

Site Selection Criteria for British Colonial Hill Stations in Malaya

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Abstract: Hill stations are designed landscapes at high altitude, created by the British in their colonised countries. Histories have proven that these landscapes were created due to the difficulty faced by this colony to survive in a hotter lowland, compared to their homeland. Following independence, hill stations in Malaysia are treated as famous tourist destinations, because of their unique characteristics. Hence, this study was carried out to identify the geographical characteristics of selected unique landscapes, prior to the existence of the Malayan hill stations. Extensive literature reviews were conducted on several published documents and historical sources. This paper has found that exceptional territory, summit's altitude, climate, size of the hilly landscape are the criteria considered by the British to create hill stations in Malaya.

Keywords: hill stations, Penang Hill, Maxwell's Hill, Fraser's Hill, Cameron Highlands.

1. INTRODUCTION

Hill stations were inhabited by the British when they colonised India and Malaya (pre-independence name of Malaysia), i.e. since the 18th century, with different functions, attractions and facilities (Weebers & Idris, 2016), but with a similar and firm reason – to escape from the tropical heat and illnesses (Aiken, 1994; Crossette, 1999; Herbert, 2011; Kennedy, 1996). This study was intended to focus on the hill stations created by the British in Malaya, i.e. Penang Hill, Maxwell's Hill, Fraser's Hill and Cameron Highlands.

Since the Independence Day in 1957, Malaysia has been developing in the sectors of politics, social and economics (Khan, Liew & Ghazali, 2014). These include the development of the mega infrastructures, in order to achieve the country's mission to be a developed country by 2020, and to achieve national transformation by 2050. Following 60 years of independence, Malaysia has witnessed a rapid growth of developments in mega cities, as well as in the suburban areas (Noor, 2015), which are getting undeniably unstoppable (Bernama, 2017a). In fact, many major developments, especially on the infrastructures, have started to intervene with the rural and remote areas (Rahim, 2017). These developments are eventually destroying their natural landscapes. For instance, in Sabah and Cameron Highlands, rapid developments for the past 20 years have been the main cause of flash floods and soil settlement, due to continuous deforestation (Bernama, 2017b; Nation, 2016). Other than Cameron Highlands, hill stations that are recently being threatened by deforestation include, Penang Hill and Fraser's Hill. Penang Hill is a heritage that has been treasured, and blessed with the coldest temperature in the Penang island (Loh, 2016). However, land clearing for the plantation of crops and to build more tourist attractions on the hill, has worsen the condition, similar to that happening in the Cameron Highlands (Nation, 2016). Fraser's Hill, known as 'The Little English' of Malaysia, is another precious treasure, which has been similarly threatened by the land clearing activity (Lokman, 2017). On the other hand, Maxwell's Hill which is located in Taiping, is also a treasure, but is still under protection from any threats (Harian, 2016). These issues have threatened the Malayan hill stations, due to the hunger of modern developments. Hence, this study

was carried out to identify the site selection criteria for the British Colonial hill stations, in order to understand their importance and protect their future.

2. HILL STATIONS

Most published documents on the emergence of British hill stations involved those located in India, rather than in Malaya. These stations in India emerged since 1819 until the late 19th century, while the first British hill station in Malaya was constructed earlier, i.e. since 1788, followed by the later stations in 1820s until 1925 (Aiken, 1987; Herbert, 2011; Weebers & Idris, 2016). Beginning in British Raj (India), the British invaders were trying to avoid the unpleasant hot weather and environment that can cause illnesses, such as malaria, in the lowland area. In order to escape this condition, the British retreated to the uphill areas and settled there (Spencer & Thomas, 1948; Kenny, 1997; Baker, 2014). The geographical features of the hill stations were found to be much colder than the lowland, and significantly out of the reach of mosquitos (Baker, 2014). Some researchers interpreted that the hill stations were constructed as a trend of resort in the 19th century, for the Europeans to retreat from the tropical heat of the colonised countries (Crossette, 1999; Francis, 2015; Weebers, 2016). However, it was later found that the function of the hill stations was more than that. Some historical sources and earliest documents stated that the hill stations in India and Malaya functioned as sanatoria for the British, to comfort their mental health from tropical pressure (Ross, 1937; Kennedy, 1996; Wood, 1895). In either interpretations, the hill stations were landscapes created by the British people, to bring the lifestyle of their homeland to a foreign country, as they felt that it was crucial to return to colder climate from the enervating low altitudes (Aiken, 1994).

In addition, Aiken (1994) and Crossette (1999) stated that the hill stations were not only a refuge landscape from the heat, but also a social place for the families and friends to play sports, attend balls, hang out in pubs, etc. This is the reason that hill stations in Malaya were created with tennis court, golf course and lawn for games, as seen in the hotels on the Penang Hill and Cameron Highlands, and pubs on the Fraser's Hill and Cameron Highlands (Aiken, 1994; Crossette, 1999; Gibby, 2017; Sim, 1946; Willis, 1936).

2.1 MALAYAN HILL STATIONS

Although most of the published documents on the British hill stations involved those located in India, Crossette (1999) found that the hill stations in Malaysia are so unique and that the authenticity has been well protected, as quoted by her:

'There are no other hill stations in Asia where the architecture, the atmosphere, and the tidiness imposed on nature by the colonial powers, most of all the British, are so carefully and consciously maintained as they are in Cameron Highlands and Fraser's Hill.' (Crossette, 1999).

According to Aiken (1994), Malayan hill stations were categorised into principal, minor and planned, as shown in Figure 1. Penang Hill, Maxwell's Hill, Fraser's Hill and Cameron Highlands are the principal hill stations, which are the central and developed landscapes with more social and cultural interactions. Gunong Kledang in Ipoh, Bukit Kutu in Selangor and Gunong Angsi in Negeri Sembilan are the minor hill stations, while Gunong Tahan in Pahang is the only planned hill station in Malaysia. Minor hill stations were the potential landscapes to be principal hill stations, but due to limited growth and flatlands, they remain undeveloped until today. However, remnants of bungalows were found erected on these highlands (Aiken, 1994; Butcher, 1979). On the other hand, Gunong Tahan was not materialised due to political factors, in which part of the hill was located in Kelantan – which was not a territory of the Federated Malay States (FMS) (Butcher, 1979).

The British people were unable to fit in the Malaya's environment, especially due to the tropical heat and illnesses. The British were so determined to find other ways to ensure they were able to stay longer in the tropical countries, since distance and government's leave policy did not allow them to return to their homeland on a frequent basis (Butcher, 1979). Geographical factors of the majestic view of nature and the immense amount of settlement, had influenced the creation of the hill stations by the British in Malaya, as they were able to get rid of the stressful environmental disabilities, and away from the reach of mosquitos (Aiken, 1994; German, 1927; Maxwell, 1988; Sim, 1946). Hill stations in Malaya began with the Penang Hill in the 18th century, Maxwell's Hill at the end of the 19th century, and Fraser's Hill and Cameron Highlands in the early of the 20th century.

Hill stations have eventually become the tourists destinations. However, according to Crossette (1999), there were bungalows which are still being used exclusively by the British Governments, private family resorts, as well as lodges for the hill stations' employees. During the post-independence of Malaysia, bungalows on the hill stations were exclusively used by the British elites during their colonisation era, as retreat bungalows for the Malaysian high-rank government officers. For example, the Bel Retiro bungalow on the Penang Hill (Corporation, 2015; Willis, 1936).

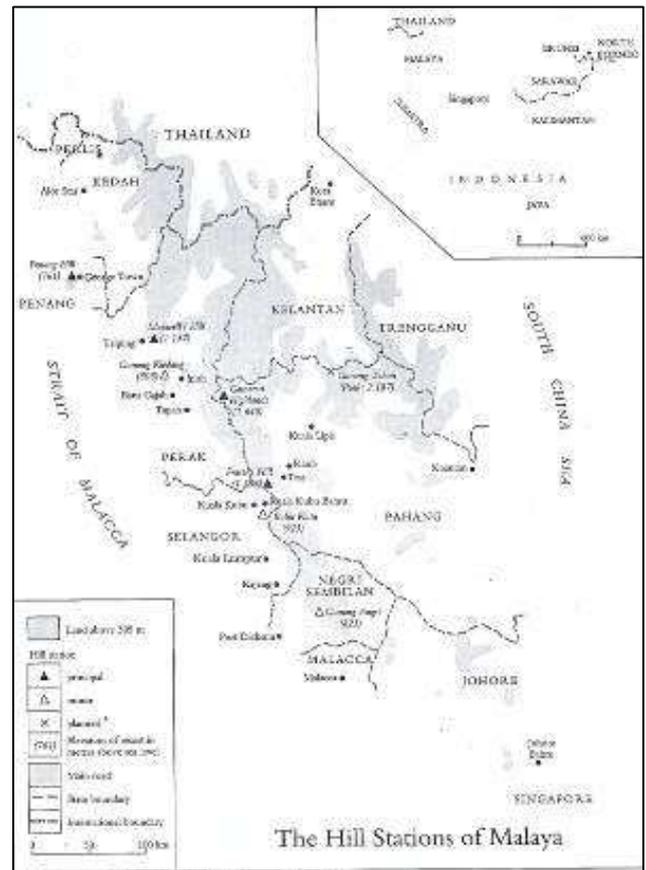


Figure 1: Map of the principal Malayan hill stations, undeveloped or minor hill stations, and the only planned hill station, i.e. Gunong Tahan (Aiken, 1994).

2.1.2 Penang Hill

'Great Hill was eventually settled by more buildings, such as the famous Bel Retiro, Convalescent Bungalow, temporary hospital and residence for the medical officer in 1820s. Importantly, development of Penang hill over time displays the technical achievement, after the completion of the Penang Hill Railway in the early 1920s.' (Aiken, 1987).

Penang Hill or was known as the Great Hill, was the first hill station in Malaya, and the only British hill station that geographically located on an island, which makes it the highest landscape in the island of Penang (Aiken, 1999). Historically, Penang Hill was intended for military purposes, not as a hill station. The higher landscape played a crucial strategic and defensive role for the British in Penang (Gibby, 2017), to overlook the Malacca Straits and the lowlands of Penang. It was found and opened by Captain Francis Light, the representative from the East India Company in the late 18th century.



Figure 2: Location of the Penang Hill in the Penang Island (Google earth, 2017).

It was recorded that buildings built close to the flagstaff of the Penang Hill were the earliest physical structures observed, which are now called as the Bel Retiro. Bel Retiro of the Penang Hill did not only functioned as a recreational accommodation, but also for the safety of the British residency in Penang. It was strategically developed to guard against the possible threats that might come from other European nations, pirates and the government of Kedah (Irshad, n.d). This is why Malacca Straits can be viewed from the Bel Retiro.

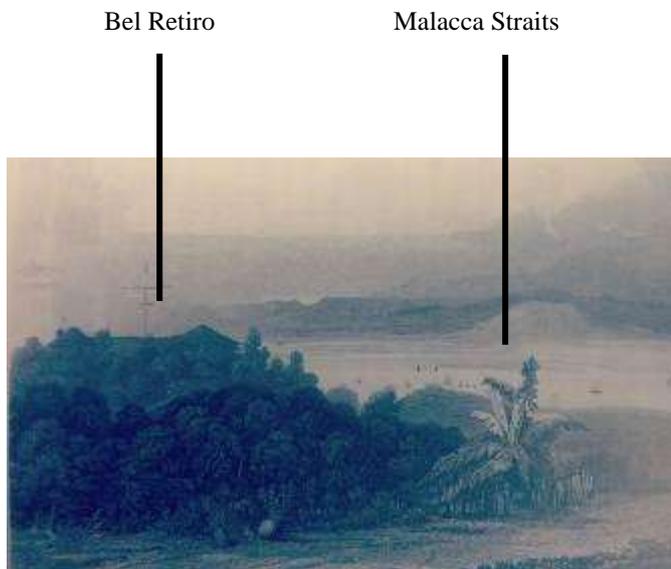


Figure 3: Direct view of Malacca Straits from the Bel Retiro and a flagstaff, as a lookout point (Aiken, 1994).

2.1.3 Maxwell's Hill

It took almost a century to create the second hill station in Malaya. Maxwell's Hill was created in 1884, which was the first hill station in Malaya that was located on the mainland, as well as the first hill station in the FMS

(Aiken, 1994; Crossette, 1999; Hasmi, 2017; Weebers, 2016). Maxwell's Hill was named after a Selangor's Resident – William Edward Maxwell.

There were limited sources on how and who opened the Maxwell's Hill. However, according to the history of Perak and Taiping, the emergence of the Maxwell's Hill initially was related to the Larut war in 1861, between two Chinese secret societies, i.e. Hai San and Ghee Hin, over the control of tin mines in Klian Pauh (original name of Taiping). This event led to the intervention of the British in Taiping. The Pangkor Treaty of 1874 was an agreement between the King of Perak and the British representative, which allowed Perak to be led under the British administration. Following the treaty, Taiping then received assistance from a British Resident – Captain Speedy. This landscape and its geographical values provided an opportunity for the British to overlook the administration and the tin mining activities from the hill, and at the same time, became a retreat place for the English people near Larut and Taiping, as they need to settle in Taiping for a longer time. (Ariffin & Hussin, 2011; CASA & CORE, 2010; Fee, 1998). As a result, The Cottage (1884) was the first retreat bungalow erected on the hill (German, 1927).

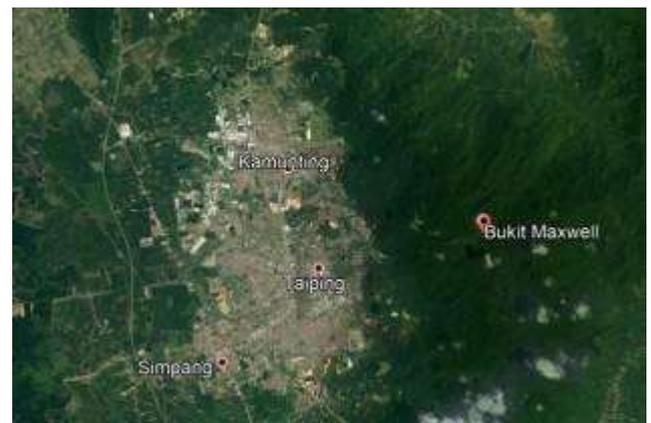


Figure 4: Location of the Maxwell's Hill from Taiping (Google Earth, 2017).

2.1.4 Fraser's Hill

The British people realised that the landscape of the Maxwell's Hill was unable to fill their needs to build more retreat buildings and infrastructures, such as hotel and mountain rail similar to that in the Penang Hill, as this hill station was lacked of flatlands (German, 1927). As a result, the colonial was on the look for a bigger hill station. In an archive report by Sir William George Maxwell (1988), in November 1917, the Right Reverend C.J. Ferguson-Davie, the Bishop of Singapore explored Fraser's Hill (Bukit Fraser in local language). He sent a report to the High Commissioner and Chief Secretary of the FMS Government about a hill that was suitable as a hill station (Aiken, 1994; Crossette, 1999).

Sir William George Maxwell wrote in his report:

'The Bishop, on his return to Singapore, wrote a report on his visit showing that within about five miles of the Gap, on the main trunk road between Pahang and Selangor, there was an area which seemed to be eminently suitable for a hill station and which could be rapid, easily and cheaply developed.' (Maxwell, 1988).



Figure 5: The Fraser's Hill (within red border) is located at the border between Selangor and Pahang (Google Map, 2017).

Historically, the Fraser's Hill was named after Louis James Fraser, a European and former gold and tin businessman, who used to live at the summit of this landscape, before it was being designed as the third hill station in Malaya. According to a few documented histories, Fraser was the first one who discovered that this mountainous landscape was rich with tin deposits (Cheong, 2013; Maxwell, 1988; Weebers & Idris, 2016).



Figure 6: Tin mining near Fraser's Hill in 1906 (Moore, 2005).

Fraser's Hill was initially aimed to be the most developed and complete hill station compared to the Penang Hill and the Maxwell's Hill, due to larger flatlands. Hence, accessibility was a crucial aspect, which led to the

construction of access roads to the first structure on the hill (Aiken, 1994; German, 1927; Maxwell, 1988).

2.1.5 Cameron Highlands

'It is expected that such a station, with a low temperature, will prove a very great asset to Malaya, in supplying what has hitherto been the chief need of the country from health.' (German, 1927).

In 1924, the Federal Council questioned whether Fraser's Hill was big enough for the needs of Malaya, when the British started to rediscover and reconsider to open Cameron Highlands (Maxwell, 1988). This was due to the rapid increase of the British population in Malaya after 1900 (Butcher, 1979). Cameron Highlands, with the size of almost 72,000 ha, were considered by Crossette (1999) as a region instead of a single place, as three big towns existed on the hill station. Physical developments were on the increase in the Cameron Highlands compared to the other three hill stations. Besides, with the height of 1,070 to 1,830 m above sea level, this hill station was famous for its ability to be 'self-developed' (Ahmad, 2013; Centre, 2017; Crossette, 1999; German, 1927). Cameron Highlands has the most fertile land for agriculture compared to the other three hill stations. This characteristic was highlighted with the emergence of Experiment Station at Tanah Rata in 1925, where this hill resort became a home to the most significant tea farm in Malaysia, i.e. Bharat Tea and Boh Tea farms, as well as terraced vegetable and strawberry farms, up to this day.



Figure 7: The location of Cameron Highlands (in red border) between the borders of Perak and Pahang (Google Map, 2017).

3. METHODOLOGY

This study was conducted by reviewing the literatures of the British hill stations, generally in India and specifically in Malaysia, i.e. Penang Hill, Maxwell's Hill, Fraser's Hill and Cameron Highlands. The review also include the undeveloped hill stations in Malaya, i.e. Gunong Kledang in Ipoh, Gunong Angsi in Negeri Sembilan, Bukit Kutu in Selangor and the never-begun-project of Gunong Tahan in

Pahang. The review was conducted on relevant historical documents and news related to the hill stations in Malaya. The relevant literatures include, unpublished documents, websites and newspapers, archive manuscripts, books, as well as published journals.

4. RESULTS AND DISCUSSION

Based on the extensive review conducted on several documents and historical sources, the geographical and unique criteria were recognised, as listed in Table 1.

Table 1: The comparisons of selection criteria according to hill stations in Malaya.

Hill stations Geographical features	Penang Hill (Principal)	Maxwell's Hill (Principal)	Fraser's Hill (Principal)	Cameron Highlands (Principal)	Gunong Kledang (Minor)	Bukit Kutu (Minor)	Gunong Angsi (Minor)	Gunong Tahan (Planned)
States/ Territory	Penang Island	Perak	Selangor and Pahang	Pahang	Perak	Selangor	Negeri Sembilan	Pahang
Summit's altitude (m)	833	1,250	852–1,460	1,070–1,830	808	923	825	2187
Temperature (°C)	24.0–25.5	15–25	22–23	17–20	Unknown			
Size (ha)	468	Approx. 690	Approx. 2,830	71,220	Unknown			
Selection criteria for the British hill stations.	<ol style="list-style-type: none"> 1. Strategic location as the highest land in the Penang Island, to become signal station and naval lookout point. 2. Wider view to overlook the lowlands, especially on Georgetown and Malacca Straits, for defence and safety of the island. 	<ol style="list-style-type: none"> 1. Strategic location to overlook the tin mining activities and administration of Taiping. 2. High enough to overlook Taiping. 3. Easily accessible by the mode of transportations of the old days. 4. Colder to satisfy the British who need to escape from the hotter plains in Taiping and Larut. 	<ol style="list-style-type: none"> 1. Wider to accommodate more government officials. 2. Strategic location – at the boundary of two FMS; Selangor and Pahang. 3. Colder to satisfy the British who need to escape from the hotter plains in Selangor and Pahang. 	<ol style="list-style-type: none"> 1. Larger plateau to accommodate almost all Europeans in Malaya, as well as to develop more than the earlier hill stations. 2. Colder climate to satisfy the British who need to escape from the hotter plains. 3. Easy access from Tapah, Perak. 4. Most fertile soil for agriculture purposes, to supply resource of highland food and tea, directly from the hill itself. 	Minor hill stations which are left undeveloped.			<ol style="list-style-type: none"> 1. Highest altitude to create perfect hill station. 2. Planned as a hill station, but was never materialised due to political conflict.

Table 1 shows the comparisons of hill stations according to the selection criteria highlighted in the literatures. Territorial aspect was the most important factor for the hill stations. Potential British hill stations must be designed landscapes located under the British administration states, i.e. the FMS of Selangor, Negeri Sembilan, Perak and Pahang, as well as the Penang Straits Settlement. According to Butcher (1979), territory was the reason behind the deselection of Gunong Tahan in Pahang as the grand hill station, as the northern part of the hill was located in Kelantan, which was not under the FMS.

One of the primary criteria of the landscape to be selected as a hill station was the high altitude from the sea level. Table 1 shows that all the principal, minor and planned Malayan hill stations are higher than 800 m above sea level. Both the highest and lowest altitudes are the planned and minor hill stations, respectively. Gunong Tahan has the highest altitude of 2,187 m, while Gunong Kledang has the lowest altitude of 808 m above sea level. Among all the principal hill stations, Penang Hill is the lowest (833 m), while Cameron Highlands has the highest

altitude of 1,830 m. It should be noted that the altitude of the hill stations is an essential criteria, as it represents the temperature level to satisfy the needs of the British people to retreat from hot plains. Penang Hill has the lowest summit among all the four principal hill stations, thus, making it the least cold summit with 25°C. This was mentioned by German (1927) in his book, that Penang Hill 'is not high enough for a hill station'. Table 1 proved that the British were actively searching for higher landscapes, which exceed 1000 m above sea level, so that the hill stations should be able to satisfy their needs to retreat to colder highlands, such as in the Maxwell's Hill (15–25°C), Fraser's Hill (22–23°C) and Cameron Highlands (17–20°C).

The next criteria to be considered prior to the creation of a hill station was the ample size of the land. Penang Hill has the smallest land size (468 ha), followed by the Maxwell's Hill with approximately 690 ha. Both the hill stations did not exceed 1000 ha. In fact, according to the literature, Maxwell's Hill was designed on the ridge, which has limited size of flatlands (Butcher, 1979; Hasmi, 2017). After the British realised that small hill stations could not accommodate the increase in the number of Europeans in the early 20th century, they continued with the search of larger landscapes that could be designed as hill stations. As a result, Fraser's Hill (2,830 ha) and Cameron Highlands (71,000 ha) were discovered, and designed as the new hill stations, where the latter has become the largest hill station in Malaysia.

The comparisons of hill stations as shown in Table 1, can be the most logical reasons on why Gunong Kledang, Bukit Kutu and Gunong Angsi were considered as the minor hill stations and have never been developed. They were not high enough to satisfy the needs of the British people to be in a colder climate compared to the lowlands. Also, according to Butcher (1979), all the minor hill stations were designed on the ridges, instead of on the flat summits. This means that they have limited flatlands to accommodate more government officials.

Table 1 also presents the unique geographical criteria of the hill stations in Malaya. Although the review shows that Penang Hill possess the least valuable characteristics in terms of the altitude, temperature and size compared to the other principal hill stations, it is still able to be developed due to its strategic location as the highest land in the Penang Island, and for its wide view to overlook the lowlands' administration and guard the Straits of Malacca from their rivals. Similarly, the strategic location of the Maxwell's Hill allowed the British to overlook the town of Taiping, while the Fraser's Hill was strategically located at the border between Kuala Kubu Baru (Selangor) and Raub (Pahang). This feature does not only provide advantages to the European in terms of controlling or defending their territories, but also for the easy access through any mode of transportations during the pre-independence period. Finally, the other criteria possess by the potential landscapes was fertile soil for agriculture. The review found that fertile soil was needed to plant most of the highland's food, including vegetables and tea

to be supplied to the British who lived in the Cameron Highlands for a longer period of time.

5. CONCLUSION

This study was purposely conducted to extend the knowledge on the selection criteria of the British hill stations in the Malaya. As a conclusion, this study found that these hill stations were selected and designed based on the unique geographical characteristics since the pre-independence era. This study also found that the possible reasons on why the minor and planned hill stations were remained undeveloped were due to the geographical and politic factors. Thus, it should be noted that the unique characteristics highlighted in this study are important findings as these natural landscapes belong to our country, and they should be preserved and protected, away from the destructions.

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