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## **BIODIVERSITY CONSERVATION STRATEGY IN MALAYSIA: A REVIEW FROM AN ISLAMIC PERSPECTIVE** (Strategi Pemuliharaan Biodiversiti di Malaysia: Satu Pandangan dari Sudut Islam)

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### **ABSTRACT**

*The rapid decline of world's biodiversity and increasing need of natural resources to accommodate the growing population suggest that the current western philosophy of conservation biology is not achieving its mission and objective as expected in Southeast Asia. The existing religious tools and channels for conservation should be seriously considered. There is a high potential in achieving high standards of conservation biology if management of natural resources adheres to the fundamental principles of Islam in Malaysia. However religious approaches are mainly limited to Islamic norms and treated independently in many parts of Southeast Asia, including Malaysia. Therefore there is an urgent need to synergize Islamic concepts in conservation biology with the existing governance system. It is believed if Islamic concepts are genuinely practised and amalgamated into the existing implementation and governance structure in conservation biology, the future for biodiversity in this region will be bright.*

**Keywords:** Islamic perspective, biodiversity, conservation strategy

### **ABSTRAK**

*Ancaman serta pengurangan biodiversiti dunia sejajar dengan keperluan tinggi untuk sumber alam semulajadi terutamanya untuk menampung penduduk yang semakin meningkat, menunjukkan bahawa falsafah serta ideologi barat biologi pemuliharaan tidak mencapai misi dan objektif seperti yang diharapkan di Asia Tenggara. Kemudahan dan saluran agama Islam yang sedia ada untuk pemuliharaan perlu dipertimbangkan secara serius. Malaysia mempunyai*

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*potensi yang tinggi dalam mencapai standard biologi pemuliharaan yang tinggi sekiranya pengurusan sumber asli berpegang teguh kepada prinsip-prinsip asas Islam. Walau bagaimanapun, pendekatan agama kebiasaannya terhadap kepada norma-norma Islam harian dan diasingkan dari sistem pentadbiran awam di kebanyakan negara di Asia Tenggara, termasuk Malaysia. Justeru itu, keperluan untuk menggabungkan konsep Islam dalam biologi pemuliharaan dengan sistem pentadbiran yang sedia adalah amat penting. Sekiranya konsep Islam yang asas di praktis dan digabungkan dalam sistem pelaksanaan dan struktur pentadbiran yang sedia ada, dalam konteks biologi pemuliharaan, maka pemuliharaan biodiversiti di rantau ini mempunyai masa depan yang cerah.*

**Kata Kunci:** Biodiversiti, pemuliharaan, Perspektif Islam

## INTRODUCTION

The world is experiencing its sixth great extinction event, exclusively attributable to human activities (Kingsford et al. 2009), and the impact in the Southeast Asia region has been particularly dramatic (Brook et al. 2003; Sodhi et al. 2004; Sodhi et al. 2009; Sodhi et al. 2010; Wilcove & Koh 2010). It is known that Southeast Asia has the highest rate of deforestation compared to any other tropical region where approximately 75% of the original forest and 42% of its biodiversity is expected to be lost by 2100 (Sodhi et al. 2004). Therefore these habitats face a high risk of eradication and localized extinction.

Meyer et al. (2000) identified 25 regions in the world known as hotspots having the highest diversity and endemics, which contain the sole remaining habitat of 44% of the earth's plant species with 35% of its vertebrate species. Of these 25 regions, Southeast Asia claims two of the world's hotspots of diversity, Sundaland and Wallacea. Besides hosting a variety of flora and fauna, Southeast Asia also boasts a diverse range of religion, cultural and ethnic background despite the fact that most of the range countries have received strong influence from the western society through colonization including Malaysia. Sundaland, the third most threatened eco-region in the world claims the highest Sunni Muslim population and is socio-politically divided into Indonesia, Malaysia, Brunei and Singapore. Malaysia, one of the most developed Muslim countries in the world is rising economically and has tried to adopt various Islamic values in its governance. Indeed development is an utmost essential in the developing regions such as Sundaland but this could not be achieved to its highest level if the basic ecological processes are not

sustained. Therefore this manuscript attempts to create a potential guideline to promote conservation biology through sustainable development from an Islamic perspective to replace the failing western philosophy of conservation biology in Malaysia.

## **SUSTAINABLE DEVELOPMENT FROM ISLAMIC CONTEXT**

Islamic traditions and values provide a very effective, practical and comprehensive solution to many of the current unprecedented environmental absurdities (Manzoor 1998).

*Mischief has appeared on land and sea because of (the meed) that the hands of men have earned, that (Allah) may give them a taste of some of their deeds: in order that they may turn back (from Evil) (Al-Rum 30: 41).*

The Islamic foundation for an ecological ethics and moral principles rest firmly on the Al-Quran and Hadith (Statements or actions of Prophet Muhammad PBUH) where the notion on *Khalifah* (vicegerent) and *Amanah* (trusteeship), shows communal obligation to the environment.

*There is none amongst the Muslims who plants a tree or sows seeds, and then a bird, or a person or an animal eats from it, but is regarded as a charitable gift for him (al-Bukhari, Sahih al-Bukhari, Volume 3, Chapter 39: Agriculture).*

*The world is sweet and green (alluring) and verily God is going to install you as vicegerent in it in order to see how you act (Muslim, Sahih Muslim, Kitab al-Riqaq, Chapter 36: Heart Melting Traditions).*

Literature reviews suggest that the Islamisation of law proceeded more methodically in Malaysia compared with elsewhere in Asia (Chong 2006). Therefore there are plenty of potential in facilitating, proposing policy and methods for practising sustainable development from an Islamic perspective. Islamic tradition and values could provide very effective and comprehensive answers and could be used as a tool to address the current state of the environment. In practice, this includes incorporation of Islamic ethics in governance; Islamic Vision, and in more recent year Islamic governance 'Islam Hadhari,' which emphasizes development, knowledge and plurality with

ten principles, including “safeguarding the environment”. One does not even have to be Muslim to benefit from such pedagogy which embraces justice and knowledge. Islam stresses acquiring knowledge through hearing, seeing and reasoning (Tabbarah 1988). The Quran itself puts equal emphasis on natural science, psychology, history, geography, sociology, astronomy and other fields of knowledge.

*Travel through the earth and see how God did originate creation*  
(Al-`Ankabut 29: 20).

As nature belongs to God, it has been given to man merely as a trust and man’s right to dominate over nature comes with conditions to protect it and use its resources sustainably. Privilege to utilise natural resources was given to humans on a guardianship basis, which basically means the right to use another person’s property on the understanding that what is entrusted will not be damaged, destroyed or wasted. The Prophet also abstain his companions from wasting any element from the nature, even ablution using the running water of a stream. The Prophet’s persistence towards conserving even the ‘running water of a stream’ suggest that he places value for nature and this fundamental primary principle of a higher objective should regulate behaviour whatever the situation and the consequences of human action may be (Ramadan 2009). The Quran also tells us how to use the resources.

*Eat and drink: But waste not by excess, for Allah loveth not the wasters* (Al-A`raf 7: 21).

However most of these pedagogy and concepts are only applied to specific technicalities and not the greater aim of sustainable natural resource use. According to Islamic law the basic elements of nature such as land, water, fire, forest, and light were considered to be the common property of all, not just for human beings, but of all living things (Khalid & O’Brien 1992). The Quran and Hadith frequently call to preserve equilibrium or balance, to be moderate in everything, and not to seriously disturb the order in nature.

*And the Firmament has He raised high, and He has set up the Balance (of Justice), in order that ye may not transgress (due) balance. So establish weight with justice and fall not short in the balance* (Al-Rahman 55: 7-9).

In addition to this the Quran repeatedly warns mankind not to cause destruction on earth.

*And when it is said to them: "Make not mischief on the earth," they say: "We are only peacemakers." Verily! They are the ones who make mischief, but they perceive not (Al-Baqarah 2: 11-12).*

*And do not do mischief on the earth, after it has been set in order, and invoke Him with fear and hope; Surely, Allah's Mercy is (ever) near unto the good-doers (Al-'A'raf 7: 56).*

*And defraud not people by reducing their things, nor do evil, making corruption and mischief in the land (Ash-Shu'ara' 26: 183).*

## **RADICAL REVOLUTIONS IN CONSERVATION BIOLOGY**

Without immediate 'mental revolution and cultural transformation' at various level the future of conservation seems rather bleak in Malaysia. The lack of local awareness, knowledge, interest and ownership in local conservation biology could be partially blamed for the losses. Additionally obsession with routine Islamic norms focuses the available resources and attention on technicalities and not on higher goals (Ramadan 2009). Despite the fact that these 'religious tools' and opportunity are available there are lack of awareness and commitment from the related State and Federal agencies to utilize this multi-pronged synergistic approach to enhance conservation biology strategy. Islamic principles should not be treated independently rather the link between religion and natural resource management are needed to establish in Malaysian environmental policy. Recent studies show that the use of religious weekly sermons in mosques has increased awareness and can elevate public concern on conservation issues (Clements et al. 2009). This illustrates that the majority of Malaysian Muslims will be able to adopt and accept new concepts and ideas if presented from a religious point of view backed with appropriate reference and examples from the Quran and Sahih Hadith. However there is a need in consistency and regularity in using such approach so that the environmental issues are presented and reminded of its importance. With the current state of tropical rainforest, the approach of using Al-Quran and the Hadith as a conservational tool in Muslim dominated countries of Southeast Asia should be considered of paramount importance as Islam has been regarded as a way of life (*Ad-deen*) and will likely be accepted by many, including non-Muslims.

Thus the compilation, accurate translation, and application of the Hadith and Quran from a conservation biology perspective should be greatly encouraged and spearheaded by the religious department, higher education centres, joining forces with the Ministry of Science, Technology and Innovation with other related government agencies that manages natural resources in Malaysia. A steering committee should be formed at the State level to execute these strategies and using the existing department and implementing agencies this information should be disseminated accordingly. These implementing process need to be carefully guided and the results should be monitored regularly in order to measure the level of success. The education system should encourage younger generations to seek and appreciate knowledge of the environment and its principles, in doing so passion on a selected subject could be triggered and principal goals could be potentially achieved. Additionally in order to increase public awareness and positive perception these teachings should be synergized at various education stages including tertiary education with relevant courses and activities focusing biodiversity conservation from the Islamic perspective. Religious classes at primary and secondary school level should circulate these messages through incorporating them in the syllabus. Injecting moral and ethical values and stewardship in conservation biology from an Islamic perspective would encourage the younger generation to view sustainable use and development from a broader viewpoint, not just on ecological needs. While at the tertiary education level, Islamic principles in ecology need to be highlighted. For instance Islamic Civilisation is a compulsory subject taught in most Malaysian universities, but little is discussed from an ecological point of view. Therefore, emphasizing how Islam promotes ecological sustainability should be incorporated in such teaching and learning processes.

Much conservation effort in Southeast Asia including Malaysia depends on International funding and aid (e.g. Charismatic species: Sumatran rhinoceros, *Dicerorhinus sumatrensis*; Indochinese tigers, *Panthera tigris jacksoni*). Muslims should aim to do it oneself without major dependency on foreign aid exemplifying stewardship and ownership of local biodiversity. This will promote young Malaysians to participate and engage on conservation and sustainable development without depending too much on foreign aid and recommendation which may result in legally binding contracts and requirements and may not be suitable to meet socio-political aspects of the local society. Especially since Islam is considered the best way of life (*deen*) then it should be able to lead over other ideologies and worldviews for a greater cause. Islam in ecology is certainly not a new concept but this could be the first attempt to identify the core Islamic principles related to conservation biology; in the South East Asian context and how they could be applied in preventing or minimising environmental

impacts and in enhancing positive impacts. Thus any perspective or suggestions to promote discussion and improve this concept should be encouraged as this is the first step to potentially to incorporate biodiversity conservation values from an Islamic perspective to develop a practical comprehensive strategic policy and action plan at both Federal and State level.

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