

Lessons Learned - Local Residents' Acceptance of Crowding During Public Holidays

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ABSTRACT

Pangkor Island is one of the islands that is the focus of tourists from within and outside the country—as evidenced by the very high number of tourist arrivals, especially on public holidays. The arrival of many tourists will have an impact on the locals as well as bring about various levels of acceptance. It can be difficult to achieve sustainable tourism development. Therefore, this study was conducted to examine the situation of crowding that occurs in Pangkor Island during public holidays and the level of acceptance of local residents to the situation. This quantitative study used a questionnaire to survey a total of 387 local residents. Using the People at One Time (PAOT) method, respondents were given five choices of pictures showing the tourism situation in Pangkor Island during public holidays. From this PAOT analysis, respondents stated that the situation in Pangkor Island on public holidays was 'very crowded' with 74.4% choosing Photo F, followed by Photo D (9.6%), Photo E (7.2%) and finally, the photo with lowest percentage was Photo A (1.3%). The average frequency of respondents seeing tourists carrying out selected activities in tourism is also high with a mean value of 4.15. The crowding situation in Pangkor Island during public holidays puts the barometer of the level of acceptance of the locals at a moderate level with a mean value of 2.87. This situation shows that the locals can still accept the number of tourist arrivals, but that there is already a conflict. If this condition continues without any improvement, it can cause the barometer reading to increase to the red level which is unacceptable. This study provides important information to stakeholders to ensure the sustainability of tourism in Pangkor Island is preserved.

Keyword: Local Resident acceptance, Crowding, Social Carrying capacity

INTRODUCTION

The island is one of the most unique tourist attractions to visit. Pangkor Island is one of the most popular tourist destinations in Malaysia apart from several other islands such as Langkawi Island, Perhentian Island, Tioman Island, Redang Island and Sipadan Island. Pangkor Island is

an inhabited island. Its population reached 15,499 people in 2015, and the number of tourist arrivals was also quite high with almost 1.9 million people recorded in 2015, which then increased to 2.1 million people in 2016 (Manjung Municipal Council, 2017). This increase in the number of tourists will definitely put pressure or impact the stakeholders in tourism, namely the tourists themselves and the locals.

The intensifying development in Pangkor Island will attract more domestic and international tourists to visit. Organized development will result in sustainable tourism development. However, to achieve sustainability, it is not only the measure of the aspect of physical carrying capacity that is important, but the social aspect needs to be examined as well. Based on the report by Manjung Municipal Council (2016), the study and planning of physical development in Pulau Pangkor has been conducted by the Local Authority (PBT), namely, Manjung Municipal Council, but the study on the second aspect of sustainability in tourism, that is social capacity, has not been studied by any party. According to the Manjung District Local Plan (Composition) 2020 report, the physical condition in Pulau Pangkor is still in accordance with the standards set by the Manjung Municipal Council (MPM), Perak Town and Country Planning Department (JPBD) and island development guidelines.

This vibrant development in Pangkor Island attracts more tourists, especially during public and school holidays. With such a large increase of arrivals, it would definitely give rise to varying levels of acceptance by stakeholders in Pangkor Island, especially the locals. Based on observations, a very significant increase in the number of tourists to Pangkor Island is during public holidays such as school holidays, festive holidays and other public holidays. During public holidays, tourists have to wait for two to four hours to board the ferry to enter and exit Pangkor Island. The researchers also experienced the crowds caused by this excessive tourism during the initial study in Pangkor Island during public holidays.

CROWDING IN TOURISM

Research on this type of crowding is a very dominant theme in social psychology literature (Shelby and Heberlein, 1986). This problem of crowding arises when the use of environmental and social resources has exceeded the recreational capacity of a location (Hammitt and Cole, 1998; Manning et al., 1999). This concept actually refers to the number of people and can be a more useful criterion than satisfaction for management. The term crowding assessment (perceived crowding) is a psychological condition derived from an individual's subjective assessment to determine the density for a particular environment (Shelby and Heberlein, 1986).

In 1972, Stokols used the terms "space" and "density" to describe the concept of crowding. He noted that crowding is an individual's psychological reaction to dwindling space. Wagar (1964) was one of the earliest researchers to study crowding and linked this concept with desert land recreation. He discussed a series of hypothetical relationships between the number of people and the quality of recreation, and found that individuals who desire privacy will be impressed by the circumstances of these visits. He concluded that participation in outdoor recreational activities is driven by "needs" and "desires" in consumer diversity and activity diversity (in Zhang and Chung, 2015).

Schmidt and Keating (1979) developed the concept of crowding in their social interference theory which argues that a situation would be identified as crowding when it has reached a level of density or condition that limits or interferes with individual activities in the environment. They define crowding as an actual level or condition that a person may find unacceptable if they feel that it is more than it should be. To emphasize a more subjective assessment of individuals to determine density in a particular environment, the term "perceived crowding" was proposed by Shelby and Heberlein (1986). This term combines descriptive information (density or level of encounters experienced by individuals) with evaluative information (density or level of encounters rated negatively by individuals).

Many studies have been conducted to investigate when, where and why such crowding occurs. Bultena et al. (1981) and Zhang (2016) studied about tourists at National Parks in Alaska, and Bultena found that visitors feel more crowded when interactions with other visitors exceed their assessment and expectations. Gramann and Burdge (1984) conducted a mail survey of visitors to Lake Shelbyville, a multi-purpose reservoir in central Illinois. Their findings suggest that perceived crowding has a positive correlation with recreational exposure, but at the same time poses a behavioural threat to other visitors.

Vaske and Donnelly (2002) provide a detailed description of the use of crowding that is considered to be evaluative acceptance. They argue that when people rate an area as congested, they are implicitly comparing the conditions they are experiencing (i.e., effects) with their perceptions of what is acceptable (i.e., standards). Therefore, in this study, researchers want to examine the crowding situation that occurs in Pangkor Island based on the perspectives of local residents. Determining the crowding situation is important because it will affect the perceptions of the locals in assessing the crowding situation in Pangkor Island. This is in line with several previous studies that have been conducted (Daniel and Zacarias, 2010; Zhang and Chung, 2015).

PROBLEM STATEMENT

In examining the issue in Pangkor Island, it is not only the quality of the tourist experience that tourists can receive before they look for alternative destinations (psychological capacity of tourists), but also the level of tolerance of the "hosts" or locals to the presence of tourists (the psychological capacity of the population) that needs to be assessed (Saveriades, 2000). This statement is supported by Marzetti and Masetti (2005), who stated that in determining social carrying capacity, both tourists and residents need to be examined. With the number of tourists increasing every year, it also puts pressure on the "hosts" or the locals. The number of locals is also increasing every year. In 2012, the total population of Pangkor Island was 12,999 people (Pangkor Island Chief Office 2012), which then increased to 15,499 people in 2015 (Manjung Municipal Council, 2016). Certainly, this creates conflict, especially for the locals who are not involved with the tourism sector in Pangkor Island. Based on statistics released by the Manjung Municipal Council (2016), 64% of the local population is involved in fisheries, 24% in business and services, and the rest are in the private and public sectors. This means that the majority of the population in Pangkor Island is not directly involved in the tourism sector. This situation is expected to have a particular impact on the local population. Therefore, the problem of this

study is to gauge the level of acceptance of local residents towards the crowding situation that occurs in Pangkor Island, especially during public holidays.

RESEARCH METHODOLOGY

According to Hair et al. (2007), the quantitative research method has the advantage in the sense that it can accommodate large sample sizes, yet it is still able to produce estimates that are accurate enough to allow small differences to be identified. The results or outcomes of this quantitative method of research can be compacted into statistics that can then be compared with other statistical groups (Sukamolson, 2010).

According to Wiersma (1995), this is one of the best methods if the study aims to measure or evaluate the attitude, perception, achievement and involvement of something. A descriptive form is also used in line with the needs of the study, which is to see a phenomenon that is happening (Mohd Majid Konting 1990). Thus, a set of questionnaires was prepared for that purpose which was constructed by the researcher based on the literature review to achieve the objectives of the study. Tuckman (1999) stressed that questionnaires are an effective way to obtain information from respondents. The use of questionnaires can save the cost of a study and is effective when it involves a large amount of data and a large sample size.

Accordingly, questionnaires are a useful instrument in collecting data to describe social phenomena in a population (Roca, 2008). According to Hou (2010), the use of questionnaires can save the cost of a study and is effective when it involves a large amount of data and a large sample size. In the context of this study, quantitative research methods were used to answer all the objectives. It was also combined with several other methods such as the Picture At One Time (PAOT) method to determine crowding at a study location. This PAOT method was developed by Manning et al. (2002) to examine crowding at a location. Respondents were asked to choose a description of the situation on Pangkor Island during public holidays based on the photos provided. After the respondents selected a picture to determine the crowding situation in Pangkor Island, they were asked to express their level of acceptance of the situation. The determination of mean values were based on previous studies such as the ones done by Pallant (2007) and Jamil Ahmad (2002).

In this study, researchers used two sampling methods, namely, the sample size determination method and the non-probability sampling method. The determination of the sample size was applied to the local community because the researchers knew the exact total population of Pangkor Island. Based on an in-depth interview with the head of Pangkor Island, Tuan Haji Khamis bin Kassim, the total population of Pangkor Island in 2016 was 16,482 people. The determination of the sample size was based on the table by Krejcie and Morgan (1970). Using a 95% confidence level or $\alpha = 0.05$ (Othman, 2015), if the sample size is 100, then 95 of the samples approach the mean value of the population. Therefore, the appropriate number for the sample size of this study is more than 375 respondents. However, in order to obtain better results, researchers selected a total of 387 local respondents to represent the population of Pangkor Island. The increase in the number of respondents allows more data to be obtained as well as obtaining more variation in the findings.

FINDINGS AND DISCUSSION

Respondents' profiles

A total of 387 residents of Pangkor Island were selected as respondents in this study. The local community is the individual closest to the development and development that takes place in a tourist location. Therefore, research on local communities is important in this study. Of the 387 respondents, 61.2% were female and 38.8% were male (Table 1). The local communities involved as respondents in this study include residents who are involved in tourism and not involved in tourism development in Pangkor Island.

Various age categories of respondents were involved in this study. The age group with the highest number of respondents is 21-30 years (34.4%), followed by the category of 31-40 years (24.3%). The age category with the lowest number of respondents recorded was 51 years and above, which amounted to only 13 people or 3.4% only. This percentage gap is quite high because many of the locals in the age category of 51 years and above did not answer the questionnaire because many could not read. Most of the residents of Pangkor Island who are in this age category have a low level of education and some have no formal education. Thus, it was difficult for them to answer the distributed questionnaires.

Table 1: Demographic profile of respondents

Respondent Category	Frequency	Percent
Gender		
Male	150	38.8
Female	237	61.2
Age		
Below 20 years old	68	17.6
21 – 30 years old	133	34.4
31 – 40 years old	94	24.3
41 – 50 years old	79	20.4
51 years old and above	13	3.4

PERIOD OF RESIDENCE IN PANGKOR ISLAND

The researcher also took into account the period of residence of the respondents in Pangkor Island. This helps in examining the extent of development and development of tourism in Pangkor Island because the longer their stay the more things they know about planning in Pangkor Island. The role of the local community is very important in determining the development of the tourism sector in a destination.

Table 2 shows the significant differences in the distribution of settling periods between each category. The category of respondents residing for more than 21 years has the highest percentage with 62% of 387 respondents. This is followed by the category of respondents residing for 16-20 years (25.1%), 11-15 years (5.9%) and five years and below (3.6%). The respondents in the category of those who have lived in Pangkor Island for 6-10 years made up

the lowest percentage at only 3.4%. These findings are clearly very helpful in this study as more than half of the respondents surveyed have lived for more than 20 years in Pangkor Island. Their information and knowledge regarding the development and development of tourism in Pangkor Island is important for the study of the social carrying capacity of tourism on the island.

Table 2: Period of Residence of Respondents

Period of occupation	Frequency	Percent
Below 5 years	14	3.6
6 – 10 years	13	3.4
11 – 15 years	23	5.9
16 – 20 years	97	25.1
21 years and above	240	62.0
Total	387	100.0

SITUATION AT THE TOURIST LOCATION (PANGKOR ISLAND)

This section explains the situation in Pangkor Island during the public holiday season based on the perspectives of the respondents and answers the objective of the study which is the situation of crowding in Pangkor Island during public holidays. To examine the crowding situation in Pangkor Island, the PAOT method was used to determine the situation during the study. This PAOT method uses a series of images created using computer software (Image Capture Technology). This is a popular method in determining conditions related to recreation as well as tourism consumption. It is particularly useful in a situation of high consumption or unusual environmental conditions for which it is unrealistic to assess the situation through writing alone (Manning, 2007; Manning et al., 1996). Its disadvantage, however, is that it places a burden on respondents to assess various scenarios and situations in tourist locations (Hall and Roggenbuck, 2002; Needham et al., 2004).

Figure 1 is a series of images created by researchers to illustrate the situation in Pangkor Island. This image was created based on the study done by Needham et al. (2008) and Zacarias et al. (2011) as well as observation methods. The main tourist attraction features of Pangkor Island are the sea and the beach. Therefore, the researchers chose the coastal area as the location in this image.

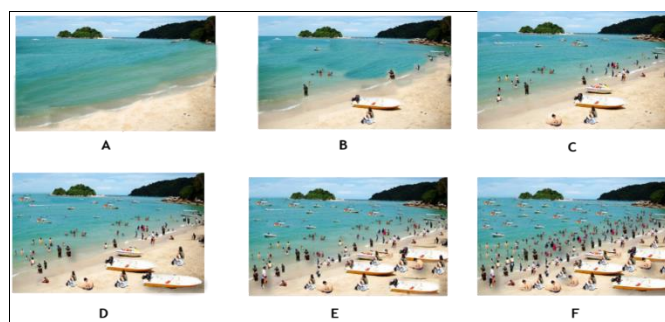


Figure 1: Selection of Images Describing the Situation in Pangkor Island

The majority of tourists in Pangkor Island do sea and beach-based activities. This photo set is an image of Teluk Nipah that was modified by placing varying numbers of tourists in it to make it easier for respondents to choose an image.

CROWDING CONDITIONS BASED ON LOCAL RESIDENTS' PERCEPTIONS

To examine the local people's acceptance of the crowding situation in Pangkor Island, a study on the crowding situation needs to be conducted first. Based on Figure 2, respondents stated that the situation in Pangkor Island on public holidays was 'very crowded' with 74.4% choosing Photo F (Refer to Figure 1). The selection of Photo F shows that the locals stated that in the area range of 271m x 44m, the number of tourists is as many as 800 people. This situation clearly indicates it is very crowded. This difference is very noticeable between the other photos. Photo A had the lowest number of responses with only 1.3% recorded. This significant difference clearly shows that the local respondents think that the situation in Pangkor Island is 'very crowded' during public holidays.

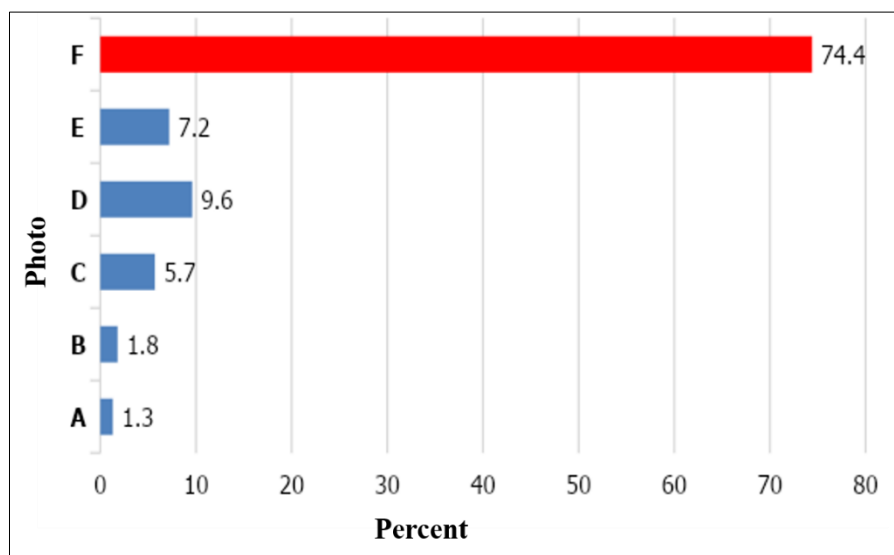


Figure 2: Crowding Situation Based on Local Residents' Perceptions of Public Holidays

The feedback from the locals clearly shows that during every public holiday, the number of tourists increases and causes crowding in Pangkor Island. However, in this study, the feedback from local residents was more towards their acceptance or tolerance of tourist arrivals and activities in their area. Saveriades (2000) and O'Reilly (1986) stated that the level of community tolerance towards the presence and behaviour of tourists at a destination gives a picture of the sustainability of tourism at that location. Therefore, the analysis for these locals is more focused on their acceptance of the presence of tourists rather than on crowding. Vaske and Donnelly (2002) pointed out that when people rate an area as congested, they are implicitly comparing the conditions they are experiencing (i.e., effects) with their perceptions of what is acceptable (i.e., standards). If they can't accept the crowding situation, they will choose other more suitable destinations to enjoy their vacation.

ACCEPTANCE OF LOCAL RESIDENT RESPONDENTS

In this section, the researchers interviewed using a questionnaire for resident respondents regarding how well they receive the arrival of tourists in Pangkor Island. After examining the impact they received as a result of the arrival of tourists in the island, it was only then that the researchers examined the acceptance of the locals. Their role in influencing tourism development activities through cooperation with the government is important (Jamaludin et al., 2009). Cottrell and Vaske (2006) argued that the perception of local people is the most accurate factor in assessing the current situation of a destination because they are the closest and know about the destination. Therefore, the researchers evaluated the aspect of the local people's acceptance of tourist arrivals which is the lifeblood of tourism development on the island.

Based on Table 4, most aspects of acceptance studied are at a high level with a mean value of more than 3.67, but respondents' acceptance of sharing facilities with tourists (mean = 3.04, SD = 0.882) is at a moderate level of acceptance (mean 2.34 - 3.66). The highest mean value recorded was the aspect of quality of life with a mean of 3.91 (SD = 0.981). Respondents felt their quality of life improved due to the large number of tourist arrivals. This is because it will lead to the addition of better facilities and infrastructure in their areas. In addition, the change of lifestyle from the fishing sector to the tourism sector is more beneficial to them. The respondents' acceptance of living comfort as a local resident was also at a high level with a mean value of 3.85 (SD = 0.917). Regarding the socio-cultural aspects as well as the reception of a large number of tourists in the future, these were also at a high level and recorded a mean value of 3.71 and 3.75 respectively.

The safety level has the lowest mean value among the high mean values = 3.69, SD = 0.865. Respondents were somewhat concerned about their level of safety with the presence of many tourists in Pangkor Island. These findings are not similar to the study conducted by Mastura et al (2016) in Mabul Island. In his study, locals feel safer with the large number of tourist arrivals as monitoring from the authorities will be more frequent. Overall, the respondents' acceptance of tourist arrivals in Pangkor Island was at a high level with a mean value of 3.84 (SD = 1.334). Taking the average value of all these indicators, the researchers concluded that the level of the local people's acceptance of tourist arrivals is high (Figure 3). According to Doxey's (1976) Irredex Model, this high level of acceptance indicates that it is at the Europhian level. Europhia means tourist arrivals are well received by the locals.

Table 4: Local Residents 'Respondents' Acceptance of Tourist Arrivals in Pangkor Island

The presence of many tourists will definitely make an impact on you as a local. Therefore, what is the level of acceptance of the following aspects as a result of tourism on Pangkor Island.			
Num.	Indicators	Min	SD
1.	Changes in the attitudes or socio-culture of the local population	3.71	0.937
2.	The quality of life of the locals	3.91	0.981
3.	Your comfort as a local	3.85	0.917
4.	Facilities that need to be shared with tourists	3.04	0.882

5.	Security level	3.69	0.865
6.	An increase in the number of tourists in the future	3.75	1.262
7.	Overall, what is your level of acceptance as a local to the arrival of tourists to Pangkor Island?	3.84	1.334
Average		3.68	

Scale		Colour
High Acceptance	>3.67	Hijau
Moderate Acceptance	>2.34<3.66	Kuning
Low Acceptance	<1.00 < 2.33	Merah

Source: Jamil Ahmad (2002) and Pallant (2007)

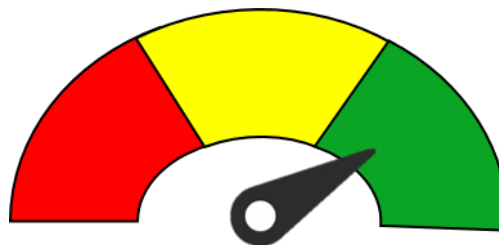


Figure 3: Local Respondents' Acceptance of Tourist Arrivals in Pangkor Island

To further strengthen the findings of this acceptance, the researchers made a cross-tabulation analysis (crosstabs) to examine the level of acceptance of local respondents who are not involved in tourism. This analysis is important to identify the level of acceptance of local residents in Pangkor Island regarding the arrival of these tourists. Based on Table 5, 55.8% of the 387 respondents are involved in tourism. Of this number, there are also those who cannot accept tourist arrivals in Pangkor Island which is 38 people or 9.81%. For those who are not involved in tourism, there are 42 respondents (10.86%) who cannot accept tourist arrivals. They feel that too many tourists will make it difficult for them to offer services. These local respondents cannot accept very large tourist arrivals during public holidays. A total of 159 people (41.08%) are those who are involved in tourism and can accept tourist arrivals in Pangkor Island while 103 people (26.62%) can accept tourist arrivals even if they are not involved in tourism. There are also respondents who are involved and not involved in tourism who stated that their acceptance is at a moderate level with 19 people (4.91%) and 26 people (6.72%) respectively. With this high percentage of acceptance, the researchers concluded that locals in Pangkor Island can still accept tourist arrivals in their area. This study supports a study conducted by Esmat and Jason (2017), who found that locals in Dubai accept the presence of tourists in their area well. If locals can accept tourist arrivals, it will help in the development of tourism in a destination (Cottrell and Vaske, 2006; Dyer et al., 2007).

Table 5: Cross-Tabulation Analysis of Resident Respondents' Involvement and Their Acceptance of Tourist Arrivals in Pangkor Island

		Overall, what is your level of acceptance as a local to the arrival of tourists in Pangkor Island?						Total
		Unacceptable		Moderate		Acceptable		
		(%)	n	(%)	n	(%)	n	
Are you involved with the tourism sector?	Yes	9.81	38	4.91	19	41.08	159	55.8 %
	No	10.86	42	6.72	26	26.62	103	44.2%
Total		20.67	80	11.63	45	67.7	262	387

n = Total of respondents

Apart from that, the researchers also examined whether the locals wanted to limit the number of tourist arrivals in Pangkor Island. An analysis of these findings will indicate the possibility of local respondents' acceptance of tourist arrivals in the future.

Table 6: Cross-Tabulation Analysis of Resident Respondents' Involvement and Their Views on Limiting the Number of Future Tourists

		Are you involved with the tourism sector?		Total
		Yes	No	
Do you want the number of tourist arrivals to be limited	Yes	166	124	290
	No	50	47	97
Total		216	171	387

Based on Table 6, there are 216 local respondents who are involved in tourism in Pangkor Island and 171 people are not involved. Of the 216 people involved, there were 166 who wanted the number of tourist arrivals to be limited compared to 50 who did not want it to be limited. The number of residents who are not involved in tourism and want the number of tourist arrivals to be limited is 124 people compared to 47 people who are not involved and do not want tourist arrivals to be limited. The number of respondents who want the number of tourist arrivals to be limited (290 people) is very high compared to the number who do not want it to be limited (97 people). This situation shows that a very large number of tourists is affecting them.

Therefore, they want the number of tourists to be limited, especially during the public holiday season.

CONCLUSION

From all the findings of the study, it can be seen that the arrival of tourists in Pangkor Island during public holidays is high. The high number of tourist arrivals every year, especially during public holidays as well as the encouraging involvement of the population in tourism and the development of accommodation facilities that are increasingly vigorous show the positive development of the tourism sector in Pangkor Island. Despite the high number of respondents responding well to tourists, residents felt the number of tourist arrivals should be limited, especially on public holidays. This situation shows that the locals are starting to feel unhappy with the number of tourist arrivals in Pangkor Island. The rapid growth of tourism in Pangkor Island requires more involvement from the locals. This is because the locals are the stakeholders who need to be given attention. If the involvement of local people is very low in a tourist location, it will make it difficult to develop tourism in that location. However, in the case of Pangkor Island, the involvement of the population in tourism is quite high with 55.8% involved. This gives an advantage to Pangkor Island to continue to grow in the field of tourism. Apart from that, the residents of Pangkor Island also enjoy the benefits of the development of tourism in Pulau Pangkor. This situation allows Manjung Municipal Council to plan better and further tourism development to attract more tourists to visit Pangkor Island.

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