Residents' Perception of Tourism Impacts in Bagan

Sandar

Abstract

Myanmar covers an area of 676,577 km^2 and it is the second largest country in the Southeast Asian Nation Association (ASEAN). Also tangible cultural heritage of Myanmar is one of the richest and most diverse heritages in the Southeast Asian Region. Tourism is essential for developed countries as well as developing countries because it has many significant impacts; economic, socio-cultural and environmental impacts. The arrival of international tourists has increased because Myanmar had introduced a series of political and economic reforms with open door policy and infrastructure investment inflows since 2011. Moreover, Bagan is World cultural heritage sites and one of the most attractive tourist destinations in Myanmar. In Bagan, tourism generates economic benefits, increasing income and creation of job opportunities for local community, infrastructure development and increasing tax revenue for government. But, it has negative environmental impacts of tourism development such as graffiti, vandalism, crowding, and pollution, rubbish, driving cars around the monuments and climbing on the monuments. Although tourism development contributes opportunities for cultural heritage sites, it affects different kinds of threats for sustainability of cultural heritage sites. Thus, stakeholders are needed to help and manage the sustainability of cultural heritage resources and to minimize the negative impacts of tourism development in cultural heritage sites. In this study, the involvement of government and local community supports the further tourism development and cultural heritage conservation in Bagan. Moreover, community based cultural heritage conservation is necessary to support sustainability cultural heritage resources in Bagan.

Key words: Cultural heritage, Tourism development, Monuments, Conservation, Economic opportunities.

I.   Introduction

Tourism is a complex and growing industry. It rapidly becomes one of the most significant economic activities in the World. Moreover, it is one of the most important and diverse forms of social and cultural exchange around the world. Tourism development can contribute positive and negative impacts on Bagan cultural heritage sites. Positive impacts of tourism development can help the further tourism development in the future and support conservation of cultural heritage sites. But, negative impacts of tourism have the controversies between tourism development and cultural heritage conservation. Thus, community involvement is essential to provide the balance between tourism development and sustainability cultural heritage resources in Bagan. Considering the importance of residents who play a key role in tourism, many researchers in developed countries conducted the studies of residents' perceptions on impacts of tourism development. This study will focus on Bagan cultural heritage sites, recognized as one of the popular tourism destinations in Myanmar. The purpose of this study is to identify residents' perceptions of tourism impacts in Bagan.

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Rationale of the Study

Tourism has both positive and negative effects on the cultural heritage sites at the same time. The positive impacts include buying goods and services produced locally, such as lodging, food and beverage, car rental and travel guides, etc., mostly from foreign tourists. It gives regional economy a boost while attaining foreign exchange. Moreover, it contributes employment creation, tax revenue, infrastructure development, raising income of local residents and improving standard of living.

On the other hand, the negative impact on the heritage environment is primarily due to the rising demand for tourism and private investment. For example, physical effect by increasing the carrying capacity due to tourist concentration on unique heritage sites, physical influence on the surrounding environment because of hotel construction in the cultural heritage area, over-crowding, vandalism and graffiti, pollution, tourism transportation and atmospheric deterioration due to the installation of outdoor advertising etc. These can cause negative effects and damage the cultural heritage sites in Bagan.

Conserving heritage sites is critical for sustainable tourism development in cultural heritage sites. The problems are how to establish coexistence between tourism development and cultural heritage conservation. This measure is to mitigate negative impacts of tourism development on cultural heritage sites in the future.

Objectives of the Study

This study is conducted with two main objectives:

1. To explore the growth of international tourists' arrival in Bagan
2. To analysis the residents' perception of tourism impacts and community involvement effect further tourism development and cultural heritage conservation in Bagan.

Method of the Study

The theoretical concepts given in the literature are reviewed to understand the theory of cultural heritage tourism, impacts of tourism and sustainability of cultural tourism. The study applied the descriptive and analytical methods to study objectives. Descriptive methods based on secondary data and analytical methods used primary data through research questionnaire.

The primary data are collected by interviewing with residents from Nyaung U (Old Bagan); quarter (3), quarter (4) and quarter (5) and New Bagan; Anawrahta quarter and Kyanzitta quarter. This study used a two-stage random sampling method. Three out of seven quarters in Nyaung U Township and two out of six quarters in New Bagan Township are selected by using a simple random sampling method. Target household of this study are 5006 households from selected tourism working quarters from Nyaung U and New Bagan.

Table (1) Target Households from Quarters in Nyaung U and New Bagan (2018)

Serial No.	Quarter/ Town	Number of Households	Number of Sample Households
1	Quarter3/ Nyaung U	1146	73
2	Quarter4/ Nyaung U	798	51
3	Quarter5/ Nyaung U	1205	77
4	Kyanzittha/ New Bagan	784	50
5	A Nawrahta/ New Bagan	1073	69
	Total	5006	320

Sources: Annual Report from Government Administrative Department Nyaung U District

II.   Literature Review

Development of tourism can improve the economy of a country by having numerous positive economic impacts. But the development of tourism can also cause negative outcomes. In late 20th century, there was noticeable change with rapid expansion of tourism, "in the structure of society and the expansion of international tourism has increased the contact among different societies and cultures" (Brunt & Courtney, 1999, p. 495).

Tourism development can enhance a country's economy through numerous positive economic impacts. According to the Easterling (2004), the positive economic impacts involve improvement of standard of living, creation of employment and a lot of infrastructure expenditure. Moreover, tourism development can increase public utilities, tax revenue and transport infrastructure. Economic impacts generate improving local incomes, increasing employment opportunities and simulating investment (Sharpley, 2014). According to Williams (2009) agreed that tourism may generate foreign exchange earnings; favorable balance of payments account; creation of substantial amount of employment; redistribution of wealth and creation of economic diversity and new channels of economic relationships. Even if the development of tourism brings positive economic benefits, it can also have negative economic consequences. The negative economic impacts are higher prices for land and housing, higher level of inflation and taxes.

Empirical studies have discovered the influence of protection of environmental resources, dirty environments, overcrowded environments, improvement of local infrastructure and traffic problems (Hall, 1992). The environmental degradation will include pollution, noise, and habitat loss, flooding and sedimentation. An influx of tourists that exceeds a given destinations' carrying capacity will result in the destination's environmental deterioration (Jahi et al, 2009). Moreover, other related environmental problems include tourism's effect on air quality, resulting from the emission of carbon monoxide smoke and sulfur dioxide gases. Unfortunately, air pollution is apparently unavoidable during a tourism industry's development phase, as development has a direct growth effect on the public transport sector, such as buses and taxis. Consequently, emissions from increased traffic volumes at these destinations will lower the air quality.

The positive and negative impacts created by the growth of the tourism industry, especially the residents ' perception of the impact of tourism are key factors in supporting the development of tourism as well as the main reason for the sustainability of tourism in the region (Kim, Uysal & Sirgy 2013). The cultural sustainability aspect focuses not only on maintaining cultural identities but also on supporting cultural enterprises. Its focus is on preserving the value of cultural diversities.

The development of tourism also put positive values into their conventional lifestyles, family relationships and individual activities and into the society itself (Zuriatunfadzliah Sahdan et al, 2009). Tourism can also be a force for preserving and revitalizing host communities ' cultural identity and traditional practices, and acting as a source of income to conserve heritage sites (Easterling, 2004). The development of tourism will influence people's habits, their everyday routines and social life and their beliefs and values. The social and cultural influence is the enhancement of local prestige, identity and pride, the reversal in traditional value, and the commercialization of culture (Andersson & Lundberg, 2013). Tourism brings new life by visitors through customs, traditions, old skills and crafts and this encourages pride in the heritage and culture of a destination as it is re-evaluated (Cooper et al, 2008). Tourism also promotes the preservation of an area's cultural heritage, which includes archeological and historical sites, traditional arts, crafts, dance, music, theater, rituals, ceremonies and clothing (Inskeep, 1991). Tourism revenue also helps to develop and sustain museums, theaters and other cultural heritage facilities (Tovar & Lockwood, 2008).

The concept of heritage conservation is defined as "the process of understanding, safeguarding historical resources in order to preserve its cultural identity, values and significance" (Orbasli and Woodward, 2009, p.316). The local community is often considered to be the key stakeholders in heritage tourism. Local communities living near the heritage sites gradually get the chance to decide on their own wealth and livelihood services (Cochrane and Tapper, 2006). But the level of residents' engagement in tourism management varies across the countries.

But the extent of resident participation in managing tourism varies across countries. Local residents in many third world countries do not have the opportunity to share in the tourism growth decision-making process as opposed to many developed countries. The concept of stakeholders becomes increasingly important in the development and management of heritage, especially the community as the owner of heritage (Peters, 1999).

III.   Tourism Development in Myanmar

Myanmar processes an abundance of tourism assets such as the natural and cultural heritage. In addition, Myanmar's government is transforming its political and economic system to achieve economic growth, reduce poverty, and raise living standards for Myanmar People. The entry point for international tourists to Myanmar is Yangon, Mandalay and Bagan, Nawpyitaw, Mawlamyine, Muse, Tachikeik, Myawaddy, Tamue and Border gateways. Myanmar has an increase in international tourists because of political and

economic reforms, enhanced connectivity and increased demand to visit Myanmar from all major sources markets.

Table (2) International Tourists' Arrival in Myanmar

Year	Number of International Tourists	% of Growth Rate
2008	193319	-
2009	243278	25.84%
2010	310688	27.71%
2011	391176	25.91%
2012	593381	51.69%
2013	900161	51.70%
2014	1131624	25.71%
2015	1301583	15.02%
2016	1272596	-2.23%
2017	1362948	7.10%

Sources: Tourism Statistics (2004, 2008, 2012, 2017), it does not include international tourists' arrival from border gateways.

Table (2) describes the international tourists' arrival in Myanmar (2008 to 2017) but it does not include international tourists from border gateways. International tourists' arrival began to increased 193.32 thousands in 2008 to 593.38 thousands in 2012 and 900.161thousands in 2013; the growth rate of international tourists' arrival from 2010 to 2011 is 51.7% because of political, social and economic reforms and inflow of investment in infrastructure related to tourism sector since 2011. Moreover, international tourists' arrival decreased from 1.3 millions in 2015 to 1.27 millions in 2016, also growth rate (-2.23%), because of changing the visitors counting method which do not include the number of international day trippers from border gate ways (JICA, 2018) and conflicts of Rohinhya in Northern Rakhine State, Myanmar.

Table (3) International Tourists' Arrival by Region in Myanmar (2017)

Region	Number of International Tourists' Arrival	% of Total
Asia	953801	69.98%
West Europe	239358	17.56%
North America	87153	6.4%
Oceania	37644	2.76%
East Europe	20069	1.47%
Other Americans	12592	0.92%
Middle East	6465	0.48%
Africa	5866	0.43%
Total	1362948	100%

Source: Myanmar Tourism Statistics, 2017

According to table (3), international tourists' arrival can be categorized by region, 69.98 % visited from Asia, 17.56% visited from West Europe and 6.4% visited from North America. Moreover, top ten foreign tourists to Myanmar by nationality are Thailand (273889), China (212642), Japan (101484), America (73085), Korea (65829), Singapore (61859), Vietnam (58919), France (58369), UK (47717) and Malaysia (47010).

Tourism Development in Bagan

Bagan area is one of Myanmar's most important cultural heritage sites. Bagan is a very interesting ancient site not only in Myanmar but also in the world as it has flourished as a Buddha Sarsanar and is rich in many valuable ancient monuments such as different varieties of temple, stupas and monasteries etc. Bagan temples are not only Myanmar's national symbols but also Myanmar's precious cultural heritage buildings. It is the biggest tourist attraction in the country and Bagan temples are recognized as one of the major historical landmarks in Southeast Asia.
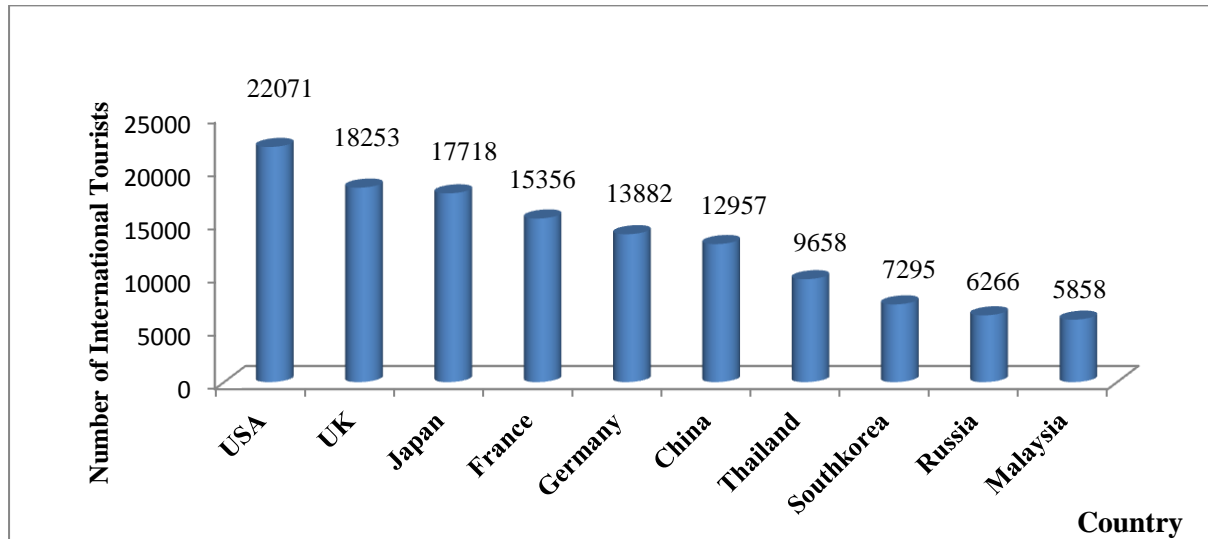
Table (4) International Tourists' Arrival in Bagan

Year	Number of International Tourists	% of Growth rate
2008	38135	-
2009	55061	44%
2010	76831	40%
2011	102587	34%
2012	162984	59%
2013	196365	20%
2014	230129	17%
2015	247140	7%
2016	283877	15%
2017	300441	6%

Source: Ministry of Hotel and Tourism, Bagan Branch Statistics (2018)

Table (4) illustrates international tourists' arrival in Bagan (2008 to 2017), the number of international tourists has increased from 38.14 thousands in 2008 to 300.44 thousands in 2017 and the number of international tourists' arrival to Bagan has increased over seven fold from 2008 to 2017. The number of international tourists' arrival to Bagan has increased year after year because there are many reasons why tourists come to Bagan. It is recognized as a historical, architectural and other Buddhist sites in South East Asia and an important Buddhist heritage site. Moreover, Bagan is one of the cultural heritage tourist destinations in Myanmar which attracts many visitors to its unique and important cultural landscape of Bagan. In addition to the historical landscape of temples and pagodas, Bagan has rich and attractive cultural and natural resources such as traditional farming, villages where people living supporting agriculture, traditional crafts produced by people living in the village. Traditional entertainments such as traditional dance, the puppet show and traditional music and people's lifestyle are to attract many tourists come to Bagan. Community-based tourism

in Bagan, tourists can get the experience of local village life such as visiting handicrafts workshops (lacquer ware, textile woven cotton) and farming.

Figure (1) Top 10 Foreign Visitors to Bagan by Nationality in 2017

Source: Ministry of Hotel and Tourism, Bagan Branch Statistics (2018)

According to the Ministry of Hotel and Tourism, Bagan Branch Statistics (2018), the largest number of foreign visitors came from America (22071), second largest number of foreign visitors came from UK (18253) and third largest number of foreign visitors came from Japan (17718).

IV.   Analysis of the Survey

Demographic Characteristics of Residents

The demographic characteristics of the residents are presented in the following table (5), this study of respondents' were mostly female (50.3%) and male (49.7%). Next, respondents were categorized into six age groups: 15-24 years (15.6%), 25-34 years (40.6%), 35-44 years (21.6%), 45-54 years (14.7%), 55-64 years (5.3%) and 65-80 years (2.2%). Most of the respondents were young and middle age between 25 to 44 years old.

Moreover, most respondents were employed in government staffs (44.7%), second as private organization staff (34.1%), and self-employed (10.9%), daily worker (3.8%). Most of the respondents had university and above (69.1%), high school education (20.9%), middle school education (5.3%) and others (4.7%). Among 320 respondents, 148 (46.2%) earned tourism related activities: tourism (9.4%), hotel (18.8%), tourism transportation (4.4%), cultural oriented services (0.6%) and tourism related work (13.1%) and the remaining are income from other sources. Majority of respondents are natives (71.6%) and length of residents is more than 6 years (75.6%), between 3 to 6 years (9.7%), between 1 to 3 years (10.6%) and within 1 year (4.1%). Some respondents were participation of cultural heritage conservation (36.9%). Demographic characteristics of respondents are shown in table (5).

Table (5) Demographic Characteristics of Respondents

Variables	Frequency	Percent
Gender		
Male	161	50.3
Female	159	49.7
Age		
15-24	50	15.6
25-34	130	40.6
35-44	69	21.6
45-54	47	14.7
55-64	17	5.3
65-80	7	2.2
Occupation		
Daily Worker	12	3.8
Government Staff	143	44.7
Private Organization Staff	109	34.1
Professional	5	1.6
Self-employed	35	10.9
Retired	4	1.3
Volunteer	2	0.6
Level of Education		
Middle Education	17	5.3
High School Education	67	20.9
University and above	221	69.1
Others	15	4.7
Main Sources of Income		
Tourism	30	9.4
Hotel	60	18.8
Tourism Transportation	14	4.4
Cultural Oriented Services	2	0.6
Tourism related work	42	13.1
Others	172	53.8
Native		
Yes	229	71.6
No	91	28.4
How Long stay in Nyaung-U		
Within 1 year	13	4.1
Between 1-3 years	34	10.6
Between 3-6 years	31	9.7
Between 6 years	242	75.6
Participation		
Any activities for conservation	118	36.9
No activity	202	63.1

Source: Survey Data (2018)

Table (6) Result from Reliability Test for Perception of Impacts of Tourism, Community Involvement and Further Tourism Development and Cultural Heritage Conservation

Construct/Items	Internal Consistency Cronbach's alpha
Economic Impacts	0.810
Environmental Impacts	0.751
Government Involvement	0.774
Local Community Involvement	0.854
Further Tourism Development and Cultural Heritage Conservation	0.706

Source: Survey Data (2018)

The above table (6) shows the result from reliability test for residents' perception of impacts of tourism and community involvement for further tourism development and cultural heritage conservation in Bagan. Cronbach's alpha is needed to construct the reliability measure in this study.

Regarding 8 items are included for economic impacts of tourism. According to the survey data 2018, reliability test for economic impacts of tourism, Cronbach's alpha 0.810, are greater than the recommended 0.7 value of reliability. Regarding 8 items are included for environmental impacts of tourism. According to the survey data 2018, reliability test for environmental impacts of tourism, Cronbach's alpha 0.751, are greater than the recommended 0.7 value of reliability.

Regarding 4 items are included for government involvement for further tourism development and cultural heritage conservation, Cronbach's alpha 0.774, are greater than the recommended value of reliability. Next, regarding 5 items are included for local community involvement for further tourism development and cultural heritage conservation, Cronbach's alpha 0.854, are greater than the recommended 0.7 value of reliability. Regarding 9 items are included for residents' perception of further tourism development and cultural heritage conservation in Bagan. Cronbach's' alpha 0.706 are greater than the recommended 0.7 value of reliability. Cronbach's alpha and composite reliability estimate of 0.70 or higher is an acceptable reliability coefficient. The larger the reliability coefficient, the more reliability the test scores will be.

Descriptive Statistics Analysis

Descriptive statistics can be used to describe the mean value of the observed variables. According to the mean value of the observed variables, this study illustrated residents' perceptions of impacts of tourism, community involvement and further tourism development and cultural heritage conservation in Bagan. Respondents are asked to provide answers on each item that are measured by a five point Likert Scale ranging from 1 being Strongly Disagree to 5 being Strongly Agree. The respondents can fill up their answer which

selected one from five points Likert Scale Scale ranged from strongly disagree, disagree, neutral, agree to strongly agree. The means values of variable are categories into three levels. In accordance with the classification of Sekaram & Bougie (2016), mean value less than 2 are classified as low level, between 2 and 3.5 are categorized as moderate level and 3.5 and above are considered as high level of perception.

Table (7) Descriptive Statistics on the Perception of Tourism Impacts

Construct/Item	Mean	Standard Deviation
Economic Impacts		
(1)Revenue generated in the local economy	4.53	0.512
(2)Increasing personal income of local residents	4.51	0.531
(3)Creation of employment opportunities	4.35	0.467
(4)Increasing foreign exchange earnings	4.00	0.734
(5)Improving standard of living	4.02	0.688
(6)Generating taxes revenue for local authority	4.25	0.779
(7)Encouraging cottage industry and other supportive industries	4.33	0.582
(8)Over commercialization of cultural heritage	2.33	0.491
Environmental Impacts		
(1)Littering done by local visitors	3.63	0.609
(2)Overcrowding	3.74	0.590
(3)Construction of hotels and other tourists' facilities have destroyed the nature and cultural landscape	3.66	0.587
(4)Damage of cultural heritage sites (graffiti, vandalism and various damage)	3.53	0.618
(5)Solid waste/ air, water, noise and soil pollution	3.55	0.661
(6)Traffic congestion and lack of systematic car parking	3.74	0.590
(7)Climbing on the monuments	3.65	0.590
(8)Driving vehicles around and close the monuments	3.67	0.595

Source: Survey Data, 2018

According to the above table (7), it shows the descriptive statistics on the perception of tourism impacts in Bagan. Respondents are asked to provide answers on each that are measured by a five point Likert Scale ranging from 1 being Strongly Disagree to 5 being Strongly Agree. The impacts of tourism consisted of 16 items divided into two sections: economic impacts and environmental impacts. The residents found that economic impacts, revenue generated in the local economy, increasing personal income of local residents, creation of employment opportunities, increasing foreign exchange earnings, improving standard of living, and generating taxes revenue for local authority, encouraging cottage industry and other supportive industries and over commercialization of cultural heritage with a score of more than 4 points. Low score was found for over commercialization of cultural heritage in Bagan, with a score of 2.33 point mean, most of the residents did not agree this statement. As regards resident's perceptions of the environmental impacts of tourism, littering, overcrowding, construction of hotels and tourism facilities, graffiti, vandalism,

pollution, traffic congestion on so on which are negative impacts of tourism, the degree of agreement is not generally too much and in many case scores slightly 3.5. Additionally overall mean score of economic impacts (4.04) and environmental impacts scores (3.65), thus residents agreed that economic and environmental impacts of tourism development on further tourism development and cultural heritage conservation.

Table (8) Descriptive Statistics on the Perception of Community Involvement

Construct/Item	Mean	Mean
Government Involvement		
1. Rules and regulations for sustainable cultural heritage tourism	4.18	0.639
2. Role of Government for achieving World Cultural Heritage Status	4.20	0.737
3. Collaboration of local and international organizations for cultural heritage conservation	4.27	0.517
4. Conservation activities by Department of Archaeology (Bagan Branch)	4.14	0.714
Local Community's Involvement		
1. Caretakers of monuments and cultural landscape	4.35	0.551
2. Participation of cultural heritage conservation	4.32	0.534
3. Cooperation with government authorities and other organizations through monitoring and maintenance	4.43	0.520
4. Carrying out rituals and celebrations	4.43	0.521
5. Ability to perform customary practices	4.53	0.530

Sources: Survey Data, 2018

According to the above table (8), this study illustrates descriptive statistics on perceptions of community involvement in Bagan. Respondents are asked to provide answers on each that are measured by a five point Likert Scale ranging from 1 being Strongly Disagree to 5 being Strongly Agree. The community involvement consisted of 9 items divided into two sections: government involvement and local community involvement. High scores more than 4 points were found for degree of agreement with the statements that Government is vital role to provide rules and regulations and support world cultural heritage status and it collaborates with local and international organizations. Department of Archaeology is actively performing the cultural heritage conservation in Bagan. Moreover, it is interesting to note that local community involvement score is more than 4 points that local community is caretakers for cultural heritage landscape, local community actively involve cultural heritage conservation and they carries out rituals, celebrations and have ability to perform customary practices for further tourism development and restoration of culture in Bagan. Additionally overall mean score of government involvement (4.29) and local community involvement (4.41), thus residents strongly agreed that government and local

community supported further tourism development and cultural heritage conservation in Bagan.

Table (9) Descriptive Statistics on Perception of Further Tourism Development and Cultural Heritage Conservation

Construct/Item	Mean	Standard Deviation
Further Tourism Development and Cultural Heritage Conservation		
1. Public funding for tourism promotion and heritage conservation	4.21	0.609
2. More tourism facilities increase the volume of tourists	4.26	0.499
3. Government and tourism organization should advertise the destination effectively	4.25	0.550
4. Carrying capacity (maximum number of visitors) should be determined and enforced by government	4.23	0.587
5. Economic benefits provide cultural heritage conservation	4.30	0.503
6. Legal protection is essential for heritage conservation	4.28	0.482
7. A variety of cultural activities support cultural restoration	4.37	0.550
8. Preserving cultural identity	4.48	0.513
9. Encouraging responsible visitors' behavior	4.57	0.515

Source: Survey Data, 2018

According to the table (9), this study illustrates that descriptive statistics on perceptions of further tourism development and cultural heritage conservation in Bagan. Respondents are asked to provide answers on each that are measured by a five point Likert Scale ranging from 1 being Strongly Disagree to 5 being Strongly Agree. The perceptions of further tourism development and cultural heritage conservation consisted of 9 items. High scores more than 4 points were found for degree of agreement with the statements that public funding, tourism facilities, collaboration of local and international organizations, conservation activities of Department of Archaeology, caretakers of monuments, participation of conservation, monitoring and maintenance, carrying out rituals and celebrations and ability to perform customary practices. Additionally, overall mean score of further tourism development and cultural heritage conservation (4.33), thus residents strongly agreed that the residents perception of further tourism development and cultural heritage conservation in Bagan.

Multiple Regression Analysis

Multiple regression analysis is used to observe the relationship between the independent variable and dependent variables. The specific model for regression analysis in this study is as follow:

$$Y_{tdc} = \beta_0 + \beta_1 X_{i1} + \beta2X_{i2} + \beta3X_{i3} + \beta4 X_{i4} + \varepsilon i$$

Where; Ytdc = Residents' perception of further tourism development and cultural heritage conservation

β_0 = Constant

X_{i1} = Residents' perception of economic impacts of tourism

X_{i2} = Residents' perception of environmental impacts of tourism

X_{i3} = Residents' perception of government involvement

X_{i4} = Residents' perception of local community involvement

εi = Error term

The above model shows the relationship between the factors which are residents' perceptions of impacts of tourism: economic impacts and environmental impacts, residents' perceptions of Community involvement: Government involvement and local community involvement for further tourism development and cultural heritage conservation in Bagan. The summary results of model are presented in the following table (10)

Table (10) Summary Results of Model

Item	Model				VIF
	Coefficient	Beta	t	Sig	
Constant	2.833***		13.279	.000	
Perceptions of Economic Impacts of Tourism	.104**	0.139	2.338	.022	1.459
Perceptions of Environmental Impacts of Tourism	-.093**	-.115	-2.270	.024	1.063
Government Involvement	.067*	.111	1.833	.068	1.524
Local Community Involvement	.254***	.367	6.678	.000	1.255
R	0.492				
R2	0.242				
F Statistics	25.095		.000		
Adjusted R	0.232				
Durbin Watson	1.752				
***,**,* Statistical significant at 1%, 5%, 10% level respectively					

Source: Survey Data, July to December, 2018

According to the table (10) the multiple regression results for this model can be interpreted as follow: R^2 is 0.242, which indicates 24 percent of the variance in supporting to further tourism development and cultural heritage conservation in Bagan can be explained by

four independent variables. Adjusted R^2 is 0.232. The F statistics is 25.095 and its significant level is at 1% (p-value = 0.000). The multicollinearity statistics by using variance inflation factors (VIF) are also checked, indicating that there are no variables exceeding our "rule of thumb" of 10 for VIF. Durbin-Watson statistics are used to check autocorrelation in the model. For 320 observations and four independent variables, d_l is 1.633 and d_u is 1.715 at 1 % significant level. Durbin-Watson value (d) 1.772 is greater than d_u 1.715; it indicates that it appears to be no autocorrelation. Therefore, it can confirm that there is no auto correlation and no multicollinearity in this model.

For the regression coefficient and significant level of each independent variable, it can be seen four variables; including economic impacts; government involvement and local community involvement have a positive relationship with further tourism development and cultural heritage conservation in Bagan. The coefficients are 0.104, 0.067 and 0.254 at a significant level of 5 percent, 10 percent and 1 percent (p-value = 0.022, 0.068 and 0.000) respectively. On the other hand, environmental impacts have a negative relationship with further tourism development and cultural heritage conservation. The coefficient is -0.093 at a significant level of 10 percent (p value = 0.024)

The study found that the results of tourism and community involvement on further tourism development and cultural heritage conservation have strongly agreed by residents' perception; economic impacts of tourism have a significant level of 5 percent, environmental impacts of tourism have a significant level of 5 percent, government involvement has a significant level of 10 percent and local community involvement has a significant level of 1 percent for further tourism development and cultural heritage conservation in Bagan.

V.   Conclusion

This study attempted to contribute the work on residents' perceptions of tourism impacts, community involvement and further tourism development and cultural heritage conservation in Bagan. According to the result, economic impacts of tourism, Government involvement and local community involvement have positive significant relationship with further tourism development and cultural heritage conservation at Bagan World Cultural Heritage Sites. But, environmental impacts of tourism have negative significant relationship with further tourism development and cultural heritage conservation. This study found that tourism in Bagan has positive and negative impacts. Economic impacts of tourism supported some benefits and environmental impacts of tourism had some damage the cultural landscape and to disturb the further tourism development. Some economic impacts such as funding from economic benefits, job creation, and government tax revenue and revitalization of handicrafts and cottage industry which encourage further tourism development and cultural heritage conservation. Environmental impacts of tourism have negative contribution such as over-crowding, littering done by local visitors, construction of hotels and other tourists' facilities, graffiti, vandalism, pollution, traffic congestion and lack of systematic car parking, climbing on the monuments and driving vehicles around the monuments which can interrupt the further tourism development and cultural heritage conservation. Thus, community involvement such as government and local community supported to further tourism

development and cultural heritage conservation. Government implemented tourism related laws and cultural heritage conservation law in Myanmar. Furthermore, Government coordinated with UNESCO and local and international experts to try Bagan up World Heritage List. Department of Archaeology manages the heritage property efficiently in Bagan. Additionally, local community is essential and they must be caretakers of cultural heritage. They are actively involving the activities of culture, customs and traditions which lead to cultural restoration in Bagan. Thus, there is a balance growth between tourism development and cultural heritage conservation which is important for Bagan. Next, key stakeholders is needed to coordinate such as Public organizations, Private Organizations, INGOs, NGOs and local community for sustainable cultural heritage assets for further tourism development. Finally, stakeholders encourage responsible visitors' behavior and community-based cultural heritage conservation for further tourism development through sustainability cultural heritage resources in Bagan.

Acknowledgements

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