with all orders of formal reality. For this reason, instead of merely emphasising the physical aspect of the built form, we could ensure the best environmental practices by expanding the Green Building to include the important role of spirituality.*

**Keywords:** *Islamic spirituality, sustainable, traditional Malay architecture.*

## 1. INTRODUCTION

The words “green” and “sustainable” are used interchangeably in the practice of creating a structure that is environmentally responsible. According to Greenbuildingindex Sdn. Bhd. (2018), “Green building focuses on increasing the efficiency of resources use energy, water, and materials while reducing building impact on human health and the environment during the building’s lifecycle, through better siting, design, construction, operation, maintenance, and removal.” In keeping with this, the Green building rating systems exist to ensure that green building outcomes are being achieved. It rewards relative levels of compliance with specific requirements so that projects are not being harmful to the environment and natural resources (Stephen, Wheeler, & Beatley, 2014). Besides, it also reduces the overall impacts of the built environment and its surroundings. Therefore, in today’s world, there is no question that we must build green, as this will increase the positive results of human health impacts throughout the building’s entire life cycle.

Sustainability is seen differently from various perspectives and on various levels. With every viewpoint we take and every judgment we make, we must take into consideration that in keeping with sustainability goals without having thoughts, the physical world is all that exists. Spirituality is also identified as a necessary aspect of true sustainability (Carroll, 2004; Gupta et al., 2016). Judging from the way humans behave in the world that we live in today, empiricism and rationalism are equally essential in the system of knowledge. We constantly see that truth can be obtained in two different ways: through the senses and/or through reasoning (Allen & Goddard, 2017). For such a perspective, even the bases for many of the Green building rating or certification systems have also been established through an assessment based on rational ideas and empirical evidence.

We tend to give less priority to religious view in everyday life particularly due to the effect of secularism (Al-Attas, 2014a). The acquiring of knowledge today is largely from our senses with empirical and rational thinking; adding to that, sustainability and green concept that we understand were neglecting the spiritual thought (Carroll, 2004). A different understanding of its meanings is limited within the realm of physical reality, rather than its substantial qualities. This does not accord with religious perspectives that give equal attention to balance both the material aspect and the spiritual aspect of human life.

Nasr (2007) has argued that man's ego and the desire to conquer nature for economic motives and many others. It caused the environmental degradation we see today. When people are devoid of any spiritual values, often the exploitation of natural resources increases and done in a non-sustainable way (Phillips & Mighall, 2014). Such degrading values like greed and selfishness can mislead someone into attempts to take advantage, and green-related businesses are no exception. Their primary focus was to maximise profits rather than meeting the actual needs of sustainability. To some extent, there have been some failures in implementing sustainability policies to the current economic and social paradigm, which caused excessive consumption (Howes et al., 2017). Hence, an urgent need for a new economic paradigm arose from these problems focusing on degrowth; a reasonable downscaling of production and consumption.

In today's society, we are gradually losing the relationship between scientific knowledge and traditional wisdom. People have easily absorbed the empirical and materialistic understanding of the natural world because our modern attitudes perceive nature as an object for human purposes, and it does obscure the traditional religious view of nature (Caird, 1883). The thought is that only the material world that we live in exists and that religion is gradually separated from the physical aspect of nature. The idea that the universe consists of a sacred aspect that humans can learn from its phenomena is replaced by a way of life centred on human interests or values. We value sustainability with our sense of meaning. That is why we often see the cosmetic attempts toward sustainability than the real attempts occurring around us (Carroll, 2004).

Previous studies have shown that sustainable practice is not a new concept in Islam (Utahberta, Asif, & Hamzah, 2016; Omer, 2010). Many aspects were discussed especially on the physical and functional aspects of the mosque, including the Prophet's Mosque in Madinah that always be useful to people. Sustainability has always been one of the recognisable features in Islamic architecture that achieved from the total framework of Islam. There must have some connection with the intelligential world that underpins the Islamic architecture. Therefore, there exists a research gap to study the sustainability in its most inward and spiritual dimensions.

The objective of this study is to emphasise the spiritual aspects of sustainable architecture from the Islamic perspective. Especially for the Muslims, the Islamic vision of reality and truth as projected by al-Faruqi (1982) that are based on the worldview of Tawhid have so much potential to give positive emotions and feelings to a person. It is hoped that the concern about spirituality (rohani) will be able to lead an individual's thoughts and actions in achieving comprehensive sustainable architecture.

## 2. LITERATURE REVIEW

This section is an attempt to shed light on the term "secular" and how it translates into the current worldview. It will lead to a discussion on the effects of secular worldviews on the environment, and then present a critical evaluation of the secular view of the current Green building practices.

### 2.1 A Separation from Religion

The idea of secularism is "a separation from religion". In a broader context, this means a society functions without religion and sees religion as a separate part of daily life. Secularism began in the westernisation of Christianity, with a mixture of conflicting concepts in the seventeenth century, which led to the scientific revolution by Descartes, to "doubt" and "skepticism". This idea is consistent with his purely rational thinking, without reference to spiritual significance.

With regards to the environment, it is when nature is removed from the realm of sacred to secular. Historically in the West, this was a clear departure from the traditional society, one where religion was at the centre of every day; happened during the Renaissance (Caird, 1883). With the birth of humanism, society's interest gradually moved away from the Divine to scientific inquiry, and the soul was replaced by the mind.

Age of Enlightenment philosophers like Sir William Hamilton, who promoted empirical-rationalist, the worldviews and taught that humans have no faculty or organ of intelligence by means where he or she can perceive the realities of a (Divine) order. This is known as scientific or rationalist humanism. This change of mindset directly contradicts the religious claims of the existence of metaphysical realms and dehumanises mankind.

The belief system that proper means and tools can discover and predefined knowledge, which refers to the positivist, modernist worldview. The philosophers of the Enlightenment, based on the thinking of (i) empiricists like Bacon, Locke, Galileo and Newton; and (ii) rationalists like Descartes, Leibniz and Spinoza, sought to discover the true nature of the world around

them. The empiricists believe that careful observation would enable the human mind to determine its nature, while the rationalists believe that we can come to know about the world through logical reasoning.

## 2.2 A Secular Worldview on the Environment

“The West has developed technically in direct relationship to the decline of the Christian consciousness, for the simple reason that the ‘secularisation’ of nature, which permits it to be regarded as an object and so exploited technically.” During the time of the industrial revolution, where the height of philosophy resided in thinkers like Descartes and Hamilton, nature was perceived as a vast, open land. In the name of science and progress, humankind has given itself “licensed technical mind to desecrate the whole social context, the entire planet and to send out squads of scientific-technical experts to chart, dissect, ransack and ravage dispassionately, on the basis of empirical evidence and experiment...” (Sherrard, 2007, p73).

The ecological crisis is a result of the secular worldview that sees the environment as separate from humankind (Laitos, 2017). This explains how nature and the environment are removed from being connected with the Divine order and how it is part of a sacred realm to a worldview that sees nature as a commodity. One strategy to combat this ecological crisis brought about by mankind’s endeavour is the implementation of the Green Building standards. Buildings are now required to take consideration of its effects on the surrounding environment.

## 2.3 The Emergence of Green Building Practices

This awakening towards the catastrophic effects of environmental plunder and neglect was most notable during the industrial revolution. This scenario is popularly portrayed in Charles Dicken’s novels like *Oliver Twist*. Poor living conditions for the factory workers, child labours, polluted air and water, brought about many diseases and deaths in these early industrial towns. Therefore, it was in the twentieth century that the global ecosystem came with a resurgence of environmental concerns to increase the health, wealth and population (Kaya & Duman, 2017). Unfortunately, these macabre living conditions are not something of the past. In fact, it is a common condition in developing countries around the world that are changing their economy from agriculture towards industrial.

There are many initiatives at the international level promoting global debates about sustainability resulted in the implementation of efforts such as the “Earth Summit” which was held in Rio de Janeiro in 1992. It was the United Nations’ Conference on Environment and Development that emphasised the

need for solutions for sustainable development, with allowance for this it came out with a declaration known as Agenda 21. In its Chapter 7, it laid out directions for sustainable urban development (Stephen et al., 2014). Then, in 2003, the Green Building Programme was started after the European Union had come out with its Energy Performance of Buildings Directive (EPBD) (Mallgrave & Goodman, 2011).

## 2.4 The Current Green Building Practices

Many initiatives and strategies have been done to promote and implement Green buildings. It is clearly outlined in the policies, guidelines and programmes applicable to various types of buildings. The verification of green nature the project is measured through varied rating and certification systems. The responsibilities for Green building across the globe today have led to many versions of assessments and systems available to suit the local conditions, such as BREEAM in the United Kingdom, CASBEE in Japan, Green Marks in Singapore, and LEED in the United States (Iyengar, 2015). Indicators of sustainable development were also created to form a useful basis for decision-making with competitive measures.

Assessments encompass categories such as energy, water, air quality, materials, project management, land use and transportation to achieve the important goal of Green buildings. It measures how the building will affect land use, energy use, communities, as well as the indoors and outdoors environment in order to make improvements. These help to clarify which green standards need to be followed, which suggests that these goals should not be set for new buildings only but also for existing ones and temporary spaces.

In Malaysia, the Green Building Index (GBI) was first introduced in 2009. Since then, we have seen significant changes in how people look at buildings. Today, cooperation can be seen among all government agencies, local authorities, education and industries, who are involved at various levels working towards achieving the same interests, discussing barriers and identifying the needs for greater progress. There are many government agencies in Malaysia that are responsible for planning and executing various green policies, such as:

- i. Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC): Responsible to lead the National Science, Technology and Innovation (STI) Agenda. It has a mission to explore, develop and utilise STI to generate knowledge, create wealth and ensure societal wellbeing towards achieving a competitive, sustainable and inclusive high income economy.

- ii. Sustainable Energy Development Authority (SEDA): The main role is to administer and manage the implementation of the feed-in tariff mechanism under the Renewable Energy Act 2011 [Act 725].
- iii. Department of Environment (DoE), an agency under MESTECC: Responsible for ensuring sustainable development in the process of national development.
- iv. GreenTech Malaysia, an organization under the purview of MESTECC: To catalyze green technology deployment as a strategic engine for socio-economic growth in Malaysia, in line with the National Green Technology Policy 2009.
- v. Energy Commission: Responsible for regulating the energy sector, specifically the electricity supply and piped gas supply industries.

Every city across the world has given a top priority to sustainable urban development on their agenda (Teriman et al., 2009). Apart from the appointed government agencies, the local authorities and municipal council, such as the Subang Jaya Municipal Council (MPSJ) with its vision to be a smart and green city by 2030 (Nathan, 2014), also provide avenues to work with Green building standards by providing facilities. Every level in societies is now having more concern with their surrounding and aims for the sustainable built environment. The architectural practices in Malaysia today are geared towards green buildings and sustainable architecture. Many of the projects have won recognition and awards for the Green building owing to important elements of design concept such as energy efficiency, environmental protection, water efficiency and indoor environmental quality. The Diamond Building that was designed by NR Architect in Putrajaya is one of the best examples of the sustainable building that have good solutions, opportunities and creativity in reducing environmental impacts in our everyday lives.

Treating nature and the environment carried out in the name of science, the whole universe and its entities are sufficient to be controlled. The index systems of measuring the Green building characteristics are quantitatively centred to ensure that the completed buildings are not harmful to the human, man-made and environmental capital. It is not only concerning the buildings that are affected, but also the universe and living organisms like plants and animals. They can be explained and measured in terms of its structure and motion of its parts, as reflected in policy usage.

However, the reality is that humans have used natural resources to a great extent for their own economic ends (Laitos, 2017). There are still many cases where the modern industrial society creates the ambiance for an excessive density of population with chaos and greed. And the worst part is, the policy does not reflect reality and the nature of the universe. We quickly adopt environmental laws and policies based on what we want nature to work instead of how it works. Humans caused nature to turn from harmony into imbalance and disorder. The same worldview has been mentioned earlier, rising from the empiricism and rationalism present in our society up until today. It has a limitation to bring necessary changes, and in any case, this would not ensure genuine sustainability practices.

An attempt to foster the sustainability in the context of the universe best practice without a prior understanding of religious and spirituality will only provide a superficial overview. Spirituality is ultimately connected with, and cannot be regarded in isolation from the build environment. How can this be fostered to meet the contextual needs?

### 3. METHODOLOGY

This study analysed the sustainability theme, which obtained from two different areas; the current body of knowledge in the field of sustainability and spirituality that has a clear connection to the research problem. A review of substantial amount of articles from diverse sources on how the process of secularization began until the current time has revealed the impact of secularism on the environment. This furthermore has lead to the development of current Green building practices. The researcher was careful when analysing the reasons for incorporating green requirements into building projects to exclude threats to validity. The data were then described the central research problem; the secular worldviews on the environment and reality that environmental law and policies were adopted pertaining to what we wanted nature to work rather than how it does work.

Based on the review results, the analysis will be focusing on understanding the phenomena in a comprehensive way, with the aspiration that nature is not only for human beings. This has resulted in exploring the feasibility of the true sustainability in reference to religious beliefs. Built upon the concepts outlined by the Islamic intellectual tradition, this thought is to elaborate clearly the spiritual and symbolic dimensions. The idea that humankind is God's vice-regent on earth, and God is the Creator and Owner of nature could generates an observable outcome in giving the best recommendations to support a holistic sustainability. Much of this worldview came from the most prominent and influential Islamic philosopher, Abu Hamid Muhammad al-Ghazali with his

contribution in reviving the spiritual dimension of Islam. Several important themes in the Islamic perspective will be discussed particularly on the domains of the Islamisation of contemporary knowledge and of Muslim education by the eminent scholar Syed Muhammad Naquib Al-Attas; on the Islamic spirituality and cosmology by Seyyed Hossein Nasr and William Chittick; and the Islamic principles in the Malay aesthetic by Abdullah Mohamed, who is also known as Nakula. All these have inspirational to the researcher in articulating the Islamic spirituality in the context of sustainability.

The potential role of spirituality consistent with sustainable architecture was then evaluated. The following data were collected; the important role of religion in the environmental conservation and the concept of sustainability according to Islamic perspective. The Islamic view is referred to because sustainability is a fundamental principle that evolves with Islam. Towards the end, a close study of the concepts from the Qur'an and Sunnah revealed the relationship between spiritual and sustainability.

## **4. RESULTS AND DISCUSSION**

It is clear from the above explanations that spirituality is something that is lacking in worldview today. Nature has lost its sacred character in modern science. The concern on spirituality could not be applied directly to Green building assessment systems; it requires courage and commitment. Taking this into account, the Islamic view can bring the focus back to the fact that the spiritual aspect is absolutely essential, and make an immediate impact on our heart and soul. We can learn from the Malays in the past on how they concerned about both physical and spiritual aspects particularly in the traditional Malay architecture. In order to achieve comprehensive sustainable architecture, something must be included in the current system. Instead of complying with the systems of value that measure mainly on material aspects, this thinking needs explore to reach morality and harmonious relationship between the inhabitants and nature. The involvement in sustainable programmes can be implemented in both human-centric and god-centric approaches.

### **4.1 Green Building Today is Human-centric**

Today, many programmes cover a wide range of environmental topics and audiences for the purposes of obtaining Green building status. There are various reasons for them to incorporate green requirements into building projects but somehow, not all are doing with the intention to give a sense of value to the environment, but instead for the sake of an award or certification to prove that they are environmentally friendly so that they can obtain certain incentives.

The carrying capacity of the natural and social system in the practice of Green building is important for the projects to be truly sustainable. Genuine efforts for sustainability exist however, there are also pretentious claims. Despite the claims made by the marketing that their projects are environmentally sustainable, massive development with land clearance altering the natural landscape is still continued. Clearly, there is a need for a higher level of value systems that can help promote an idea in preventing selfishness and greed, which improves the quality of the built environment.

### **4.2 Returning to Religious Views of Nature**

After drawing a historical line and showing how we got to where we are now, there are certain fundamental concepts of sustainability that are so important besides the empirical facts and indicators of the physical evidence that we have created today.

As a by-product of living in a secular society, we have lost the innate spiritual integration of the environment. Being confined to the secular view and aspects, one could only see the benefits of Green building with very human-centric. Nonetheless, problems still exist with regards to the idea of sustainability in the built environment, in the way we view land as a commodity to be bought and sold to make profits. Men have tried as much to take advantages of the opportunities that nature has afforded them. The motif of development is to make profits, and only then it would be considered as a fair return investment (Ravetz, 2013).

It started with the Western neglect of metaphysics on environmental, economic and social aspects. When the spiritual dimension was underdeveloped, it makes us self-centred and divorced from the transcendent; everyone has to take his or her own position as stakeholders, consultants and builders. When religion is no longer seen as a significant purpose in the environment, there exist authorities or agencies, and certifies that set the parameters to rate and award the buildings. Everyone is trying to catch up and come up with solutions to minimise the environmental issues, to the point that they have so many concerns over measuring the success quantitatively with tools they have produced.

Twenty-six years after the 1992 Rio Earth Summit, we are still struggling for architecture to be environmentally sustainable. Sustainability must come with a sense of wholeness and deeper commitments. Our mind has the capacity to comprehend both the physical and spiritual aspects. Expanding the implementation of green building to include spirituality is in conformity with the religious view. In many religious traditions, there is no contradiction

in having both physical and spiritual considerations. The Muslims can access these ideas by seeking knowledge of the natural world and also receive knowledge of the invisible world through revelation. Spirituality is obtained by intellect and in conformity with the knowledge that integrates the belief in Allah as our creator (tawhid). Additionally, one can overcome the apparent limitations within these particular religious traditions that concern our morality to achieve higher levels of sustainability.

#### 4.3 The Various Spiritual Dimensions

The Federal Constitution in Article 3(1) states that 'Islam is the religion of the Federation, but other religions may be practiced in peace and harmony in any part of the Federation.' Regardless of our personal belief, the need to address spiritual and religious concerns in everyday life, there are many dimensions of spirituality in respect of cultural diversity in Malaysia. Besides the Muslims worldview, there are also other views that emphasise the spiritual idea of sustainability specifically to their religious affiliations such as Buddhism, Christianity and Hinduism. Each religion has its own unique understanding of what sustainability means in spiritual and relational terms. Spirituality has a strong connection with a quest for purpose and meaning in life, and it goes beyond the senses to a realm beyond. Every faith system also has the belief that there is a reality beyond the material world. These are a few principles across the diversity of spiritual perspectives that will give some impacts on the way we treat our planet.

Out of this diversity of religions, Islam in Malaysia makes up a total of 61.3% of the entire population (Department of Statistics, Malaysia, 2018). In the Islamic worldview, Allah is the creator of everything and nature is a cosmic book revealing the signs (ayat) of Allah. All that is happening on the planet is based on the law of the universe. Every created being is in a state of submission to Allah. The outward contents like seeing the blossom coming out on trees are the domain of nature that relates to the higher order of reality (Nasr & Chittick, 2007). These are among the proofs of God's existence in the way things are, and that can only happen with God's permission. In this regard, the built environment must be in harmony with its surrounding.

Buddhism is the second largest spirituality underscores the way of life in Malaysia after Islam, representing 19.8% of the entire population. It also stresses the relationship between human beings and the environment at the deepest level (Obadia, 2013). Besides, Buddhism itself is essentially about bringing all these elements of life into balance, whether on a personal level, or a community, or global level. This creates social harmony and equality, protecting the environment and ensuring economic prosperity. It accords with

the concept of sustainable development that is based on respect and concern for all life.

Meanwhile, 9.3% of Malaysians practice Christianity; just like in Islam, Christians believe that humans are God's stewards of the earth. God does not want to see the world polluted or we abuse the world's resources. Christianity also teaches us that God is the Creator and Owner of the universe. It has the principle of sustainability to guide environmental growth, by making sure that man does not compromise the future generation's needs with meeting today's needs. In relation to the wide understanding and moral creativity, the integration between environmental sciences and theological ethics is needed (Jenkins, 2013).

About 6.3% of Malaysia's population practice Hinduism. This religion suggests that simple living is a model for the development of sustainable economies. Protecting the environment is one of the most important duties in Hinduism. Furthermore, the earth can be seen as a manifestation of the goddess and must be treated with respect. Likewise, they also have the practices of meditation and bonding rituals, which are not necessarily centred on the religious faith, but still are a highly individualised form of transcendence (Kalita, 2015).

All of these traditions share the same concern that humans should respect the natural environment, and each has unique interpretations of its associated values. It is clear that the man does not own anything on this planet earth, and therefore we need to respond with these views. In fact, many of these ideas have been implemented successfully in the built environment of the Malays in the past.

#### 4.4 Spiritual Values in the Traditional Malay Architecture

In the past, the utilisation of natural resources in the daily life activities has grown in the Malay tradition. Their architecture is the embodiment of sustainable living as their living was surrounded by nature. Certainly, in the traditional Malay houses, timber constructions with many design features are environmentally sustainable (Gibbs, 1987). Not only on how they are responsible towards natural resources, there are many other aspects of the community's needs that are also worth to be taken into consideration in the practices of Green Building today.

From the Islamic perspective, the physical world that we see is not everything that makes up the whole universe. According to al-Ghazali (2015), nature is a book of symbols. Everything that exists in this world that we live in is a symbol of something in the higher world. Nasr (2007) therefore elaborates

that the universe has a sacred aspect that contains a spiritual message for humans. With a greater understanding to our relationship with the natural world and the purpose of the world is to remind us of Allah, the Muslims look at the universe as a reflection of God. The cosmos and all of its phenomena contain meaning and with that, Islam has brought so much concerned and responsible for maintaining the peace and harmony with nature. This belief has certainly affected the Malays' positive thoughts and attitudes towards environmental values.

In Islam, knowledge is not entirely a property of a human mind, and even the value judgment is not everything based on human reason and sense experience (Al-Attas, 2014b). Assimilation of the Islamic principles from the previous beliefs in all aspects of the Malay life has happened throughout the Islamisation of the Malay world. The knowledge included the spiritual aspects acquired through the teaching of *tasawwuf*. The Malays attempt to harmonise the outer dimensions of Islamic law and worship with the inner dimension of spiritual disciplines up to the ultimate stage of *ihsan*, which is the relationships between the body and the soul.

An excellence in worship is the highest station in spiritual development for the Muslims. Following with this impact of Islamic teaching, the Malays believe in balancing physical and spiritual aspects (Al-Attas, 1963). The physical world exists and is sustained with the spiritual world, and it cannot exist independently. Emphasising the spiritual matter does not mean we ignore the practical or functional aspects of architecture. When the traditional Malays built their houses, the spiritual element superseded the physical element. They saw everything spiritual and this world is ephemeral. This perspective provided an essential faith to persist and accept the universe as it is.

#### **4.5 The Islamic Spiritual Ideas of Nature**

Islam is concerned with maintaining everything that interrelates in the universe, and that is governed through the cosmic laws. The divinely inspired concept of sustainability revolves around the Islamic principles will also be comprehended with the knowledge of intellect. This knowledge occupies a higher level of the hierarchy in religious that includes the spiritual retreat with Allah, with His Grace, His magnificent and perfection (Nasr, 2003). It conceptualises and is interpreted with the Islamic vision of the cosmos, which is bound to the spiritual ideas that have sustained even in the Malay tradition. The creation of the world based on the original natural order (*fitra*) can be comprehended with a world-system in reference to the Qur'an and Sunnah. These are the three essential concepts for understanding the spiritual ideas of nature pertaining to sustainability:

From the above table, the three important concepts reflect the knowledge of the whole universe, which tell us that this world is not limited to physical, but also the spiritual. Everything in this world is in a state of well-ordered and must be maintained. The above Quranic ideas of the universe are not only physical, made up of stars and planet, but also comprise a spiritual cosmos that filled by non-physical entities. Not only it can reveal the hidden and symbolic meanings, it is also rich in the Divine Nature.

From an Islamic spiritual understanding, this world has meanings and symbols of a higher degree of reality. The structure of the cosmos contains a spiritual message for humans, which is the same as the revelation that comes from the same source of religion. Assimilation of Islamic belief with the value-based considerations and attitudes does make one respect the nature and become aware of its role as a reminder. Having the connections between Green building assessment and traditional value systems, particularly through the Islamic intellectual tradition, can renew our spiritual understanding of nature. Besides having a vision of nature's hierarchical order, a thorough understanding of the way the universe is functioning will affect humans' responsibilities of themselves, God, the cosmic order. Having thus briefly explained the relationships of the sustainable characters to the spiritual aspects, we shall next see how it has also become a tremendous source of inspiration in the aesthetical elements in the traditional Malay architecture.

#### **4.6 The many levels of existence**

As further elaborated by Chittick (2010), the main characteristics of the Islamic traditionalist cosmology include the hierarchy of reality that can be divided into two; the visible world and the invisible world. The physical world (*Alam al-shahadah*), which is observable, and the metaphysical world (*Alam al-ghayb*), which is unseen or unreachable, can only be discussed on religious bases. It mostly gathered from the religious scriptures of Islam and with Islamic intellectual tradition.

Behind the harmony of the cosmos, there is a concept of man's mystical quest for the Divine, which is also known as the Way (*tariqah*) or the journey towards Allah. People tend to use a diversity of expressions in order to represent this concept. For example, Sufism translated this important structure orders as the cosmic hierarchy. It has several layers that are arranged vertically accordingly to its different stages (*tingkat*). The levels of cosmic existence begin with the Source of the cosmos, which is the Divine. "The invisible realm is closer to God and more real than the visible world" (Chittick, 2013). Another example that represents this concept is explained by Nakula (1985), has clarified the symbolic idea to remind human about the different stages of the universe. For

that, he used the tiered pyramid roof of Masjid Kampung Laut in Kelantan as an analogy to demonstrate the levels of cosmic order (see Figure 1).

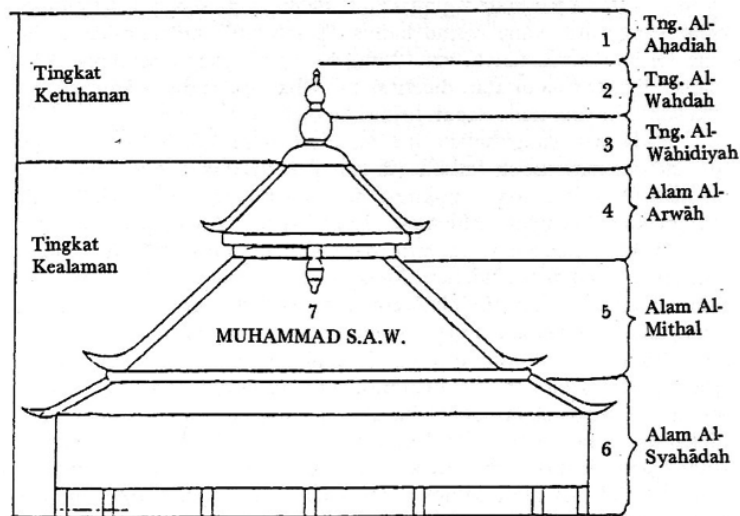


Figure 1: Masjid Kampung Laut, Tumpat, Kelantan as the analogy to demonstrate the levels of cosmic order (Nakula, 1985, p. 38).

Each horizontal segment of the mosque indicates a particular level of existence. This provides a view of how the physical worlds and spiritual world are related to each other, in the vertical direction towards Divine essence. These levels of existence, from the highest order of reality to the lowest level, clarified the nature of the quest.

The foundations of the Islamic spirituality are rooted in the Qur'an and the Prophet's sayings, inspirable from the awareness of Allah and to live in accordance with His will. Spirituality can be attained through intellectual intuition and not simply through the process of logical reasoning. Besides being responsible for and being in harmony with the environment, this sort of view emphasises the practice with the heart that comes from the purification of the soul. It is only then that we are aware of the fundamental aim to preserve the good relationship between God and His creations. Without failure, we should treat the natural environment with love and respect because the very structure of the cosmos contains a spiritual message for man. In this context of sustainability, architecture should respond to nature as it really is instead of the way that what we wish it to be.

Table 1: The spiritual ideas of nature in contact with sustainability.

1) <i>Tawhid</i>	<p>Allah created all things in heaven and on the earth. Everything in the universe comes from Him and returns to Him. The oneness of God (<i>tawhid</i>) is the basis of the Muslim faith and a general view of reality. This principle is derived from the Qur'an:</p> <p style="text-align: center;"><i>Say: He is one God: God the eternal, the Uncaused (Absolute) Cause of all being. He begets not, and neither is He begotten; and there is nothing that could be compared with Him (Qur'an 122:1-4).</i></p> <p>The best description of the characteristics of Allah above is in essence with <i>tawhid</i>. The Qur'an tells us that God in His wisdom has created all forms of existence for a finite duration of time, which is known only to Him. The purpose of creation is in fact for God to be known by man; His perfect instrument of knowledge. Everything we do in this world is for Allah.</p>
2) Protecting the Nature	<p>The purpose of man's creation that is to be a <i>khalifah</i> on earth:</p> <p style="text-align: center;"><i>And [mention, O Muhammad], when your Lord said to the angels, "Indeed, I will make upon the earth a khalifah." They said, "Will You place upon it one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?" Allah said, "Indeed, I know that which you do not know" (Qur'an 2: 30).</i></p> <p>As the vicegerent (<i>khalifah</i>) of Allah on earth, the role is to protect nature and to delight the created beings, not to conquer it. It is an obligation for the <i>khalifah</i> on earth to preserve and conserve the natural environment. Without spirituality, nature is only seen as something that can be conquered and manipulated for own use without thinking about the consequences. Spiritual knowledge could turn them into the inward dimension and see nature as a symbol that exists in a certain frame. It is only through this transparent reality that will make them understand the real sense.</p>
3) The Concept of "Alam"	<p>In regard to the relation between God, man, and the environment, it is important to understand the meaning and role of cosmos (<i>Alam</i>). This world exists for a purpose and a reason. This world is a place to prepare for the afterlife.</p> <p style="text-align: center;"><i>Those who remember Allah while standing, sitting or (reclining) on their backs, and reflect in the creation of the heavens and the earth, (saying): 'Our Lord! You have not created this in vain. Glory to You! Save us, then, from the chastisement of the Fire (Qur'an 3:191).</i></p> <p>In Islam, the knowledge of <i>Tassavuf</i> is to raise people to a higher station of spirituality. It deals with the internal feelings to cleanse the self and take account of our daily behaviour. This is an important aspect of the spiritual journey that involves observing and contemplating the nature. <i>Alam</i> has always been a "reminder" that gives awareness, where we contemplate it as a mirror reflecting a higher reality.</p>

## 5. CONCLUSION

It is clear that the Green building rating systems are effective tools and widely used to measure the success of sustainability. However, the extensive



outcomes cannot rely merely on these current mechanisms of measuring sustainability. Regardless of how much emphasis sustainability is placed on the physical aspects, there must always be the spiritual side. They are two sides of one coin that must be addressed together to ensure a holistic result is achieved. Sustainable architecture should refer to Islam perspective because no sphere is left in which the beliefs and actions of Muslim. On a personal level, a heart is an inner self that playing a very important role in fostering sustainability. It is essential to achieve sustainable development at the heart of an individual.

Besides, from the Islamic perspective, the inner aspects (rohani) in its fullness enabled one to see sustainability on the spiritual level. Spirituality is guidance for people to penetrate into the meaning of nature. The whole life of man in all its spheres should be an expression of complete submission to the Creator of this universe. Hence, it is a value added to the current effort in creating awareness of sustainable architecture. This ensures the right outcome of fixing the imbalance that exists in humans today, from trying to dominate nature to act responsibly and attain harmony with nature.

With the objective to emphasis the spiritual aspects of sustainable architecture from the Islamic perspective, this worldview encompasses all domains of life from physical to spiritual realms ensured all the benefits were shared with everyone equally. Spiritual teachings convey the nearness and love of God, which is incredibly important for us to be accountable for the use of natural resources and affirm the sacred quality in nature. Addressing positive attitudes by placing oneself in a bigger cosmological picture, with the role of humans to protect nature can lead an individual's thoughts and actions. This natural and balance order is in corresponds to a cosmological view where humans are the most comprehensive beings and the most manifestations and attributes of God.

Sustainability is not a new concept. To deny its link with spirituality is just like cutting ourselves off from the roots. The Malays in the past have lived sustainably and spiritually in every aspect of life with the Islamic influences. Both sustainability and spirituality that interlinked in the traditional Malay architecture are enhanced in this study. They have clearly shown to be important elements in the Malay architecture. In addition, further research may explore opportunities for developing spiritual consideration to be integrated with the existing education programmes to ensure sustainability. As religion and faith have long been applied in our tradition, genuine sustainability based on spirituality is consistent with its underlying values. In light of this, the traditional Malay architecture is a model to be emulated and applicable to the Malaysian society.

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