



ISSN NO. 2320-5407

Journal Homepage: [-www.journalijar.com](http://www.journalijar.com)

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/11988
DOI URL: <http://dx.doi.org/10.21474/IJAR01/11988>



INTERNATIONAL JOURNAL OF
ADVANCED RESEARCH (IJAR)
ISSN 2320-5407
Journal Homepage: <http://www.journalijar.com>
Journal DOI: 10.21474/IJAR01

RESEARCH ARTICLE

THE FEASIBILITY OF ISLAMIC ASTROTURISM IN MALAYSIA

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Manuscript Info

Manuscript History

Received: 01 September 2020
Final Accepted: 05 October 2020
Published: November 2020

Key words:-

Astrofiqh, Cosmofiqh, Islamic Astronomy, Observatory, Astrotourism, Archaeological Sites, Dark Sky

Abstract

Islamic astrotourism is a form of tourism that involves the sites with astronomical, historical and archaeological interest such as observatories, mosques, museums, and planetariums. This article discusses a study on the feasibility of Islamic astrotourism in Malaysia. This article aims to enlighten the role of Islamic astronomy may significantly contribute to tourism. A qualitative method was used in this article using instrument such as document analyses, interviews and observations. The result shows that there is a tight collaboration between Islamic astronomy and tourism in some activities held by astronomical institutions and travel agencies, including of amateur astronomers and astronomical organizations such as tours, conferences, carnivals, and publications. In addition, it will show the efficiency of involvement of such organizations in the development of Islamic astrotourism in Malaysia.

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Introduction:-

United Nations World Tourism Organization (UNWTO) defined tourism as comprises the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes. According to the latest UNWTO World Tourism Barometer (2018), international tourist arrivals grew by a remarkable seven percent in 2017 to reach a total of 1322 million and is expected to continue in 2018 at a rate of four to five percent. Within this growing period, tourists are looking for the same type of experiences as other tourists, but increasingly wanting facilities that reflect their values, such as Islamic hotels and halal food especially for Muslim tourists.

Malaysia has been recognized by Thomson Reuters as the country with most developed Islamic economy for travel sector. With the huge increase of tourists to various travel destinations, many non-Muslim countries have started to realise that they should tap into the Muslim market to increase tourism revenue. Since then, several countries in Asia and even in Europe are changing their practices to become more Muslim-friendly. Reflecting to the issue discussed, it should be an excellent start to introduce Islamic tourism especially Islamic astrotourism in Malaysia. Each party

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are encouraged to implement the Syariah compliant and Muslim friendly concept to attract more tourists to Malaysia (Eusoff 2018).

Islamic astrotourism in Malaysia may include astronomical events or sites which exist in 365 days. As a start, this article will discuss a few potential sites of Islamic astrotourism in Malaysia, as well as astronomical events which occurs in order to promote this new form of tourism. As we know, tourism and economic growth are cointegrated. With the number of tourists traveling rising year on year, Islamic astrotourism is an increasingly potential sector for future investment. Tourism has a positive impact on economic growth and any initiative and efforts that promotes tourism could contribute towards it (Ingle 2010). In order to do that, this article purposes to enhance common knowledge and understanding about Islamic astrotourism and to show how it helps to foster economic growth, through the achievement of development, while minimizing cultural and environmental impacts. Thus, this article will discuss a study on the feasibility of Islamic astrotourism in Malaysia and indirectly enlighten the role of Islamic astronomy may significantly contribute to tourism.

Literature Review:-

In Malaysia, development of Islamic astronomical research may be measured by the increased of research conducted. Hence, studies relating to the excellence of contemporary issues in Islamic astronomy are assayed by local scholars, covering various issues such as discussion of observatories and its economy prospect (Mohamed et al. 2016), descendants of Islamic civilization superiority (Ibrahim et al. 2017a), functions of observatories in solving Islamic astronomy issues (Ibrahim et al. 2015), the continuation of Islamic astronomy from West Asia (Ibrahim et al. 2013), observatories in Islamic history (Mujani et al. 2012), the establishment of Al-Khawarizmi Complex in Malaysia (Ibrahim et al. 2012), Malaysian observatories and those of the Islamic civilization era (Safiai et al. 2014), the continuity of astrolabe as a multipurpose astrofiqh instrument (Safiai et al. 2016), astrolabe inventions across civilizations (Ibrahim et al. 2017b; Safiai & Ibrahim 2016a), as well as observatories in servicing Islam (Safiai & Ibrahim 2016b).

Methodology:-

This article uses qualitative research approach commenced from reviews of previous works in Malaysia related to Islamic astronomy. This research was conducted in Malaysia as a country that met the established research criteria. In order to achieve the purpose of this study, data collection was conducted for three years from 2015 to 2019 using document analysis, interviews and observation. All of these methods were conducted to test the feasibility of the research area. Document analysis have been done to obtain information which only can be accessed by official matters. These include documents such as project proposal, progress records, manuscripts and private letters. Besides, interviews were conducted on managements such as Mufti State Department, State Museum Department, Ministry of Tourism and Culture Malaysia, Ministry of Science, Technology and Innovation Malaysia, and mosque. All interview sessions were conducted separately using the same question guides in gathering the information about several places that have potential to become Islamic astrotourism attractions in Malaysia. In addition, few observations also have been conducted in order to obtain more specific and accurate data to the potential places mentioned before. Fieldwork visit was conducted to verify the condition of those places so it can be ascertained that the obtained data were valid data. In order to ensure the data validity, focus group discussions were conducted in order to discuss the research problem and finally will enlighten the research area in presenting paperwork in conference besides manage to publish it in some publications.

Result Analysis:

Islamic astrotourism is a new special interest tourism oriented towards the celestial sphere and extraterrestrial space, but without departing from the Earth's surface. It has a little bit difference with space tourism which it is a form of tourism exclusively for certain individuals who is extremely rich and in good health. The truth is that space tourism costly pleasure is to pay special training on the ground, getting a return ticket space shuttle and stay on cosmic station, or go outside the station into an open space area upon special request (Cater 2010). Astrotourism however refers to observation of celestial bodies, visit astronomical observatories and astronomical instruments, contemporary and from the past (Robson 2005; Weaver 2011).

Observatories:-

As mentioned before, Islamic astrotourism include the observations and observatories. In Malaysia there are five official observatories supervised by State Mufti Department which are Pusat Falak Sheikh Tahir Pulau Pinang,

Kompleks Falak al-Khawarizmi Melaka, Balai Cerap al-Biruni Sabah, Balai Cerap Selangor and Kompleks Baitulhilar Teluk Kemang Negeri Sembilan.



Figure 1:- Kompleks Falak Al-Khawarizmi Melaka.

These observatories which are known as astrofiqh observatories were functioned in servicing Islam for the advancement of Islamic astronomy in Malaysia in the fields of research, education and tourism. The observatories indirectly give the tourists the exposure to understanding Islamic astronomy holistically in public programs organized such as star parties, tours, and special viewing nights. Beside these five official observatories, there are many more other observatories in Malaysia including *hilar* observation stations, university or school observatories and private observatories, be they mobile or stationary (Ibrahim & Safiai 2014).

Archaeological Sites and Museums:

More often than observatories, the tourists also can visit some archaeological sites with astronomical significance, such as Stonehenge in the United Kingdom, Machu Pichu in Peru, and the Pyramids of Giza in Egypt (Malville 2008). While in Malaysia, the tourist can visit Lembah Bujang Archaeological Museum, an historical area which consist of more than fifty ancient tomb temples, called *candi*. Most unique and well-preserved of these is located in Pengkalan Bujang, Merbok. In the area of Lembah Bujang known as Sungai Batu, excavation have revealed jetty remains, iron smelting sites, and a clay brick monument dating back to 110AD, making it the oldest man-made structure to be recorded in Southeast Asia. Other than that, an archaeological site Kokino in Macedonia proclaimed 'megalithic archeo observatory' to say the least, entertaining explanation, in Bulgaria have announced the discovery of megalithic sundial 5,000 years old. In Malaysia, there are more than hundreds megalith sites that can be visit. Megalith stones were known to have the connection with astronomy in aspect such as navigation, agriculture and sociocultural. Among the sites are Megalith Garden Putrajaya, Pengkalan Kempas Megalith Complex and Terachi Megalith Site in Negeri Sembilan (Jusoh 2018).



Figure 2:- Megalith Garden Putrajaya.

Mosques:

Islamic astrotourism also include mosques with astronomical significance. Before 1957, hilal observations were made traditionally on top of the mosque's tower. The first hilal observation made on mosque's tower was instructed by Syed Alwi Tahir al-Hadad, Johor's Mufti at that time at Sultan Abu Bakar Mosque in Johor Bahru (Safiai 2013). Another mosque was Serkam Pantai Mosque in Malacca. Apart from doing the observation on top of the mosque tower, there was a sculptured carved sundial which existed in the mosque area. It is believed that the sundial used to determine prayer times in the older period by *muwaqqit* assigned (Safiai et al. 2020; Ibrahim et al. 2020). Another sundial can be found at National Mosque Kuala Lumpur and Mizwalah TaHa at Tabung Haji Complex, Sepang, Selangor. Both are modern types of horizontal sundial.

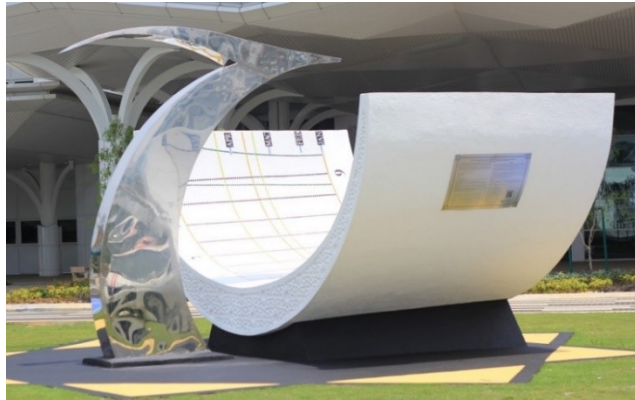


Figure 3:- Mizwalah TaHa.

Dark Sky Areas:

Another attraction is educational programs related to the phenomenon of astronomical events involves booking specific vacations in order to view celestial events, constellations, planets or other astronomical attractions such as eclipse, meteor shower and comet. There are a lot of programs organized during certain astronomical events participated by many parties including government agencies, universities, planetariums and tourism companies. A one-day or multi-day observation trip to observe the night sky with the naked eye or doing astrophotography where in Malaysia by far from the city lights the milky way, seeing the opposition of planets, observing the stellar configurations and constellations, and enjoying meteor shower. Besides, observational tours can be organized and to observe an eclipse (Collison & Poe 2013).

Conclusion:-

Islamic astrotourism is a new unique form of tourism in which tourists at specially organized program linking Islamic astronomy and tourism. This includes astronomical tourism activities such as visit the astronomical observatories, archaeological sites or mosques, observation of celestial objects and phenomena by naked eye or telescope in dark sky areas, either for personal pleasure or scientific fun. Islamic astrotourism is not only for professional, and it is different from the astronomical research. Astrotourism is already to live in countries like Malaysia with their own offer in terms of size, equipment, and modernity observatories and instruments. Based on discussion above, it is clear that Malaysia actually has a lot to offer in order to encourage interested astro tourists. With the organizing of those programs and presentations thereof, Islamic astrotourism can become part of the tourist attractions of Malaysia for tourists of all ages and backgrounds. This offer to anyone who could help attract foreign tourists, especially tourists from those countries where astrotourism developed at a high level.

Acknowledgement:-

This study is financed by Geran Universiti Penyelidikan (GUP-2020-068); Geran Galakan Penyelidik Muda (GGPM-2019-041); and Dana Pecutan Penerbitan (PP-FPI-2020), Universiti Kebangsaan Malaysia.

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