Inspirations of the Religious Worldview for Sustainable Development

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Abstract

The global community today is extremely concerned with the accelerating deterioration of the natural environment and its destructive consequences on life on earth. '*Sustainability*' is a critical idea to deal with many of critical questions posed by ecological crisis. Among many others, Man's attitudes toward nature and his methods of interacting with the natural world have been identified as root causes of environment problems. It is undeniable that the accelerating growth of human population on earth puts more pressure on natural resources to satisfy the increasing needs of mankind, but the green technologies guided by moral values should be capable of tackling this major problem. Man's attitudes toward nature are determined by his worldview which emanates from a religion or culture; while his methods of interaction with nature are determined by advancement in science and technology. These two modes of factors, i.e. religious and scientific, will identify the root causes of environment crisis with regard to man's activities on earth. The major objective of this article is to investigate how religious worldview may contribute in developing strategies for sustainable development, especially of United Nation for the entire global community. Taking *built environment* as unit of analysis, the article exposes the religious wisdom to the theory of sustainable development. It emphasizes that the power of science and religious wisdom must be integrated for better management of both the natural environment and development of human community. The article concludes that the religious worldview can play a crucial role to change man's view, his method of interaction with nature, and emphasizes protection of the natural environment from destructive activities of mankind

Keyword: *Religious worldview, sustainable development, needs theory, Maqasid al-Shariah*

Abstrak

Masyarakat global hari ini amat bimbang dengan kemerosotan alam semulajadi yang pesat dan kerosakan ini melibatkan manusia dan juga kehidupan di bumi. Kelestarian adalah idea utama bagi menangani kebanyakan soalan-soalan kritikal yang diberikan oleh krisis ekologi. Antara yang lain, sikap manusia terhadap semula jadi dan kaedah mereka untuk berinteraksi dengan alam semula jadi telah dikenal pasti sebagai punca masalah alam sekitar. Tidak dapat dinafikan bahawa pertumbuhan populasi manusia yang pesat di bumi menambahkan lebih banyak tekanan ke atas sumber semula jadi untuk memenuhi peningkatan keperluan umat manusia, dan teknologi hijau yang berpandukan nilai-nilai moral harus mampu menangani masalah utama ini. Sikap manusia terhadap semulajadi ditentukan oleh pandangan beliau yang berasal dari agama atau budaya; manakala kaedah beliau interaksi dengan alam semula jadi ditentukan oleh kemajuan dalam bidang sains dan teknologi. Kedua-dua mod faktor, iaitu agama dan sains, akan mengenal pasti punca krisis alam sekitar yang berkaitan dengan aktiviti-aktiviti manusia di bumi. Objektif utama kajian ini adalah untuk menyiasat bagaimana pandangan agama boleh menyumbang dalam membangunkan strategi pembangunan lestari, terutamanya Rancangan Pembangunan Bangsa-bangsa Bersatu untuk seluruh masyarakat global. Menggunakan persekitaran dibina sebagai unit analisis, Kajian ini mendedahkan kebijaksanaan agama kepada teori pembangunan lestari. Ia menekankan bahawa kuasa sains dan kebijaksanaan agama perlu disepadukan untuk pengurusan yang lebih baik bagi kedua-dua persekitaran alam semulajadi dan pembangunan masyarakat. Kajian ini menyimpulkan bahawa pandangan agama boleh memainkan peranan yang penting untuk menukar pandangan manusia, kaedah berinteraksi dengan alam semula jadi, dan menekankan perlindungan persekitaran semula jadi daripada aktiviti kerosakkan oleh manusia.

Kata kunci: *Pandangan agama, pembangunan lestari, teori keperluan, Maqasid al-Shariah*

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1.0 Introduction

The real capacity of nature to meet the basic needs of the successive generations virtually depends on two factors: (1) a healthy natural environment, and (2) the ability of man to unfold the internal dynamics of nature. Although mankind across the history has been interacting with nature to acquire his essential needs, there was no clear link between development requirements of human society and environmental health. The peaceful relationship of man and nature is mainly due to two basic factors: Man's attitude toward nature was positive, while his method of interaction with it was peaceful. Religion and culture are the major sources of the first; while science and technology are source of the second. In fact, fusion of science and technology (mind and hand), although they have grown separately, has provided man with unlimited power to interact with nature. Such power may turn to be destructive if not integrated with moral values and religious wisdom.

The basic presupposition of this article is that the religious worldview can play a central role in application and reactivation of the three aspects of sustainable development; i.e. ecological equilibrium and development of economics and human society. Providing the internal dynamism that emanates from thoughts and his basic beliefs, the worldview changes the way man looks and interacts with nature.

1.1 The Root Causes

Considering man's attitudes toward nature and his methods of interaction, the contemporary literature on ecology understands the root causes of environmental crisis in two broad contexts: Religio-cultural causes and technico-scientific causes. These two modes identify both the theoretical and practical bases of the problem. There are, however, various categories within these two contexts, such as cultural, psychological, biological, economic, ethical, and others. Some authors focus on religious factors as major causes, while others emphasize on technico-scientific factors. Lynn White (1967) for instance, emphasizes that "*What people do about their ecology depends on what they think about themselves in relation to things around them*". Accordingly "*Human ecology is deeply conditioned by beliefs about our nature and destiny-that is, by religion*".

Considering the religious worldview as a single root cause, according to Moncrief (1970), however, is insufficient to answer all questions on ecological problems. Therefore, Moncrief identifies various factors, holding that "*The forces of democracy, technology, urbanization, increasing individual wealth, and an aggressive attitude toward nature seem to be directly related to the environmental crisis*". He further explains that "*The Judeo-Christian tradition has probably influenced the character of each of these forces. However, to isolate religious tradition as a cultural component and to contend that it is the 'historical root of our ecological crisis' is a bold affirmation for which there is little historical or scientific support*" (Moncrief, 1970).

In fact, Moncrief's observation that religion has influence on the character of each force emphasizes that the religion is the major source of man's attitude toward nature which determines the nature of his activities. Therefore, the religion as most powerful source of worldview plays a crucial role to deal with root causes of ecological crisis. The term "Religion" as appears in this article, however, indicates only the faith in Omnipotent and Omniscience God, or "*Tawhid*" in Islamic terminology. Such an established faith in Divine God, according to Einstein 1941, gives high principles of aspiration, liberates mankind from the bondage of egocentric cravings, desires, and fears; and which help formation of the ultimate goals for life and ethical judgments as means to reach it (Einstein, 1940).

The great religions of the world have been playing a crucial role, across human history, to formulate methods of man's interpretation of the world, physically and metaphorically, and determine modes of his interaction with nature for his own ends. Man's interaction with nature was not only for material purposes, but also for spiritual and intellectual ends. Understanding the religious worldview, therefore, might be regarded as a key factor to develop strategic proposals for dealing with the environmental problems on earth.

1.2. Sustainable development

The critical consequences of environmental change due to human activities on earth, have alerted the global community and shifted the attention of the researchers to this important issue. In fact, a deep consciousness on the importance of ecological equilibrium is growing across the global community. This rediscovery of the indispensable link between environmental health and human life has inspired the concept of 'Sustainable Development' (SD), which has been brought into the focus, may be for first time in human history, during the General Assembly of the United Nations (UN) in December 1987. SD is defined as "The development which implies meeting the needs of the present without compromising the ability of future generations to meet their own needs". In this sense, SD formulates a new approach to

provide a creative method of interaction with nature that allows extending the quality of life throughout the generations without compromising their rights of any generation to benefit from bounties of nature.

The idea of sustainable development has provided the framework for development strategies and the guiding principles for environment policies to UN and its member states as well. The three major aspects of sustainable development are related to environment, society, and economics. These are the key principles that underlay all others aspects of strategic plans and guidelines for decision making of all countries. In practice, the sustainable development requires integration of economic, environmental, and social development across the territories and generations. The final goal of sustainable development is to make a prosperous progression in human community, socially and economically, to protect the natural environment, and create equity among the generations in sharing the bounties of nature (Emas, 2015).

2.0 Sustainability, Science and Technology

With accelerating growth of the world population and increasing demand for resources, man has to develop new methods of interaction with nature to maintain life on earth and to satisfy his basic needs. The idea of sustainable development is introduced as basic approach for this crucial purpose. Sustainability, therefore, has become a framework for development plans and a common topic for various research disciplines across the globe in the last few decades. The core idea of sustainability is based on three dimensional goals, which includes environment, social and economic development. (Explained in UN Development Goals in Table 1 below).

It is no doubt that scientific knowledge and advanced technologies are the major tools to achieve the developmental goals; but the real challenge is posted by the question: how to solve the paradox and reconcile between the developments needs of human society that based on advanced technologies and environment destruction that follows. Many researchers have concluded that there is co-relationship between community development and environmental degradation. In other words, as human societies grow and develop, the environment declines. Human activities on earth have profoundly changed some ecologies of the natural world. Even unintentionally changes in human ways of living often affect nonhuman nature. (White, 1967). The bitter fruits of human intervention to nature are obviously demonstrated by the current environmental changes and ecological crisis, which is a matter of urgent global concern. (Leichenko & O`brien, 2008).

The history of human civilization is characterized by diverse periods of success followed by crises and declining periods. Responding to the challenges posted by nature (Kearney, 1955), mankind has never ceased efforts to find means to satisfy his basic needs. Giant cities, great walls, pyramids, and many other wonderful things from the ancient civilizations are concrete evidences that human has been capable of making considerable changes in nature for his own interest. Ibn Khaldun has used the term "`*Umran'* to highlight the progressive achievements of human civilization and development (Ibn Khaldum, 2000). Science and technology according to White (1967), have been the major instruments of man to make the planet earth a better place for his survival and progress. Science is description, explanation and understanding of the natural phenomena; while technology is application of scientific knowledge in practice. Due to the crude technologies used, the ancient civilizations were able to explore only a very humble part of the world. Many civilizations declined and run out of history not only due to technology, but also lack of the idea of sustainability and exhausting of their resources.

The modern science and technologies, on the other hand, have made great transition and significant transformation in the way man interacts with nature; it was shifted from traditional norms to the modern methods, and provided the power, new concepts, and new strategies to interact with natural phenomena. Modern scientists and engineers, aided by the power of advanced technology, are planning for eco-settlements, eco-municipalities and smart cities. But, the aggressive intervention of man into nature, however, has created many problems to the environment and to human community as well. Therefore, the idea of sustainability is developed for proper management of resources and their better utilization to make the Mother Nature capable of satisfying needs of the entire human generations. Sustainability, in this context, is the capacity to endure properties of the planet earth by method of maintenance, renewal, and sustenance. It means responsibility for long-term maintenance of sources which has environmental, economic, and social dimensions. Sustainability in this sense is applicable for both natural and human aspects. For instance, sustainability in ecology describes how biological systems remain diverse and productive over time, and all necessary preconditions for the well-being of humans and other organisms. Long-lived and healthy wetlands and forest are examples of sustainable biological systems.

Table 1: The UN Development Goals

Goals	2000-2015	2015-2030
Goal 1	Eradicate extreme poverty and hunger	End poverty in all its forms everywhere
Goal 2	Achieve universal primary education	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
Goal 3	Promote gender equality and empower women	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Reduce child mortality	Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
Goal 5	Improve maternal health	Achieve gender equality and empower all women and girls
Goal 6	Combat HIV/AIDS, malaria and other diseases	Ensure availability and sustainable management of water and sanitation for all
Goal 7	Ensure environmental sustainability	Ensure access to affordable, reliable, sustainable, and modern energy for all
Goal 8	Develop a global partnership for development	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9	-	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10	-	Reduce inequality within and among countries
Goal 11	-	Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 12	-	Ensure sustainable consumption and production patterns
Goal 13	-	Take urgent action to combat climate change and its impacts
Goal 14	-	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15	-	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16	-	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17	-	Strengthen the means of implementation and revitalize the global partnership for sustainable development

*Note: The new UN Agenda (2015-2030) contains 17 Sustainable Development Goals with 169 targets; while the Millennium Development Goals (2000-2015) were eight.

The two major approaches to reduce the negative impacts of human interaction with nature and enhancing ecosystem services are: environmental management and management of human consumption. Studies on environment ecology have suggested three broad criteria for ecological

sustainability: (i) renewable resources should provide a sustainability yield, i.e. the rate of harvest should not exceed the rate of regeneration; (ii) for non-renewable resources there should be equivalent development of renewable substitutes; (iii) waste generation should not exceed the assimilative and recycling capacity of nature. (Enger, Smith & Bockarie, 2000).

3.0 The Framework for Sustainable Development

As indicated above, the idea of sustainable development was initiated and promoted by the United Nations (UN) since the end of the Second World War as an urgent matter that concerns the entire human community. *The Millennium Development Goals* (2000- 2015) and the *Agenda for Sustainable Development* (2015-2030) were strategic plans proposed by the UN as a frame of reference for member states in their development policies (see Table 1). Introducing the new development proposal, entitled "*Transforming our World: the 2030 Agenda for Sustainable Development*", the new UN Agenda (2015-2030) contains 17 Sustainable Development Goals and 169 targets which demonstrate the scale and ambition of the Agenda; while the Millennium Development Goals were eight. The new goals are grounded upon the early Millennium Development Goals and complete what these did not achieve. The three dimensions of sustainable development are: the economic, social and environmental. However, the Agenda reminds, these dimensions are integrated, indispensable, and balanced (UN Document of Summit for Adoption of the Post 2015 Development Agenda).

For successful results in sustainable development, all UN member states should be guided in their development polices and decision makings by principles of the UN Development Goals (2015-2030).

4.0 Sustainability in Built Environment

Sustainability in built environment has become a niche area for various disciplines of modern studies. Engineers, architects, developers, as well as governments across the world, all have involved in this area in order to tackle human impacts on environment (Abidin, 2010). The term "*built environment*" indicates a man-made "*paradise*", which refers to human-made resources, versus natural resources, and infrastructure designed to support human activity, such as buildings, roads, parks, restaurants, grocery stores and other amenities.

Conventional practices of global development have caused many problems, such as climate change due to greenhouse gas emissions, and reduction in limited natural resources. The built environment and operation of associated industrial activities have been identified as the main consumer of resources and the major contributor to the climate change and other environmental issues. As such, a significant improvement of global environmental conditions could be achieved through effective interventions at planning, design, construction and management of built environment. Accordingly, the sustainable built environment has been identified as a global trend in the infrastructure development. Various road maps have been suggested by modern studies for effective implementation of built environment sustainability. It has been suggested that the effective implementation of sustainability in built environment begins with vision for sustainability at global industry, and project levels; and continue with a road map for implementation at strategic and operational levels (Vanegas, 2003).

4.1 The Basic Elements of Sustainable Built Environment

Sustainable development aims at improving and increasing quality of life for all generations. It aims at promoting the infinite development on earth and its physical resource and its capacity to absorb waste. The concept of sustainable built environment implies that the new instructions are designed to achieve balance between human socio-economic activities and the natural environment's capacity to provide resources and absorb the waste. As explained by David Grierson "Today the ecological footprint of the world population and economy exceeds the total productive area or ecological space available on the planet. Essentially, we have gone beyond that which the environment can afford. Excessive levels of production and consumption, resulting from economic growth models that equate success with material throughput are causing excessive levels of environmental impact" (Grierson, 2009).

Jorge A. Vanegas in his "*Road Map and Principles for Built Environment Sustainability*" has outlined five key elements of built environment sustainability as following: "First and foremost, built environment sustainability is about people, i.e. well-being of mankind: body, mind, heart, and soul. It is about continuously enabling, maintaining, and enhancing the quality of life for people within families, communities, organizations, and society. To achieve this goal, built environment sustainability requires continuously enabling, maintaining, and enhancing four other elements: (i) the quality, integrity, and performance of the built environment, i.e., facilities

and civil infrastructure systems; (ii) the quality, integrity, and performance of the industrial base production systems for products, goods, and services; (iii) the quality, integrity, and health of the natural environment (i.e., air, water, soil, and biota); and (iv) the quality, integrity, and availability of the resource base (i.e., natural, social, and economic capital) and of the built environment and the industrial base. In addition, sustainability requires managing effectively the influences stemming from social, cultural, political, and regulatory systems, from economic and financial systems, and from environmental and ecological systems. The industrial base and the built environment provide the fundamental foundation upon which a society exists, develops, and survives.

4.2 Sustainable Cities

A sustainable city is defined as being "organized so as to enable all its citizens to meet their own needs and to enhance their well-being without damaging the natural world or endangering the living conditions of other people, now or in the future. It is also crucial that eco-cities create and maintain viable connections and relationships to their hinterlands: The mode of adaptation of cities to their hinterland ultimately defines their sustainability or lack of it (UNEP, 2010). Sustainable cities are known by various names, such as eco-cities, eco-settlements, smart cities, and others. The general characteristics of sustainable cities, towns, villages, or buildings are as following:

- They are designed to minimize ecological footprints;
- They are designed to maximize human potentials.
- They are designed to repair, replenish and support the processes that maintain life.

5.0 Inspirations of Religious Worldview for Sustainability

Sustainability does not mean that human should avoid the proper interaction with nature to make changes; instead, it means the positive interaction with nature to create harmony and balance between consumption and reproduction or between damage and recreation. In this situation, people are tools for both the destruction and the construction; therefore integration of science and religious wisdom is necessary. "Respect for Nature" is one of six fundamental values of the Millennium Declaration of United Nations that outlines sixty targets for peace, development, the environment, human rights, etc., which are essentials for sustainable development in the twenty-first century. To promote Respect for Nature, the declaration announces that: "Prudence must be shown in the management of all living species and natural resources, in accordance with the precepts of sustainable development. Only in this way the immeasurable riches provided to us by nature can be preserved and passed to our descendants. The current unsustainable patterns of production and consumption must be changed in the interest of our future welfare and that of our descendants. The precept of "sustainable built environment" is the mode of prudence in environment management which aims to promote the value and respect of nature in UN declaration.

In fact, the rationale and the philosophical foundations of "built environment" are found precisely in the religious worldview of the Divine Scriptures. Unlike the evolution theory of modern biology, the Holy Books, such as Bible and *Qur'an*, inform us that mankind was originated in "Paradise" a place where man can satisfy all his basic needs and enjoy a comfortable live without any considerable efforts. The term "Sustainability" in this sense might be conceptualized as equal to the Qur'anic term "*Khulud*" which is interpreted as an eternal way of life and unlimited enjoyment. The endless and eternity are the characterizing features of the Divine built environment 'Paradise', wherein man enjoys everything, including his endless life. However, the Divine Scriptures inform that, due to his destructive behaviors and immoral acts, man was descended into the planet earth, the new home, where nothing is for free but by its own price. In this new home man has lost, forever, all privileges he had over other creatures in the Divine-made Paradise. In this new environment he must use both his talent (science) and hand efforts (technology) to recreate his own "Paradise" on earth. Furthermore, man in this new home must develop precepts of sustainable development to overcome the various challenges that will be posted by nature such as limited resources, lack of food, diseases, sickness and death.

The Divine Scriptures also inform us that due to the remarkable capabilities that granted to man as a moral agent which qualified him to be a vicegerent of God on earth (*Khilafah*), would make him capable to overcome challenges posed by nature by utilization of both his creative talent and the protective wisdom of morality. The Divine Scriptures conclude that, if man perfectly managed this world, based on Divine Guidance, he would be capable of returning to Divine made Paradise to reclaim his original position in a life to come.

The above philosophy of religious worldview about the role of mankind in relation to nature should provide the theoretical foundations of man's

interaction with nature and inspire the modern mind for sustainable built environment.

5.1 Basic Requirements for Man-made Paradise

The above philosophical framework of sustainable built environment which is revealed in Divine Scriptures provokes human attention and invites many questions, the most significant of which can be formulated as the following: what are the basic requirements that enable man to perform his duty as a vicegerent of God on earth (*Khilafah*)? In other words, what does man need to construct his own "Paradise" on earth? i.e. the sustainable built environment. The answer to this important question has been the real challenge to mankind throughout the history. The key factors which might indicate to suitable answer, however, can be summarized in three points. The first basic point is recognition of the major causes of descending from Divine Paradise into the planet earth. The second crucial point is that man must be aware of the fact that "sustainability" which is a general characteristic of divine paradise (*Khulud*) is essential in all his interactions with nature. The basic characters of sustainability are, actually, demonstrated by nature itself, which are no destruction or waste in natural processes, creation and recreation process is the distinguishing feature of nature. Furthermore, nature only functions with certain patterns that follow exact and specific methods which could inspire human intellect for investigation and learning. Therefore, there is no destruction in the natural environment but total balance. The third factor is that man must be aware of the fact that the two basic instruments that he has been granted to perform his duty in the planet earth are knowledge of facts and conductive behaviors. The Scriptures inform us that man has gained the debate over Angels based on knowledge of all names; while he gained the favour of God against the devil by his moral behavior. Hence, he must utilize these two weapons perfectly and properly for his success and to maintain a meaningful life.

A careful reflection upon the religious worldview is essential to uncover the general principals of sustainable built environment in modern world. The knowledge is important to develop "built environment" which depends mainly on technology and scientific progress, while moral values are essential for "sustainability" which depends on religious wisdom.

5.2 Environment and Sustainability in Islamic Account

The holy *Qur'an* is the main source of Islamic worldview and thought. It has introduced essential ideas related to nature and the natural phenomena to emphasize the Islamic worldview. The study of Qur'anic verses on ecology and environment, based on modern science, can inspire researchers to make great insights and develop new theories on environment matters. Osman Bakar, the eminent philosopher of modern science, outlines some of the Qur'anic inspirations on environment as following: first, the idea that earth's destiny is linked to the rest of the cosmos and man; second, the uniqueness of the earth as a life-supporting planet; third, the harmonious relationship between organisms and their environment; fourth, the ecological balance and equilibrium (Bakar 2007).

Besides the principal ideas, the *Qur'an* gives especial focus on sustainable built environment through the concept of eternal life for everything '*Khulud*' in hereafter. The idea of eternity and continuous enjoyment is articulated by the divine revelation as basic character of the next life. The environment and picture drown by the holy *Qur'an* about the Heaven (Divine-Made Paradise) in the next life can inspire and motivate human mind for sustainable built environment in this world. Below are some Qur'anic verses which promote the precept of sustainability:

- *"Those who have faith and do righteous deeds, they are the best of creatures, Their reward is with God: Gardens of Eternity, beneath which rivers flow; they will dwell therein forever; God well pleased with them, and they with Him: all this for such as fear their Lord and Cherisher"* (*The Qur'an* 98:7-8).
- *"The parable of the Garden which the righteous are promised, beneath it flow rivers: perpetual is the enjoyment thereof and the shade therein: such is the end of the Righteous; and the end of Unbelievers in the Fire"* (*The Qur'an* 13:35).
- *It is He Who sendeth down rain from the skies: with it We produce vegetation of all kinds: from some We produce green (crops), out of which We produce grain, heaped up (at harvest); out of the date-palm and its sheaths (or spathes) (come) clusters of dates hanging low and near: and (then there are) gardens of grapes, and olives, and pomegranates, each similar (in kind) yet different (in variety): when they begin to bear fruit, feast your eyes with the fruit and the ripeness thereof.*

Behold! in these things there are signs for people who believe" (*The Qur'an* 6:99).

- "*Truly this is what ye used to doubt, As to the Righteous (they will be) in a position of Security, Among Gardens and Springs, Dressed in fine silk and in rich brocade, they will face each other, So; and We shall join them to Companions with beautiful, big, and lustrous eyes, There can they call for every kind of fruit in peace and security, Nor will they there taste Death, except the first death; and He will preserve them from the Penalty of the Blazing Fire*" (*The Qur'an* 44:50-56)

- "*Or, Who has created the heavens and the earth, and Who sends you down rain from the sky? Yea, with it We cause to grow well-planted orchards full of beauty of delight: it is not in your power to cause the growth of the trees in them. (Can there be another) god besides God? Nay, they are a people who swerve from justice*" (*The Qur'an* 27:60).

- "*But those who believe and do deeds of righteousness, We shall soon admit to Gardens, with rivers flowing beneath,- their eternal home: Therein shall they have companions pure and holy: We shall admit them to shades, cool and ever deepening*" (*The Qur'an* 4:57).

Sustainability and eternity are basic characteristics of the next life; everything there is beautiful and everlasting; gardens, fruits, shadows, and palaces with rivers flowing beneath. This beautiful picture described by the Qur'anic verses about the next life should attract the attention of modern architects and engineers for sustainable built environment.

6.0 The Essences of Sustainable Built Environment

Sustainability is essentially aims to preserve and maintain life on earth, especially human life. Hence preserving the natural resources and securing human needs are major goals of sustainability. The key categories of resources relating to the basic human needs are food, peace, and energy. In other words, a key element here is the linkage between human wellbeing and his security. What to be sustained, based on this element, can be classified into two basic categories: (i) natural systems, and (ii) human needs. The first category includes resources, biodiversities, ecosystems and life support systems. The main objective of this category is to serve the second category which includes human life and well-being of human community. The main objective of sustainability in both cases is to preserve life on earth,

human cultures and civilizations. Meeting the basic human needs is, thus, a major objective in creating a sustainable development. Abraham H. Maslow in his eminent work "*A Theory of Human Motivation*" (Maslow, 1943) has identified the basic categories of human needs. The basic idea of the theory is that human behaviors are motivated by five basic needs which classified hierarchy as following:

1. The material needs: such as food and water;
2. The safety needs, such as security, shelter and health;
3. The emotion needs, such as family, spouse, and friends;
4. The self-esteem needs, such as recognitions, respect, and achievement; and
5. The self-actualization needs, which means the total satisfaction that achieved when all basic needs are fulfilled.

It is obvious that the central point of needs theory is the material needs; the spiritual dimension of mankind is totally absent. In fact, spirituality also is one of the basic human needs that could be the basic source of motivation. The materialistic approach was unavoidable result of the modern philosophy of science, which removes the spiritual aspects of humanity from scientific scope. In other words, *Theory of Human Motivation* was designed to satisfy requirement of prevailing philosophy of modernity, which concerns only with tangible facts of the physical world; therefore it puts the material needs at the top of the hierarchy. The critical fact is that, the idea of sustainable build environment would be totally absorbed by this materialistic view of the world if religious wisdom is disintegrated from modern science and technology. Sustainable build environment, in this sense has only economic value and it means to sustain our material needs, not to maintain the natural resources for the future generations.

To avoid such unpleasant conclusion, Abu Ishaq Al-Shatibi, in his theory of *Maqsid al-Shari`ah*, which means the principal objectives of Islamic legal system, introduces another approach. Al-Shatibi identifies the basic human needs based on essentials of human interest or *Maslaha*, which addresses both materialistic and spiritual aspects of mankind. He, first classifies the entire human needs into three basic categories: (i) Necessities (*Daruriyyat*); (ii) needs (*Hajiyyat*); and (iii) supplementary (*Tahsiniyyat*). Necessities are the basic needs that essential for humanity, at both individual and community levels. According to Al-Shatibi, Necessities (*Daruriyyat*) are five, in hierarchy identified as: (1) preserving the

religion, (2) preserving human life, (3) preserving human mind, (4) human progeny, and (5) preserving the property. The term 'property' in this broad context includes everything beneficial to mankind that can be owned, such as premises and natural resources. Needs are everyday requirements which make human live extremely hard without it, such as economics, politics, and social communications. Complimentaries are much less needed things, with regard to the above two levels, such as self-actualization needs and enjoying a luxurious living (Al-Shatibi, 2004). According to Al-Shatibi, and other Muslim scholars, such as Al-Ghazali and Fakhrul Razi, the entire Islamic legal system aims at preserving and maintaining the above three levels of human interest, which encompasses all aspects of human needs, materially, spiritually, and intellectually.

The above psycho-ecological approach toward preserving and enhancing environmental health is explored by considering some pertinent aspects of Islamic socio-intellectual history and their relevance for rearticulating and reapplying authentic Islamic environmental ethical values in today's world (Setia, 2007).

6.1 Sustainability of the Fundamentals

The above analysis emphasizes that awareness of the essences in the process of sustainable build environment is necessary. Awareness must be created among all the stakeholders to enable them to differentiate between goals and means in the process of incorporating the concept of sustainability in the practical life and in infrastructure development. According to the prevailing approach, the concept of sustainability promotes only the economic value of human interaction with nature, not necessarily prevention and maintenance of natural resources. It does not promote equity between people which depends fundamentally upon a balanced distribution of wealth and resources among communities and between generations.

Essentials of sustainability, in Islamic perspective, are the above five categories of Necessities (*Daruriyyat*) which are crucial to maintaining human life on earth. Therefore, the top requirement of human community in Islam is to preserve human life as intrinsic goal and whatsoever that can maintain human life and wellbeing human community such as ecological equilibrium, sustainable use of natural resources, and environment management. On the other hand human society must declare war against all activities which endangers life on earth, such as wars, hunger and diseases. Preserving of property is used in Islamic tradition in a sense that encompasses good management of environment and sustainable use of the natural resources.

The above two theories of Al-Shatibi and Maslow can explain how religious worldview introduces itself to science. The two theories are obviously interrelated to each other in term of their subject matter, but their major point of distinction is found in their philosophy as well as in their scope. Basic needs theory of Maslow addresses mainly the materialistic aspects of human needs, while theory of *Maqasid* addresses the all human: material, spiritual, and intellectual. Another point of divergence between the two theories is the method of the authors; Maslow is a psychologist, therefore his theory definitely based on the descriptive approach; that is mere description of the observable phenomena as they are taking place on the ground. On the other hand, Al-Shatibi is a theologian; therefore his theory is based on normative approach that integrates knowledge with values. He does not describe what he observes, but he positively interfering to shape what *should be*. That is the main factor behind the priority given to the religion in the hierarchy of Al-Shatibi's theory of *Maqasid*. It is also should be noted that, according to the normative approach of Al-Shatibi, not all human desires and tendencies can find equal chance for growth and flourishing.

7.0 Conclusion

Changing our perceptions, values, and beliefs towards nature is the strategic approach to deal with environmental crisis. The religious worldview plays crucial role to achieve this important goal by developing the positive attitude toward nature. Infusion of moral values in modern science and technology will solve the problem of aggressive interaction with nature. Man equipped with green technologies and moral values can develop a peaceful paradise on earth. The strategic method to create such environment is to introduce the religious wisdom as a framework to articulate the growing consciousness on sustainable interaction with nature. The crucial role played by the religious worldview in addressing the question of sustainable development is the only aspect that is missing in the UN development Plan. Integration of knowledge and values is necessary to achieve goals of sustainable development, especially to protect the natural environment from destructive interactions of man. Beside inspiration for built environment, the religious worldview provides both the guiding principles and moral commitment for a peaceful interaction with nature. The eminent historian of science George Sarton notes that many civilizations of human history ended up into failure,

not for lack of intelligence, but rather due to lack of moral values (Sarton, 1927).

The question of values might provide the key idea about how the modern world can deal with the paradox of development of human community and deterioration of eco-systems. The above analysis establishes the fact that the religious wisdom and scientific progress are the two major components of sustainable development. Both, science and religious wisdom empower man to develop the built environment, but science gives knowledge and enlightenment and religion gives norms and moral principles. Science makes instruments and religion constructs the purpose and hope. Science brings the sustainable settlements into greater harmony with its own self, while religious wisdom brings them into greater harmony with nature and environment. Therefore, our architects, designers, and policy makers must take in consideration the spiritual dimension of society in construction of eco-settlement communities. In other words, the new built environment settlements must be centred by spiritual enhancement buildings such as church and mosque.

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