FRASER'S HILL 1919 – 2019: REVIEW ON LANDSCAPE'S EVOLUTION AND FEATURES THROUGH ARCHIVAL RECORDS AND SITE OBSERVATION

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ABSTRACT

The creation of the hill station landscape was one of the tangible evidences of British imperialism in Malaya from the late 18th century until 1957. In the past, British expatriates retreated from lowland to higher lands due to their inability to adapt to hot climates and the threat of malaria. However, despite looking at landscapes as colonial remains, hill stations depict the human genius in taking the opportunity offered by the natural environment with specific geographical factors to satisfy one's needs and bring comfort to their health. Fraser's Hill is one of the hill stations in Malaysia and is famously known as a tourist's destination because of its colder climate. Unfortunately, there are unstoppable threats to this landscape and the risk of it being forgotten as a historic landscape. Hence, this paper is objectively to document the history and evolution of Fraser's Hill landscape and to explore its built environment over a 100-year timeline. These objectives were achieved through a qualitative review of archival documents and on-site observation on Fraser's Hill. The evolution of Fraser's Hill proves that this historic landscape is more than just a cold mountainous landscape because it portrays the value of cultural landscapes that deserve to be protected.

Keywords: Fraser's Hill, British Hill Stations, Heritage Landscape, Landscape Evolution, Cultural Landscape

1. INTRODUCTION

The year 2024 marks the 105th anniversary of the official establishment of Fraser's Hill. Fraser's Hill, or locally called Bukit Fraser, has a long history, including twenty years before its official establishment in 1919 as the hill station and as one of the government administrative areas for the British in Malaya (Aiken, 1994). Although the landscape is cradled with thick and lush tropical forests, the British have intelligently shaped the landscape by referring to their cultural needs in a foreign country.

The landscape was originally occupied as a tin mining area in Pahang, where, according to the record by Scrivenor (1931), the Chinese were the earliest found to mine for tin near what is now called Fraser's Hill. The timeline was parallel to the story where L.J. Fraser started transportation service to supply the rice, provisions, machinery, etc. from Kuala Kubu Bharu to the hill, which eventually gained the mining land on the hill for himself in the year 1894 (Maxwell, 1988; Scrivenor, 1931). Abu bin Suradi, on the other hand, was the first Malay man and the first miner to receive a mining lease at Fraser's Hill, which was issued in November 1899, twenty years before the official opening of Fraser's Hill.

Similar to other principal hill stations in Malaysia, Fraser's Hill is one of the landscape-scale evidences that portray human intelligence. However, despite the beauty of the landscape as one of the hill stations in Malaysia that complies especially with historical and aesthetic criteria under the National Heritage Act 2005, this landscape has been threatened with major development to satisfy the need to commercialise Fraser's Hill (Babulal & Alagesh, 2020a; Babulal & Alagesh, 2020b; Raw & Raw, 2023; Hew, 2024). Concern was raised recently by Hew (2024) about the risk of Fraser's Hill being forgotten as a historic and memorable landscape that has evolved together with generations of the local community since its official emergence in 1919 due to several factors and the eagerness of stakeholders to build more high-rise resorts in Fraser's Hill. Thus, due to the concern raised, this paper is objectively to document the history and evolution of Fraser's Hill's landscape and to explore its built environment from the beginning of its official opening in 1919 until 2019, which marks 100 years of Fraser's Hill. These objectives were achieved through archival data and on-site observation methodology. At the end of this article is the recommendation for the whole setting of Fraser's Hill to be seen and protected as a cultural landscape.

It is crucial to highlight that there are a few limitations that occurred in this research and initiated significant recommendations. This research was focused solely on the evolution of Fraser's Hill, particularly in the built environment. However, there are similar issues at other British hill stations in Malaysia. This study certainly offers valuable insights into the evolution of other hill stations through old and latest maps and site observation to provide recommendations for policymakers to maintain the site.

2. LITERATURE REVIEW

2.1 Hill Stations

The human movement to high altitudes is recorded as a human tradition dating back many centuries in Asia, Africa, and Europe, where it was connected with the tradition of grazing herds or linked with religious festivals (Westlake, 1993). On the other hand, there was a tradition to move to the higher altitude landscape called hill stations by the Europeans in colonised Asian countries, objectively to escape from the unbearable tropical heat on the plain. Hill station is not a native institution but was a late 18th-century to 19th-century phenomenon developed by European colonial masters (strictly British and Dutch) to make sojourns in a foreign land less uncomfortable (Crossette, 1999; Spencer & Thomas, 1948; Weebers & Idris, 2016).

In the early 19th century, people began to learn and slowly recognise that the cooler climate at higher elevations was healthy. According to history, it was not until the India Raj had conflict with the Gurkhas of Nepal in the Nepali wars that the health and spirits of the men improved dramatically during their sojourn in the hills (Westlake, 1993). Eventually, military detachments were established in the highlands, which were near the military operations area. As the establishment was able to provide health restoration, this military establishment was sometimes referred to as a sanatorium. Sanatorium is defined as an establishment for the medical treatment of people who are convalescing or have chronic illness (Oxford Dictionary). This term is perfect to describe a highland establishment that reflects its function during that time.

'Hill station' is the term used by the British everywhere in the Orient. The term 'Orient', on the other hand, was repetitively used in historic articles of hill stations, referring to the Asian lands. According to Spencer & Thomas (1948), hill stations can be considered one of the permanent legacies of the Occident to the Orient. In India and the Netherlands Indies (Indonesia), government patronage increased throughout the years, at least in the early 19th century. It is logical that these two regions possess more hill stations compared to the other Orient countries, as historically, these countries have received frequent European visits in large numbers. Thus, the characteristics of the British in India Raj and Dutch in the Netherland Indies were added to the hill station landscape. This included private bungalows, hotels, clubs, racecourses, polo fields, shops, botanical gardens, schools, churches, banks, newspapers, roadways, and path systems. Tennis courts, golf courses, swimming pools, and other amenities have been added later (Spencer & Thomas, 1948).

2.2 British Hill Stations

The British colony created hill stations during their colonialism era in India and Malaya (pre-independence name for Malaysia) since the 18th century. Hill stations emerged with different attractions, facilities, and functions (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).

Some historical sources and earliest documents stated that the hill stations in India and Malaya functioned as sanitaria for the British to comfort their mental health from tropical pressure (Kennedy, 1996). 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. To escape this condition, the British retreated to the uphill areas and settled there (Spencer & Thomas, 1948; Kenny, 1997; Baker, 2014). Malaria, cholera, typhoid fever, hepatitis, and dysentery were the dangers that mostly threatened the British people in the 19th century when they invaded India. The geographical features of the hill stations were found to be much colder than the lowlands and significantly out of the reach of mosquitoes (Baker, 2014).

Not only that, but hill stations are also the landscapes created by the British people to bring their homeland's lifestyle to a foreign country, as they felt that it was crucial to return to a colder climate from the enervating low altitudes (Aiken, 1994). Aiken (1994) and Crossette (1999) stated that the hill stations were not only a refuge from the heat but also a social place for families and friends to play sports, attend balls, hang out in pubs, etc.

2.3 British Hill Station in Malaysia

In Malaya, the geographical factors and majestic view of nature 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 keep them away from the reach of mosquitoes (Aiken, 1994; Baker, 2014; German, 1927; Maxwell, 1988; Sim, 1946). Hill stations in Malaya began with 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 20th century.

In addition, the emergence of hill stations was also related to the emergence of English bungalows in Malaya. According to Aiken (1994), a bungalow was a hill dwelling for temporary use by Europeans in Penang, because the 'bungalow' term was rarely used for dwellings on lowland but for 'house' and 'residence'. This is supported by Aiken (1994) and Gibby (2017), who found that bungalows in Malayan hill stations were inspired by and transited from those in India. The British assumed their colonialism and imperialism in this land would be permanent, and they wanted to feel the comfort of their hometown in this foreign country, so they found it in hill stations (Butcher, 1979). Aiken (1994) made an interesting review as he wrote that the British role in Malaya was more on prestige and superiority than military purposes, thus the demand for hill stations increased in Malaya to separate their own kind from local culture.

After the independence of Malaysia, hill stations became one of the landscape-scale evidences of the British colonialism era in this country. Hill stations continue to receive visitors from the lowlands and have become among the most famous tourist destinations in Malaysia. Crossette (1999) stated that hill stations in Malaysia are so unique and that their authenticity has been well protected. In 2017, a comparative study was conducted to identify the criteria of a site prior to its selection as a hill station by the British. Zaini, Ali, and Kayan (2017) stated that territorial aspect, higher altitude, ample size of the flatlands, and strategic location to overlook the lowlands were the most crucial criteria of a hill station. Significantly, the authors highlighted that the findings on site selection criteria for hill stations are about the natural landscapes that belong to Malaysia, which should be preserved and protected.

3. METHODOLOGY

To achieve its objectives, this research was conducted through a historical review of archival data on British hill stations, particularly Fraser's Hill's old maps, as well as on-site observation. This research highlights the necessity of qualitative methodology to highlight the evolution of the historic landscape within a 100-year timeline.

A historical review of archival data was undertaken for an in-depth understanding of the historical evolution of Fraser's Hill through old maps, personal journals, and books. On-site observation was conducted in February 2018 as the data collection technique to explore the built environment of Fraser's Hill prior to its 100th year in 2019. The observation was conducted by looking at the English bungalows, modern buildings, tangible features, and settlement setting within the boundary of Fraser's Hill.

Data from archival documents and on-site observation were compiled and sorted. The compiled data was broken down according to historical and present timelines. The process was repeated several times. Through the process, data were reassembled according to build environment features, and this process was repeated several times for the researcher to achieve the research objective, which is to explore its built environment since the beginning of its official opening in 1919 until 2018.

4. RESULTS AND ANALYSIS

4.1 Evolution of Fraser's Hill Landscape

Fraser's Hill (3.7119° N, 101.7366° E) is one of the principal hill stations in Malaysia, which is regionally located in Southeast Asia, with an estimated population of 468 based on the latest statistical data available in 2010 (Department of Statistics Malaysia, 2010). Geographically, Fraser's Hill is located 449 kilometres to the north from Singapore and 98 kilometres to the northeast from Kuala Lumpur. This landscape was shaped by the British people and covers two states: the State of Selangor and the State of Pahang. However, the area under Pahang territory is larger than the area under Selangor territory, as shown in Figure 1.

In Selangor, Kuala Kubu Bharu is the nearest town, while in Pahang, Raub is the nearest town to Fraser's Hill. The landscape is located on a hilly landscape, namely the Titiwangsa Range, at a height between 852 metres and 1,460 metres above sea level. There is only one entrance to access Fraser's Hill, which is from The Gap Road (in Selangor), and one exit through Quarry Road (in Pahang).



(Perbadanan Kemajuan Bukit Fraser, 2018).



Figure 2: Aerial view of Fraser's Hill in 2017 (Courtesy from Remote Sensing Malaysia, 2018).

Fraser's Hill, with an approximate size of 2,000 hectares, is smaller to be compared to Cameron Highlands, which is approximately 71,220 hectares, but bigger to be compared with Penang Hill in Penang and Maxwell's Hill in Taiping. The landscape encompasses all the key natural and structural elements that have been constrained and inspired to be developed beyond their original. According to Cheong (2013), only 1.5% of the total land on Fraser's Hill is developed with built and non-built structures; 6.5% is cleared land, which is covered by secondary vegetation; and 92% of the total land on Fraser's Hill is lush forest.

Development of Fraser's Hill began with the construction of access roads to connect all English bungalows and other buildings' potential sites because Fraser's Hill was initially aimed at being the most developed and complete hill station compared to the earliest hill stations in Malaya: Penang Hill and Maxwell's Hill. The British believed that accessibility was a crucial aspect for further development; hence, access roads were constructed as the first structure on the hill (Aiken, 1994; German, 1927; Maxwell, 1988).

The evolution of Fraser's Hill landscape can be seen through maps dated from 1925, 1947, 1966, and 2019, as shown in Figure 3 until Figure 6 below. The features of the landscape are colour-coded to present the different features, where red presents the building structures, green presents the secondary vegetation and golf course, blue presents the constructed water feature, and yellow presents the tennis court.



Figure 3: Fraser's Hill 1925 (National Archives of Malaysia, 2018).

Figure 3 shows the earliest map of Fraser's Hill's landscape in 1925, six years after the beginning of its development in 1919. There are two main features found on this map: the golf course and building structures. According to the history timeline, the plan for the 9-hole golf course at Fraser's Hill was materialised between 1924 and 1926, designed by Mr. Frank Hemmant, and became the first golf course in Malaya (Maxwell, 1988; visitmalaysia.info, n.d.). The map also shows that many buildings were already constructed in 1925, and according to the records, most of these buildings are bungalows.



Figure 4: Fraser's Hill 1947 (National Archives of Malaysia, 2018).

Figure 4 portrays Fraser's Hill landscape in 1947. The map reveals that vast development occurred in Fraser's Hill in a twenty-two (22)-year span between 1925 and 1947. A lot of buildings (red colour) were built and scattered throughout the landscape.

Not only that, but there are also more green areas or secondary vegetation that were created, such as the Corona nurseries and gardens that are located in the bungalows' area. It is also apparent from 1947's map that there is a manmade water feature, as shown in the blue-coloured region, named Allan's Water, which is named after Mr. F.H. Allan, an engineer who came up with the water supply idea that was able to supply water to bungalows at the hilltop (Maxwell, 1988). According to the archival record, Allan Water was planned since 1921 and was originally built as a dam, purposely to collect water for the use of people on Fraser's Hill. Interestingly, the 1947 map also shows the presence of two tennis courts, as assigned in yellow.



Figure 5: Fraser's Hill 1966 (National Archives of Malaysia, 2018).

Figure 5 shows the 1966 map of Fraser's Hill, in which more secondary vegetation emerged compared with the map in 1947. For comparison, the tennis courts no longer exist on this map and were replaced with secondary vegetation. This map also shows that no major building construction took place between 1947 and 1966, and the Allan Water and golf course were maintained.



Figure 6: Land use of Fraser's Hill in 2019 (Author, 2019).

Figure 6 shows the land use of Fraser's Hill in 2019 in detail, one hundred (100) years after the emergence of this hill station. This plan portrays that Fraser's Hill is getting more commercialised with the existence of commercial land use, complete with residential buildings, primary schools, the rise of government institutes, and public facilities. In summary, Table 1 below shows the major changes that took place in the landscape between 1919–1924 and 1925–1946, according to Selangor and Pahang, which contributed to the land use at Fraser's Hill until the present day.

Year	1919 – 1924	1925 - 1946	1947 – 1966	1967-2019
Land Use	1. House/ residential	1. Housing/ residential	1. Housing/ residential	1. Housing/ residential
	2. Routes and	2. Institution & public	2. Institution & public	2. Institution & public
	communications	facilities	facilities	facilities
	3. Open space & recreation	3. Routes and communication	3. Routes and communication	3. Routes and communication
		4. Commercial	4. Commercial	4. Commercial
		5. Waterbodies, Open Space & Recreation	5. Waterbodies, Open Space & Recreation	5. Waterbodies, Open Space & Recreation
		(Author, 2	2024)	

Table 1: The evolution of land use in I	Fraser's Hill from 1919-2019
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Fraser's Hill is elevated from a height of 900 metres above sea level near Bukit Peninjau (Peninjau Hill) up to 1,456 metres above sea level near Bukit Pokok Pine (Pine Hill). Based on the topography map shown in Figure 7 below, buildings on Fraser's Hill are built in a landscape with a height of more than 1,000 metres above sea level. Similar goes to the road constructed within the boundary of Fraser's Hill, where the road is elevated from 852.97 metres above sea level near The Gap to 1,328 metres above sea level near Bukit Peninjau. This shows that the topography of Fraser's Hill is undulating, and the landscape is smooth and uneven.



Figure 7: Topography map of Fraser's Hill in 2014 (Malaysian Department of Survey and Mapping, 2018).

Geologically, the tract is made up of large enclaves of metasediments (JPBD & LESTARI UKM, 2007; Roe, 1951), where granite dominates the hill. Shale, schist, phyllite, and chert with layers of metaquartize and schistose coarse sandstone are the types of rocks that occurred near Fraser's Hill and Kuala Kubu Baharu (Roe, 1951). Continuous research on the soil structure in Fraser's Hill has found that geologically, Fraser's Hill soil is not suitable for agricultural activities due to the indication of a high proportion of sand, which is between 60% and 83% of the total soil texture (Amir, 2015).

Historically, Fraser's Hill was developed with an American missionary school, post office, police station, and pub for the Europeans after the 1930s, as shown in Figure 8 (Aiken, 1994; Cheong, 2013; Crossette, 1999). However, the charm of Scottish Village in Fraser's Hill was exploited when too many 'government administration' environments took place in this hill station, which became unfair to the non-government servants during that time as they were unable to enjoy the privilege to retreat in Fraser's Hill (Aiken, 1994; Crossette, 1999).



Figure 8: Old pictures showing town of Fraser's Hill in 1930s (National Archives of Malaysia (2018)

4.2 Evolution of Built Environment in Fraser's Hill

To be compared with the two earliest British hill stations in Malaysia, Penang Hill and Maxwell's Hill, on-site observation has found that Fraser's Hill has a huge difference in size compared to the formers. Fraser's Hill is blessed with huge flatland at an altitude between 852 metres and 1,460 metres above sea level. The geographical factor of this landscape allows for more buildings to be constructed on Fraser's Hill compared to the other two British hill stations. The landscape has been utilised by the local community in diverse ways, especially under Pahang territory, through various types of buildings that are present in the landscape.

On the other hand, Fraser's Hill's setting is scattered (see Figure 6) within its boundary, which is similar to Penang Hill and Maxwell's Hill layouts. Every building is connected to the communication road. Although many bungalows are located at the ridge or in a higher landscape, which is a typical setting for hill stations, there are also many modern buildings that can be found in higher landscapes, i.e., high-rise resorts.

Fraser's Hill is essentially a mountainous landscape with collections of English bungalows. Observation found that these bungalows are Mock Tudor-designed bungalows where some of these general characteristics can be seen clearly because most of the English bungalows here are almost the same, i.e., steep pitched roofs, stones for walls, chimneys, and black and white in colour, as shown in Figure 9 and Figure 10. Although English bungalows portray the uniqueness of hill stations, nevertheless, post-independence or modern buildings built within Fraser's Hill setting, such as apartments, food court structures, schools, and religious buildings, as shown in Figure 11, are important to show the significant aspects of Fraser's Hill compared to earlier hill stations, Penang Hill and Maxwell's Hill, which are local communities.



Figure 9: Among the English bungalows in Fraser's Hill with original features that still survive until now and have been converted for commercial use (Author, 2018).



Figure 10: Post office and police station buildings are among the earliest institutional buildings in Fraser's Hill (Author, 2018).



Figure 11: Modern buildings in Fraser's Hill (Author, 2018).

Roads and trails are cultural features that contribute to Fraser's Hill's landscape. Fraser's Hill is a large landscape connected by a winding and hilly metal or asphalt road to be used especially by motorised vehicles. Primary roads on Fraser's Hill are the main circulation and communication systems in the landscape. Similar to historic bungalows, there are 14 roads in Fraser's Hill that are named after significant people and places in Fraser's Hill. For example, Quarry Road, which was named after boulder stones that were used to construct buildings on Fraser's Hill, Lady Guillemard Road, and Richmond Road were named after British officials' wives who used to live in the landscape.

Next, the unpaved trails on Fraser's Hill are the bridle paths of forest trails, where visitors use the trails for jungle trekking activities, as shown in Figure 12. There are eight unpaved trails in total and majority are named after historical people who contributed to the evolution of Fraser's Hill, as shown in Table 2 below.

Table 2: Name and	distance of	unpaved	trails in	Fraser's I	Hill

Unpaved Trails	Distance (Kilometre)
Mager Trail	0.5
Abu Suradi Trail	0.5
Pine Tree Trail	6
Rompin Trail	0.2
Hemmant Trail	1
Bishop Trail	1.3
Maxwell Trail	2
Kindersley Trail	0.4



Figure 12: Mager and Hemmant Trails are still in used for jungle trekking activities (Author, 2018).

Significantly, the golf course is a renowned feature on Fraser's Hill. According to archival records, the setting of Fraser's Hill landscape can be related to the existence of this golf course, where all the construction of later buildings circulated. Site observation has found that this golf course is huge and has become a tourist attraction. It has been established for a long time since the colonial era in the 20th century, and it can be seen from site observation that people have become accustomed to its existence. Many locals and tourists were seen playing golf, especially in the evening, as shown in Figure 13.



Figure 13: Golf course of Fraser's Hill (Author, 2018).

Finally, there is the famous clock tower on Fraser's Hill (see Figure 14). Interestingly, this clock tower was built after the independence year of this country and does not commemorate any British royal coronation like the typical clock tower in many old towns in Malaysia, such as Kuala Kubu Bharu, which is the nearest town to Fraser's Hill (Shamsudin, 2015). Although this structure is new to the landscape, it's stoned structure and covered with creeper vine is well-blend with the English environment of Fraser's Hill and has been the centre of attraction for this hill station. The clock tower is considered as significant to this landscape as the landmark of Fraser's Hill (Bahauddin, Mohamed, & Omar, 2010; Chai, 2008; Er, Chong, Ahmad, Sum, & Ramli, 2013).



Figure 14: The famous clock tower of as the landmark of Fraser's Hill (Author, 2018).

5. CONCLUSION

Fraser's Hill is located at a higher altitude with mountainous characteristics. It is landscape-scale evidence that survives both the colonial and modern Malaysian eras. Interestingly, despite the issue raised in the historical timeline, which was 'too many government administration environments' (Aiken, 1994; Crossette, 1999), this typical colonial planning of established government offices and police stations on the hill portrays proper planning in developing Fraser's Hill (Shamsudin, 2015), which adds value to this hilly landscape. However, due to the concern about unstoppable threats on Fraser's Hill, as mentioned earlier in this article, it is crucial to highlight the importance of Fraser's Hill more than just a mountainous landscape with a collection of English bungalows.

To quote an interesting view in an old journal, 'From the meteorological station between 'Mogador' and 'Ledgehem' on a clear morning, the finest view that I know of the mountains of the Peninsula can be seen.' (Scrivenor, 1931, pg.13), this statement gives the idea that Fraser's Hill is not only about the famous tangible features and human intelligence in developing Fraser's Hill, but also the scenic beauty offered by nature since the beginning of its emergence. Not only that, but it was also found through archival records and site observation that this landscape is occupied by a local community that has become accustomed to the existence of this landscape's features since the pre-independence era until now. This suggests the presence of place attachment in Fraser's Hill by the local people. Thus, the threats on Fraser's Hill do not only demolish historical buildings but also affect the beauty of nature and the lifestyle of its local community.

The connection between the landscape and its timeline, natural and cultural features, as well as human factors, pose a cultural landscape perspective on Fraser's Hill. The cultural landscape is demonstrated as the product of the past's evidence and human legacy through time on Fraser's Hill.

Data from archival records and site observations portrays that buildings, especially historic English bungalows at high altitude, contribute to the image of Fraser's Hill within its setting as a British hill station in Malaysia. This image draws a significant, clear boundary between Fraser's Hill and the nearest landscape or towns. The existence of a local community on Fraser's Hill proves continuous interaction between man and the landscape since pre-independence until now and produces a way of life. Fraser's Hill evolved through decades with the development of buildings and infrastructure to satisfy human needs within the setting boundary for retreat, recreational, and living purposes. The natural features and resources of Fraser's Hill, such as the colder climate and higher altitude, are useful for a convalescent or sanatorium to treat heat illness, a holiday retreat, a unique harbour, especially for fauna such as birds, and a home to wild and beautiful flora. These are the significant characteristics of Fraser's Hill that interpret the cultural landscape and interconnect with each other.

The uniqueness of Fraser's Hill as one of the British hill stations in Malaysia through a cultural landscape perspective is able to portray the relationship between humans and nature since the beginning of its existence, with historic buildings, the beauty of nature, and human value as evidence of its exceptional value. By looking in depth into the cultural landscape perspective, this research offers a starting point that would benefit the whole setting of Fraser's Hill as a unique landscape that is worth further protection and preservation that involves human, landscape, and time factors.

Recognising cultural landscape is a significant initiator for the protection of natural biodiversity because of its direct interaction and enhancement to the landscape's ecology (Gandiwa, Finch & Hill, 2016; Agnoletti, Tredici & Santoro, 2015; Hartel.T, el.at, 2014; Avrami, 2011; Ashley, Russell & Swallow, 2006; Fowler, 2003; Farina, 2000). Vlami et al. (2017) state that identifying landscapes that possess a high degree of cultural landscape value, i.e., culturalness or outstanding cultural attributes, is one of the measures that can be taken to highlight the needs of a holistic conservation approach for the whole setting. Gupta (2022), by referring to the examples of hill areas, has suggested that heritage preservation should be done in places with appropriate planning frameworks, guidelines for development, and heritage-related regulations. These efforts would be essential to minimise damage to hill areas with heritage values like Fraser's Hill and promote sustainable development of the landscape. Thus, this research would prove the benefits of protecting Fraser's Hill through cultural landscape characteristics and criteria as part of heritage preservation planning frameworks.

In conclusion, this study has documented and explored the evolution of Fraser's Hill landscape and its land use over the course of 100 years of its timeline through archival document review and on-site observation. The review of maps evolution and on-site observation reveals that more than 90% of this landscape is still green, lush, and forest that protects the natural and geographical characteristics of Fraser's Hill. Nevertheless, the geographical factor of this landscape also allows for more development to take place in the landscape, such as wider flatlands compared to the earliest hill stations in Malaysia. Thus, this paper is also presenting the modern buildings that emerged in the landscape for the use of local people and tourism purposes.

Despite being treated as a colder climate tourism spot with the collection of authentic English bungalows, which makes Fraser's Hill landscape fall under development pressure, Fraser's Hill portrays a unique cultural landscape value that illustrates the significant interaction between humans and landscape and its worth to be protected from unstoppable urban development as well as the risk of being forgotten. Finally, this paper also provides a benchmark for the whole Fraser's Hill setting to be recognised as heritage because every feature of the landscape is valuable and related to each other. Hence, more studies are expected to be conducted to highlight the uniqueness of this landscape.

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6. **REFERENCES**

- Agnoletti, M., Tredici, M., & Santoro, A. (2015). Biocultural diversity and landscape pattern in three historical rural areas of Morocco, Cuba and Italy. *Biodiversity Conservation*, *24*, 3387-3404.
- Aiken, R. (1994). Imperial Belvederes: The Hill Stations of Malaya. New York: Oxford University Press.
- Amir, A. (2015). Kajian Tunjuk Tanah di Bukit Fraser Dalam Keadaan Baik. Retrieved 8.8.2017, from UKM <u>https://www.ukm.my/news/arkib/index.php/ms/berita-penyelidikan/2129-research-shows-frasers-hill-still-</u> pristine-.html?tmpl=component&print=1&page=
- Ashley, R., Russell, D., & Swallow, B. (2006). The Policy Terrain in Protected Area Landscapes: Challenges for Agroforestry in Integrated Landscape Conservation. *Biodiversity and Conservation*, 15(2), 663–689. <u>https://doi.org/10.1007/s10531-005-2100-x</u>
- Babulal, V., & Alagesh, T. N. (2020a). 'Fraser's Hill project may lead to overdevelopment'. *New Straits Times*. Retrieved from <u>https://www.nst.com.my/news/nation/2020/08/618676/frasers-hill-project-may-lead-overdevelopment</u>
- Babulal, V., & Alagesh, T. N. (2020b). Gazette Fraser's Hill. New Straits Times. Retrieved from https://www.nst.com.my/news/nation/2020/08/618680/gazette-frasers-hill
- Bahauddin, A., Mohamed, B., & Omar, S. I. (2010). The British Colonial Architectural Heritage of Fraser's Hill and Cameron Highlands, Malaysia. Paper presented at the Transformation and Modernisation in Tourism, Hospitality and Gastronomy, Subang Jaya, Malaysia.
- Baker, J.C.T (2014). Mobility, tropicality and landscape: the Darjeeling Himalayan Railway 1881-1939. Journal of Historical Geography, 44, 133-144
- Cheong, C. (2013). Fraser's Hill A Lush Highland Hideaway. Petaling Jaya, Malaysia: Percetakan Imprint (M) Sdn Bhd.
- Crossette, B. (1999). The Great Hill Stations of Asia. New York: Basic Books.
- Department of Statistic Malaysia. (2018). Jumlah Penduduk Mengikut Kawasan Pengguna, Bukit Fraser, Pahang, Malaysia.
- Er, A. C., Chong, S. T., Ahmad, H., Sum, S. M., & Ramli, Z. (2013). The Sustainability of Fraser's Hill as an Ecodestination. *International Journal of Business Tourism and Applied Sciences*, 1(2), 109-115.
- Farina, A. (2000). The Cultural Landscape as a Model for the Integration of Ecology and Economics. *Bioscience*, 50(4), 313-320.
- Fowler, P. J. (2003). *World Heritage Cultural Landscape 1992-2002*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000133121
- Francis, R. (2015). *Penang Hill Furnicular Railway: Remembering an Engineering Feat 1923-2010*. Penang: Areca Books.
- Gandiwa, P., Finch, J., & Hill, T. (2016). Vegetation structure and composition in the semi-arid Mapungubwe Cultural Landscape. *Global Journal of Environmental Science and Management*, 2(3), 235-248. <u>https://doi.org/10.7508/gjesm.2016.03.003</u>
- German, R. L. (1927). Handbook to British Malaya. London: Malay States information agency.

Gibby, M. (2017). Penang Hill: A Journey Through Time. Penang: Entrepot Publishing Sdn Bhd.

Gupta, J. K. (2022, April 16). Promoting Sustainable Development Of Hill Areas-Issues and Options. https://www.linkedin.com/pulse/promoting-sustainable-development-hill-areas-issues-options-gupta-5f/ Hartel, T., Fischer, J., Câmpeanu, C., Milcu, A. I., Hanspach, J., & Fazey, I. (2014). The importance of ecosystem services for rural inhabitants in a changing cultural landscape in Romania. *Ecology and Society*, 19(2). <u>https://doi.org/10.5751/es-06333-190242</u>

Herbert, E. W. (2011). Flora's Empire: British Gardens in India. London: University of Pennsylvania Press.

- Hew, N. J. (2024). *Sejarah Bukit Fraser* [Video]. Perbadanan Perpustakaan Awam. Retrieved March 10, 2024, from https://m.facebook.com/watch/?v=424511920043521&vanity=selangorlibrary
- JPBD, S., & LESTARI UKM. (2007). Garis Panduan Pengurusan dan Perancangan Pembangunan Kawasan Sensitif Alam Sekitar Perbukitan dan Tanah Tinggi Daerah Hulu Selangor. Retrieved from Selangor, Malaysia
- Kennedy, D. (1996). The Magic Moutains (Vol. 1). Berkeley: University of California Press.
- Maxwell, W. G. (1988). The Early Days of Fraser's Hill/by Sir George Maxwell. In U. o. Malaya (Ed.), University of Malaya. University of Malaya.
- Raw, O., & Raw, O. (2023). The battle for Fraser's Hill: a Malaysian former hill station's 'Little England' heritage and rich wildlife under threat from development. *South China Morning Post*. <u>https://www.scmp.com/magazines/post-magazine/travel/article/3210376/battle-frasers-hill-malaysian-former-hill-stations-little-england-heritage-and-rich-wildlife-under</u>
- Roe. W. J.(1951). The Geology and Mineral Resources of the Fraser's Hill Area, Selangor, Perak, And Pahang, Federation of Malaya, with an Account of the Mineral Resources. *Geological Magazine*, 88(6), 443-444. doi:10.1017/S0016756800070084
- Scrivenor, J. B. (1931). Recollections of Cameron Highlands and Fraser's Hill. *Journal of the Malayan Branch of the Royal Asiatic Society*, 9(1), 2-14.

Shamsudin, K. (2015). *A Town Planning History Charles Reade*. Selangor: Kamalruddin Shamsudin. Sim, K. (1946). *Malayan Landscape*. London: Micheal Joseph LTD.

- Spencer, J. E., & Thomas, W. L. (1948). The Hill Stations and Summer Resorts of the Orient. *Geographical Review*, 38(4), 637-651.
- Weebers, R., & Idris, H. (2016). British Hill Stations in South Asia and Mainland South East Asia: British India, Ceylon, Burma and British Malaya: A Comparative Study. *Journal od Southeast Asian Studies, 21*, 174-189.
- Westlake, G. D. (1993). An Introduction To The Hill Stations Of India India: Indus.
- visitmalaysia.info. (n.d). Golf. Fraser's Hill. Retrieved from https://www.fraserhill.info/golf.htm
- Vlami, V., Kokkoris, I. P., Zogaris, S., Cartalis, C., Kehayias, G., & Dimopoulos, P. (2017). Cultural Landscapes and Attributes of "Culturalness" in Protected Areas: An Exploratory Assessment in Greece. Science of the Total Environment, 595(October 2017), 229-243.