

Analysis of Heritage Sites' Attractiveness in relation to Archaeotourism Development in Bujang Valley (Kedah)

Adnan Jusoh^{1*} & Yunus Sauman @ Sabin¹

¹Department of History, Faculty of Human Sciences,
Universiti Pendidikan Sultan Idris, 39500 Tanjung Malim, Perak, MALAYSIA
E-mail: adnan.jusoh@fsk.upsi.edu.my

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v7-i6/3030>

Published Date: 19 June 2017

Abstract

This article focuses on the heritage site located in Lembah Bujang/Bujang Valley (Kedah) and its relationship with the archaeotourism sector. Bujang Valley is rich in heritage, comprising archaeological sites, historical buildings and nature. However, to what extent has such a unique heritage been used to expand archaeotourism in Bujang Valley? Which location is the main focus of tourists, is the infrastructure provided at the sites sufficient for visitors' convenience, and what are the problems that become constraints which may affect the development of archaeotourism in Lembah Bujang. The objective of this article is to analyse the attractiveness factors of heritage sites in the Lembah Bujang (Kedah) archaeotourism sector. In addition, the article will discuss the success criteria of those sites that gain tourists' attention, the facilities that are available and that should be provided, as well as how to increase the number of tourists visiting Lembah Bujang. This study used both qualitative and quantitative methods. References to primary and secondary sources were conducted through libraries and archives. A total of 150 questionnaires were distributed to collect feedback from respondents relevant to the analysis by using SPSS. The study found several locations which are very popular and the focus of tourists, among which are Lembah Bujang Archaeological Museum (MALB) and Sungai Batu. In addition to the archaeological findings, tourists' attraction to Lembah Bujang is due to the element of history and the monuments. In addition, the landform and the natural environment are among the factors that attract tourists to Lembah Bujang. The study also found that cooperation between all parties is essential to promote the speciality of a heritage site if they want to expand the archaeotourism sector in Lembah Bujang. Meanwhile, the authorities should also provide facilities in the vicinity of the site for visitors' convenience.

Keywords: Bujang Valley, Archaeology, Heritage Site, Attractions, Archaeotourism

Introduction

One aspect of the fast-growing global tourism sector is visiting archaeological sites and historical places. This sector is also often associated with tourism activities that are based on historical and heritage elements. This activity is known as heritage tourism, but there are times when it is also referred to as archaeotourism. Basically, archaeotourism is the combination of two words, archaeology and tourism: it is closely related to tourism destinations based on archaeological and historical heritage sites. In general, its purpose is to see the heritage that has been passed down from previous generations, including history, culture, art, nature, artefacts and others. To achieve this goal, reservation and conservation efforts are made in respect of archaeological and historical heritage sites with the potential to be developed as attractive tourist destinations.

Today, the archaeotourism sector is rapidly growing worldwide, not only because it inspires local activities, but because it is able to generate national revenue. For example, the arrival of tourists to visit the Hindu-Buddhist heritage temples in Angkor Wat (Cambodia), Borobudur Temple and Prambanan Temple (Indonesia) yields millions of US dollars every year. Similarly, the high number of tourists annually visiting other world heritage sites such as the pyramids (Egypt), the Great Wall (China), Petra (Jordan) and so on has managed to add extra income to the respective countries. Sadly, though Malaysia also has a number of unique heritage sites and tourism potential, it is unfortunately not able to attract tourists in large numbers. A potential site for archaeotourism is Bujang Valley (Kedah) with its archaeological findings, historic sites and interesting monuments.

Literature Review

In around 5 AD to 13 AD, Bujang Valley was the site of the early kingdom of Kedah Tua/Old Kedah. A lot of scholarly writings, from colonial times to the present day, have therefore related to Bujang Valley, especially those in the field of archaeology. Such studies include, among others, those by Adi (1998), Adi and Othman (1981), Ahmad (2012), Allen (1988), Evans (1931), Lamb (1982), Leong Sau Heng (1980), Nik Hassan (2008), Nik Hassan and Othman (1992), Quaritch-Wales (1940), Supian (2002) and Zuliskandar (2012). Most of the researchers' conclusions clearly indicate that archaeological findings in Bujang Valley area are very important, especially in the aspect of national historiography.

According to historical records, Bujang Valley is associated with the kingdom of Kedah Tua, which is said to have existed between the fourth and fourteenth centuries AD. It developed out of a port which eventually became a government and the focus for traders from both the east and the west. This made Bujang Valley famous and it became the trading centre for raw materials. Bujang Valley is recorded in some foreign sources, where it is recognised by a number of names including Kataha (Indian), Katahanagara (Sanskrit), Kidaram or Kadaram (Tamil) and Kalah or Kalah-bar (Arabic) (Braddell, 1980).

Geographically, Lembah Bujang is located on the coast of the southern part of Kedah, between 100°20'East and 100°30'East longitude and 5°32'North and 5°38'North latitude (Narimah, 2015). With an area of about 144 square miles, Bujang Valley covers the area between border of Bukit Choras in the north, Sungai Muda in the south, the Strait of Malacca in the east and the North-South Highway in the west (Azlin, 2015). Bujang Valley is home to the remains of archaeological sites such as Ulu Sungai Merbok (on the slopes of Gunung Jerai), including Tupah, the left and right tributaries of Sungai Bujang (especially in Pengkalan Bujang), Sungai Batu Estate, Semeling (the riverside of Sungai Semeling), Kampung Sungai

Mas, Kampung Aur, Seberang Prai, Anak Bukit, Bukit Choras, Bukit Meriam, Bukit Pendiati, Bukit Kecil and Bukit Penjara (Nik Hassan, 2009).

Beginning as a small settlement, Bujang Valley developed into a trading port until it became the focus for traders from the east and the west (Nik Hassan, 1998). In addition to its strategic location on the route between the east and the west, the advantage of Bujang Valley is that it has a river mouth which is navigable by merchant ships, including Sungai Bujang, Merbok and Sungai Muda. The prosperity of Bujang Valley caused it to become the focus of both eastern and western foreign traders. Later, it was also visited by Hindu-Buddhist preachers based on the discovery of temple remains, statues and inscriptions around Lembah Bujang (Zuliskandar, 2013). I-Ching, a traveller from China on a trip to India, stopped at a place called Chieh Cha around the seventh century, which was thought to be Bujang Valley (Supian, 2002).

Initially the Bujang Valley kingdom developed as an independent kingdom; however, around the seventh century, it became part of the Srivijaya kingdom. In addition to being the focus of traders in its heyday, Bujang Valley became a focus for preachers of Hinduism and Buddhism. Under the Srivijaya influence, Bujang Valley became the Buddhism preaching centre. However, in 1025 AD and again in 1068 AD, Bujang Valley was attacked by King Rajendra Chola, as a result of which its function as a trading port also declined (Zuliskandar, 2012). The discovery of archaeological remains in Bujang Valley confirmed that it had been the focus for foreigners, both traders and missionaries (Nik Hassan, 2008).

Research and Methodology

This study applied qualitative and quantitative methods of research which involved the study of sources from several public and university libraries. In addition to interviews with several individuals involved in research on Bujang Valley, a questionnaire was used to collect data. A total of 150 questionnaires were distributed to local tourists who visited the heritage sites around Bujang Valley, Kedah. The data obtained from the questionnaire were analysed using the Statistical Package for Social Sciences (SPSS). Descriptive analysis (frequency and percentage) was used to consider the data in general, while the interviews were analysed by theme. Data analysis used a basic quantitative technique or descriptive form, being frequency, percentage, mode and mean, to examine the distribution of respondents' backgrounds such as age, race, gender and occupation. Analysis was also presented in the form of percentages, tables, figures or pie charts to explain the findings more clearly.

Findings and Discussion

The overall number of respondents involved in the questionnaire for this study was 150, with 78 male respondents (52%) and 72 female respondents (48%). The average age of the respondents was primarily between 20 and 24 years, with 32 respondents (21.3%), followed by 28 respondents aged 30 and 34 years (18.7%). There were four respondents aged over 50 years. As for race, Malay was the highest with 101 respondents (67.3%), followed by Chinese with 32 respondents (21.3%) and Indian with 17 respondents (11.3%). Of the respondents, 76 were married (50.7%), 71 single (47.3%) and three separated (2.0%). In terms of educational level, it was found that respondents who graduated from higher learning institutions were high in number: 80 respondents (53.3%) held a diploma or Bachelor's degree, while 40 respondents (26.7%) had graduated from secondary school. Those with a Master's degree or Doctorate totalled 28 respondents (18.7%), while only two respondents had no formal education.

Places of interest

A total of eleven locations that have become heritage and historical tourist attractions in Bujang Valley have been identified, of different types or categories. Among the locations considered to be the focus for the local population are Bujang Valley Archaeological Museum (MALB), a number of archaeological sites, cities or forts, and tombs and historical buildings as specified in the following Table 1.

Table 1.

The locations of heritage and historical tourism in Bujang Valley.

	Location	Frequency (n=150)	Percentage (%)
1	Muzium Arkeologi Lembah Bujang (MALB)	131	87.3
2	Sungai Batu archaeological site	118	78.3
3	Kota Kuala Kedah	97	64.7
4	Pengkalan Bujang archaeological site	95	63.3
5	Kg. Pendiati archaeological site	86	57.3
6	Kota Kuala Muda	74	49.3
7	Makam Tunku Haidar	74	49.3
8	Masjid Ar-Rahman	73	48.7
9	Makam Sultan Muzaffar Shah	65	43.3
10	Menara Jam Sg. Petani	64	42.7
11	Bangunan Balai Polis Sg. Petani (colonial architecture)	63	42

According to Table 1, the heritage tourism location with the highest number of visits by the respondents is the Muzium Arkeologi Lembah Bujang (MALB), with a total of 131 respondents (87.3%). This is followed by Sungai Batu Archaeological Site with 118 respondents (78.3%), Kota Kuala Kedah with 97 respondents (64.7%) and Pengkalan Bujang Archaeological Site with 95 respondents (63.3%). Other heritage tourism sites are the archaeological sites of Kg. Pendiati, Kota Kuala Muda, Makam Tunku Haidar, Masjid Ar-Rahman, Makam Sultan Muzaffar Shah, Menara Jam Sg. Petani and Bangunan Balai Polis Sg. Petani which recorded a relatively high number of respondents: almost half of the respondents had visited this location.

Even though there are many tourism locations based on heritage and history in Bujang Valley, when viewed in terms of potential, a different pattern is seen. There are three types or levels of potential classified, namely non-potential location, moderately potential and potential, as specified in the following Table 2.

Table 2.

Tourism potential for locations based on heritage and history in Bujang Valley.

	Location	Percentage (%)		
		Non- potential	Potential	Most Potential
1	Muzium Arkeologi Lembah Bujang (MALB)	0.7	2.6	96.7
2	Pengkalan Bujang archaeological site	2	8	90
3	Sungai Batu archaeological site	0.7	10	89.3
4	Kg. Pendiati archaeological site	2.7	11.3	86
5	Makam Tunku Haidar	4.7	30	65.3

6	Kota Kuala Kedah	6	40	54
7	Makam Sultan Muzaffar Shah	6	43.3	50.7
8	Kota Kuala Muda	8	42.7	49.3
9	Bangunan Balai Polis Sg. Petani (colonial architecture)	8	53.3	38.7
10	Menara Jam Sg. Petani.	8.6	58.7	32.7
11	Masjid Ar-Rahman	10	58.7	31.3

Based on Table 2, the highest number of respondents (96.7%) stated that MALB has high potential to become a centre of heritage tourism, followed by Pengkalan Bujang archaeological site (90%), Sungai Batu archaeological site (89.3%) and Kg. Pendiati archaeological site (86%). As for Makam Tunku Haidar and Kota Kuala Kedah, the number of respondents stating that these are potential locations exceeded half of the entire respondent population, with 65.3 per cent and 54 per cent, respectively. As for the Bangunan Balai Polis Sungai Petani, Menara Jam Sungai Petani and Masjid Ar-Rahman, the majority of respondents saw these areas as having moderate potential. For all locations, the percentage of respondents stating that the location had no potential was low.

a) Factors that attract tourists to Bujang Valley

In an attempt to understand the factors that attract local tourists to Lembah Bujang, the choice of location usually depends entirely on the interests and tastes of each visitor. For instance, there are tourists who are interested in a location with history and heritage attractions such as in Bujang Valley, while some tourists do not like that at all. On the other hand, there are tourists who are interested in locations with a peaceful, quiet and calm atmosphere; therefore the ideal location is an area with natural attractions. The types of major tourist attraction in Bujang Valley are listed in Table 3.

Table 3.
Main attractions in Bujang Valley.

	Bujang Valley main attractions	Frequency (n=150)	Percentage (%)
1	Monument / historical building	79	52.7
2	Historical events	54	36.0
3	Beautiful nature	17	11.3
	Total	150	100.0

Table 3 clearly shows that there are three types of major attraction in Bujang Valley, namely the remains of monuments and architecture of historical buildings, historical events and the beautiful natural environment. A total of 99 respondents (52.7%) chose the remains of monuments and historical buildings as the main attraction, while a total of 54 respondents (36%) stated that historical events were the main attraction. Meanwhile, 17 respondents, or 11.3 per cent of the respondents, stated that the beautiful natural environment was the major local tourist attraction in Bujang Valley.

b) Popularity of tourist preferred locations in Bujang Valley

When we review locations based on the popularity of heritage and historical tourism in Lembah Bujang, a similar pattern is revealed but there are differences in terms of percentages. For example, the list of heritage and historical tourism locations includes MALB, archaeological sites, cities or forts, tombs and historical buildings, as listed in the following Table 4.

Table 4.

Ratings based on popularity of heritage and historical tourism area.

	Heritage and historical site tourism	Frequency (n=150)	Percentage (%)
1	Muzium Arkeologi Lembah Bujang (MALB)	148	98.7
2	Pengkalan Bujang archaeological site	122	81.3
3	Menara Jam Sg. Petani.	120	80.0
4	Sungai Batu archaeological site	118	78.7
5	Kota Kuala Kedah	118	78.7
6	Kota Kuala Muda	117	78.0
7	Kg. Pendiati archaeological site	108	72.0
8	Masjid Ar-Rahman	106	70.7
9	Makam Sultan Muzaffar Shah	103	68.7
10	Makam Tunku Haidar	103	68.7
11	Bangunan Balai Polis Sg. Petani (colonial architecture)	103	68.7

Table 4 also shows the position of heritage-based and history-based tourism attractions around Bujang Valley by the number of respondents who had visited those places. The findings reveal that MALB has the highest percentage at 98.7 per cent: almost all respondents had visited the museum. The second most visited location is Pengkalan Bujang archaeological site with 122 respondents (81.3%), followed by Menara Jam Sungai Petani with 120 respondents (80%). Other places, despite not achieving such high numbers of visitors, are still popular choices as places to visit, as the lowest percentage was 68.7 per cent of all respondents.

c) Potential tourist places of interest based on location

Table 5 shows the tourism potential of heritage-based and history-based locations in Bujang Valley. The three locations with the highest number of potential visitors are MALB (93.2%), Pengkalan Bujang archaeological site (83.8%), Sungai Batu archaeological site (83.5%) and Kg. Pendiati archaeological site (80.0%). In general, all the heritage-based and history-based locations have potential as tourism areas. The lowest percentage was recorded at Masjid Ar-Rahman, though this too recorded a potential percentage exceeding half of all respondents (51.7%). The percentage of respondents regarding these location as no potential tourism areas was very low, being less than ten per cent for each location.

Table 5.

Tourism potential of heritage and history-based locations in Bujang Valley.

	Heritage and historical site tourism	Percentage (%)		
		Non-potential	Potential	Most potential
1	Muzium Arkeologi Lembah Bujang (MALB)	0	10	93.2
2	Kg. Pengkalan Bujang archaeological site	3.8	12.3	83.8
3	Sungai Batu archaeological site	0.8	15.7	83.5
4	Kg. Pendiati archaeological site	4.2	15.8	80
5	Makam Tunku Haidar	5.3	16.7	78.1
6	Makam Sultan Muzaffar Shah	4.4	21.1	74.6
7	Bangunan Balai Polis Sg. Petani (colonial architecture)	3.6	25.9	70.5
8	Kota Kuala Kedah	5.6	27.2	67.2
9	Kota Kuala Muda	4.8	28	67.2
10	Menara Jam Sg. Petani.	2.4	37.3	60.3
11	Masjid Ar-Rahman	2.6	45.7	51.7

d) Supporting factors of Bujang Valle

Table 6 shows the factors supporting Bujang Valley as an archaeotourism centre. A total of 77 per cent of respondents stated that landform and physical environment were the main factors supporting Bujang Valley as an archaeotourism centre. Another factor was the diversity of attractions in Bujang Valley, selected by 59.5 per cent of respondents. Meanwhile, support from the government and private agencies recorded a total of 48.6 per cent and 46.6 per cent respectively. Access to transportation was seen as the least significant factor, with only 37.8 per cent of respondents agreeing that this was very important.

Table 6.

Factors supporting Bujang Valley as an archaeotourism centre.

	Strength/advantage	Percentage (%)
1	Geographical landform / physical environment	77.0
2	Various attractions	59.5
3	Government support	48.6
4	Support from private agencies	46.6
5	Access to transport	37.8

The comparative position of factors supporting Bujang Valley as an archaeotourism centre by percentage is shown in Figure 1 below.

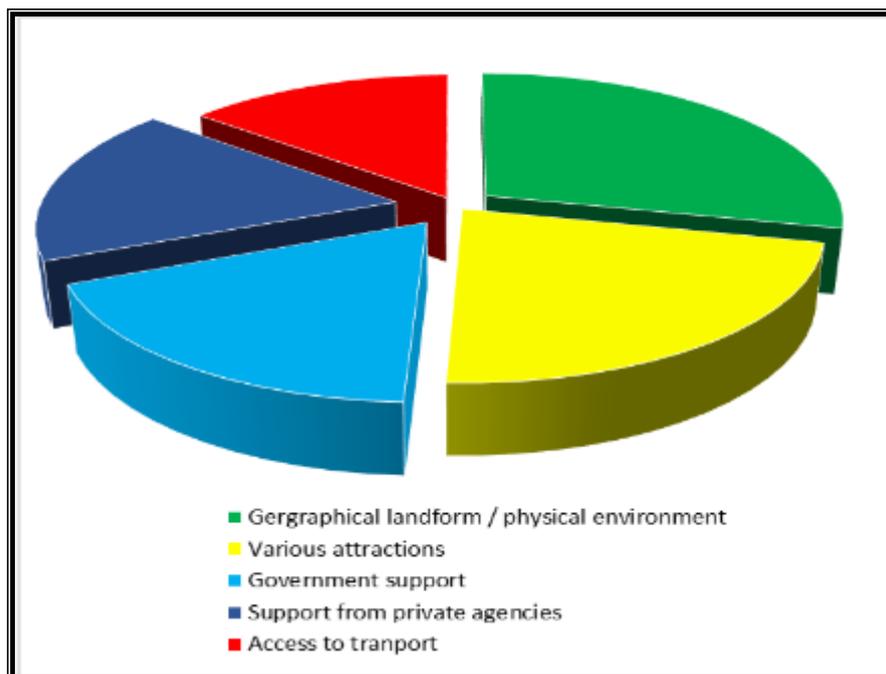


Figure 1. Supporting factors of Bujang Valley as an archaeotourism centre.

e) Recommendations to increase the number of tourists visiting Bujang Valley

As one of the preferred locations among visitors, especially those interested in heritage and historical elements, Bujang Valley is frequently visited by tourists. However, the feedback obtained shows that there are several ways to increase the potential of Bujang Valley as an interesting archaeotourism centre.

Table 7.

Recommendations to increase the potential of Bujang Valley as an archaeotourism centre.

	Recommendation	Percentage (%)
1	Increase promotion on domestic and international levels	82.7
2	Increase the number of interesting activities here	76.0
3	Improve the infrastructure	68.7
4	Conduct more joint ventures with other parties	62.7
5	Provide public transport and better access to transportation	51.3

Referring to Table 7, there are several recommendations to increase the potential of Bujang Valley as an archaeotourism centre. The analysis found that 82.7 per cent of respondents stated that there was a need to increase promotion at domestic and international levels. Next, 76.0 per cent of respondents believed it was necessary to increase activities around Bujang Valley, 68.7 per cent of thought the infrastructure needed to improve, 62.7 per cent saw a need to conduct more joint ventures with other parties, and 51.3 per cent of respondents stated that it was necessary to provide public transport and better access to transport.

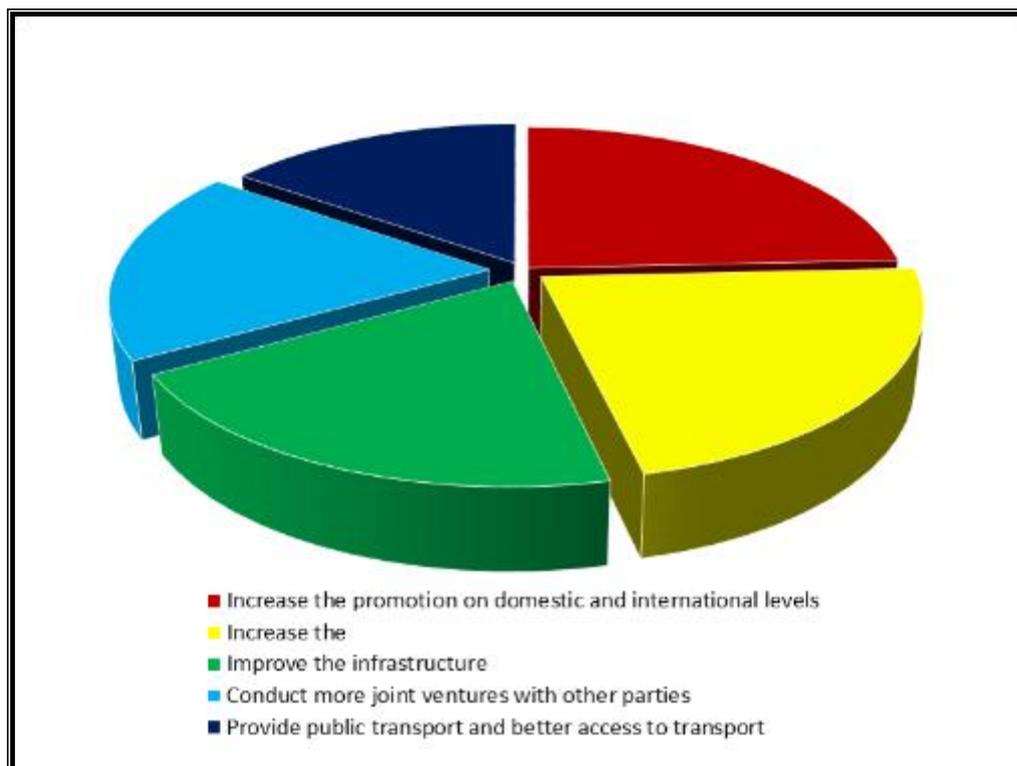


Figure 2. Recommendations to increase the potential of Bujang Valley as an archaeotourism centre

f) Tourists' feedback on the promotion of Bujang Valley

Table 8 shows tourists' views on the marketing network and sources of information for Bujang Valley. In response to the statement that Bujang Valley has sufficient billboards promoting its archaeotourism, the majority of respondents (48%) agreed, while 32.7 per cent disagreed and 19.3 per cent were unsure. As for the statement that there is not enough promotion of Bujang Valley archaeotourism in the mass media, the majority of respondents (56%) agreed. The greatest proportion of respondents (40%) disagreed with the statement that there are many travel agencies that offer services to Bujang Valley.

Table 8.

Marketing network and source of information.

Matter	Perception		
	Disagree	Unsure	Agree
1 Sufficient billboards promoting archaeotourism in Bujang Valley	32.7	19.3	48
2 Lack of promotion in mass media about archaeotourism in Bujang Valley	25.3	18.7	56
3 There are many agencies that offer services to Bujang Valley	40	34	26
4 Variety of archaeotourism packages offered in Bujang Valley	57.3	15.3	27.4
5 You frequently hear about Bujang Valley archaeotourism	48.7	22	29.3
6 No special attractions available that can attract tourists to come to Bujang Valley	50.7	16	23.3

In addition, 57.3 per cent of respondents disagreed with the statement that there are various Bujang Valley archaeotourism packages offered. The majority of respondents also

disagreed with the statement that they often hear announcements about archaeotourism in Bujang Valley. This clearly shows that there is little promotion of Bujang Valley archaeotourism among tourists. The majority of respondents (50.7%) disagreed with the statement saying that there are no specialities that can attract tourists to Bujang Valley. In general, this situation shows that Bujang Valley has a special attractiveness that can draw tourists' attention

Conclusion

Bujang Valley has potential heritage sites that can be developed as archaeotourism sites. A number of heritage sites have become the focus of tourists in Bujang Valley, particularly the Bujang Valley Archaeological Museum. This is because, in addition to exhibition galleries displaying archaeological findings in the Bujang Valley area, there is a temple complex consisting of Pengkalan Bujang Temple, Bendang Dalam Temple, Bukit Pendiak Temple and Bukit Batu Pahat Temple which are the main attractions. In addition, the recent archaeological discovery of the Sungai Batu archaeological site has the potential to become a new tourist attraction in Bujang Valley. Recent findings at Sungai Batu archaeological site shows some interesting new discoveries and this has the potential to be another tourist attraction to Bujang Valley. However, it is undeniable that there are some other heritage sites found in the Bujang Valley that are also attractive to tourists due to historical factors and their uniqueness, among them Kota Kuala Kedah, Tomb of Tunku Haidar, Tomb of Sultan Muzaffar Shah, Sungai Petani Clock Tower and the Sungai Petani Police Station, a building featuring colonial architecture.

In addition, the study found that several aspects need to be considered for the growth of archaeotourism in Bujang Valley, especially by the authorities. Among the issues that need to be examined is the suggestion to increase promotion at both domestic and international levels. Promotion should be driven by an exciting new approach, especially through mass media, the internet, seminars and so on. This can be done by increasing the range of interesting activities in Lembah Bujang—for example, arranging with TV broadcasters overseas to broadcast a documentary on the Bujang Valley archaeological findings, the unique sociocultural climate, the traditional cuisine, the handicrafts and so on. In addition to the role played by government agencies, such efforts can also be driven by the private sector or NGOs, while individuals involved in research are encouraged to issue publications or documentaries disseminating the new discoveries happening in Bujang Valley from time to time. Furthermore, the important thing to watch for is improvement of the infrastructure, whilst access to transport is also important to facilitate further tourism. In short, holistic planning and cooperation by all parties is necessary for Bujang Valley to continue growing as the country's archaeotourism centre.

Acknowledgement

This research was carried out with the assistance of the Fundamental Research Grant Scheme (FRGS) (2014-0101-106-02). The authors wish to express their gratitude to Minister of Higher Education (MOHE) and UPSI who provided the research fund and the parties involved in this research.

Corresponding Author

Adnan Jusoh, PhD
Department of History

Faculty of Human Sciences
Universiti Pendidikan Sultan Idris
35900 Tanjung Malim, Perak, MALAYSIA.
E-mail: adnan.jusoh@fsk.upsi.edu.my

References

- Adi, T. (1998). *Bujang Valley Historical Park, Kedah. Malaysian Museum Journal*, 34, 1-16.
- Allen, J. (1998). *History, Archaeology, and the question of foreign control in early Historic-Period Peninsular Malaysia. International Journal of Historical Archaeology* 2(4), 261-289.
- Azlin, S. (2015). *Lembah Bujang, sebuah kerajaan lama yang berpusat. In Tarmini Masron & Mokhtar Saidin. (eds). Teknologi maklumat ruangan dalam arkeologi. Pulau Pinang: Penerbit Universiti Sains Malaysia. pp. 12-29.*
- Braddell, R. (1980). *Most ancient Kedah. In Lembah Bujang. Kuala Lumpur: Persatuan Sejarah Malaysia. pp. 32-33.*
- Chris, S. (editor) (1999). *The seventy wonders of the ancient world-the great monuments and how they were made.* London: Thames & Hudson Ltd.
- Evans, I. H.N. (1931). A search for antiquity in Kedah and Perlis. *FMS* 15 (2), 51-62.
- Lamb, A. (1960). Report on the excavation and reconstruction of Chandi Bukit Batu Pahat, Central Kedah. *Federation Museums Journal* 5: X-108. *Kuala Lumpur: Persatuan Sejarah Malaysia*
- Lamb, A. (1960). Chandi Bukit Batu Pahat: A report on the excavation of an ancient temple in Kedah. Monographs on Southeast Asian subjects No. 1, Eastern University Press Ltd., Singapore.
- Lamb, A. (1980). Pengkalan Bujang an ancient port in Kedah. In *Lembah Bujang, Kuala Lumpur: Persatuan Sejarah Malaysia. pp. 74-108.*
- Leong Sau Heng. (1980). *Lembah Bujang.* Kuala Lumpur: Persatuan Sejarah Malaysia.
- Narimah, S. (2015). Aplikasi sistem maklumat geografi dalam pengurusan data tapak arkeologi: Lembah Bujang, Kedah. In *Tarmini Masron & Mokhtar Saidin. (eds). Teknologi maklumat ruangan dalam arkeologi, Pulau Pinang: Penerbit Universiti Sains Malaysia. pp. 157-170.*
- N.S. Nik Hassan. (1998). *Early history.* 4. Singapore: Archipelago Press.
- N.S. Nik Hassan. & Othman, M.Y. (1992). *Warisan Lembah Bujang.* Kuala Lumpur: Ikatan Ahli Arkeologi Malaysia.
- N.S. Nik Hassan (2009). Penemuan arkeologi dan cabaran untuk memperkasakan penyelidikan warisan Lembah Bujang. *Prosiding seminar pembangunan warisan Kerajaan Melayu Lembah Bujang.* 31 March- 1 April, Kedah.
- N.S. Nik Hassan. & Othman, M.Y. (1990). *Antiquities of Bujang Valley.* Kuala Lumpur: Museum Association of Malaysia
- Supian, S. (2002). *Tamadun Awal Lembah Bujang.* Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Quaritch Wales, H.G. (1940). Archaeological research on ancient Indian colonization in Malaya. *Journal of the Malayan Branch Royal Asiatic Society* 18(1), 1-85.
- Swarbrooke, J. (1994). The future of the past: Heritage tourism in the 21st century. In A.V. Seaton. (ed.). *Tourism: The state of the art.* (Edited). England, Chichester: John Wiley and Sons.
- Zuliskandar, R, N.S. Nik Hassan, Abdul, L. S., Adnan, J., Yunus, S. & Othman, M. Y. (2013). Compositional analysis of ancient bricks at Site 2211, Candi Pengkalan Bujang, Kedah.

- Research Journal of Applied Sciences, Engineering and Technology*, 6(16): 3027-3033, 2013.
- Zuliskandar, R, N.S. Nik Hassan, Adnan, J. & Muhammad, R. R. (2014). Candi Sungai Batu (Tapak SB1): Kearifan tempatan dalam teknologi pembuatan bata dan seni bina candi. *International Journal of the Malay World and Civilisation (IMAN)*, 2(3), 43-50.
- Zuliskandar, R, N.S. Nik Hassan, Adnan, J. & Yunus, S (2013). Analisis komposisi bahan bata purba, Candi Bukit Kecil, Lembah Bujang, Kedah. *International Journal of the Malay World and Civilisation (IMAN)*. 1(2), 3-9.
- Zuliskandar, R. N.S. Nik Hassan, Adnan, J. & Mohd. Z. H. (2012). Compositional analysis on ancient bricks from Candi Sungai Mas (Site 32/34), Bujang Valley, Kedah. *American Journal of Applied Sciences*, 9(2), 196-201, 2012.
- Zuliskandar, R., N. S. Nik Hassan, Mohamad, Z.M., Kamaruzaman, A. & Adnan, J. (2013). Peranan Pulau Kelumpang sebagai salah satu pusat pengeluar manik kaca Indo-Pasifik di Malaysia. *Jurnal Arkeologi Malaysia*, 26, 92-103.
- Zuliskandar, R., N.S, Nik Hassan, Adnan, J. & Muhammad, R. R. (2014). Interpretasi terkini data arkeologi di Kompleks Percandian Pengkalan Bujang, Kedah. *International Journal of the Malay World and Civilisation (IMAN)*, 2(2), 81-90.