

Perceptions and Land Law Influences: Unravelling Colonial Land Law and Forest Management Policies During British Malaya Era

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Abstract

This study explores the discrepancies in interpretations of land rules between state and federal levels, particularly concerning the recognition and definition of British law in land ownership, disposal, and acquisition. The objectives include analysing perceptions of colonial land law and forest management policy during the British Malaya era and comparing perception agreements regarding the influence of land law on administration and forest management policy. The study was conducted in Penang, Kelantan, and Perak using a structured questionnaire and a two-stage sampling procedure. Results show that a majority (more than 55%) agreed that British-Malaya land administration still influences present-day practices. Additionally, 79% agreed that the "National Land Code" was based on the Federated Malay State Land Code of 1926. Respondents disagreed with statements on colonial forest management policy but agreed (78.8%) with those regarding forest land administration influenced by the British era. The study suggests that land administration practices in the Federated Malay States served as models for subsequent British advisors. However, variations in perception pose challenges in collectively managing land laws related to forestry, necessitating a strong understanding between the public and stakeholders for effective forest-land decision-making and sustainable land development.

Keywords: Land Rules Interpretation, British Law Influence, Perception Analysis, Land Administration Practices, Forest Management Policy.

Introduction

The issue of land rights gained significance when Europeans began occupying territories abroad. However, the importance of land rights varied significantly depending on the specific circumstances of each colonial project. This variation was mainly influenced by the role of land in those circumstances. Liberal Britain, for instance, tended to extensively occupy

sparsely populated and underdeveloped precolonial regions. As a result, the extensive British colonialism in such areas had relatively positive effects (Serrao, 2017; Lange et al., 2006).

Prior to the arrival of British colonial power, the land law in Malaya developed following the indigenous Malay customs. During the British governance of Malacca in 1824, three different land tenure systems were in place: Malay customary tenure, Dutch grants, and the English deed system. The implementation of the Torrens system occurred at a later stage. A comprehensive study of the historical development of land law in British Malaya examined three distinct entities that existed before the country gained independence in 1957. The Federation of Malaya had a unified Land Code for the four Federated Malay States, while each of the five Unfederated Malay States (UFMS) had separate state legislation. The English deeds system continued to be enforced in Malacca and Penang. During the early colonial administration, the British government applied the Rules of Natural Justice or Common Law, aiming to ensure fairness and equality. Prior to the implementation of the Torrens system, the British established the Deeds Registration System (DRS) as their land registration system. The DRS organized and structured land interests through a general register. The British colonial administrators enforced the English Deeds System, which vested all land in the Crown. The introduction of the Torrens system in the Federated Malay States coexisted with existing land systems based on Malay customs, Islamic law, and European land law.

The history of colonial forests in Malaya dates back to the 18th century. The establishment of the Malayan Forest Service can be traced back to its predecessor, the Indian Forest Service, where the initial training of forest administrators for Malaya and Burma took place. This formation occurred approximately 80 years after England's initial contact with the Malay Peninsula, which reflected the fragmented and ambivalent nature of early British involvement in the region (Emerson, 1979). In 1883, the Malayan Forest Department was established as a result of a merger between various departments of the Federated Malay States (FMS) and the Straits Settlements (SS). It was not a single department but comprised multiple departments. Subsequently, the Forest Departments of the Unfederated Malay States (U-FMS) were established at different stages in the early 20th century. Wyatt-Smith (1961) reported that these departments were established in (Johore, 1920; Kedah, 1923; Kelantan, 1933; Terengganu, 1936; Perlis, 1961).

As the British colonial system expanded its control over the entire peninsula, Chinese and European capitalists played a pivotal role in establishing an export-oriented economy centred around tin, rubber, and timber industries (Wong, 1965; Jackson, 1968). This development had significant implications for land administration and forest management in Malaya. The forests of Malaya were under the jurisdiction of the Straits Settlements (SS), the Federated Malay States (FMS), and the Unfederated Malay States (U-FMS). In 1883, the British government took steps to strengthen and expand forestry management by establishing the forest department in Malaya. The forest department operated under the authority of the land office, which helped centralize British power.

The impact of land laws on forestry is complex and cannot be fully understood by solely examining formal legal frameworks. In many parts of the world, customary land laws derived from traditional practices govern land rights allocation and defence, often without being codified in written form. These customary laws continue to play a crucial role in determining land rights, including those related to forestry. However, even when governments or colonial powers have been willing to recognize individual claims based on customary land use for agriculture, they have generally overlooked traditional communal rights to areas used collectively, such as forestry (Christy et al., 2007). In Malaya, the British colonial

administration considered forestry-related matters to be economically significant, following a similar approach as in India, Africa, and other colonies. Furthermore, the expansion of British military-related activities abroad, including the construction of railways and the establishment of military camps, facilitated the extension of their dominant economic colonization policy in Southeast Asian regions. This study aims to analyse the perceptions of colonial land law and forest management policy during the British Malaya era, as well as compare agreements and disagreements regarding the influence of land law on administration and forest management policy.

Methodology

Study Area

The study was conducted in Peninsular Malaysia, formerly known as Malaya. The study area is geographically situated between 1° and 6° N latitude and 100° to 103° E longitude. It covers a total land area of 131,732 square kilometres. Three specific states were chosen for the study, namely Penang (Strait Settlement), Kelantan (Unfederated Malay State), and Perak (Federated Malay State). Figure 1 shows the location of the states in Peninsular Malaysia.

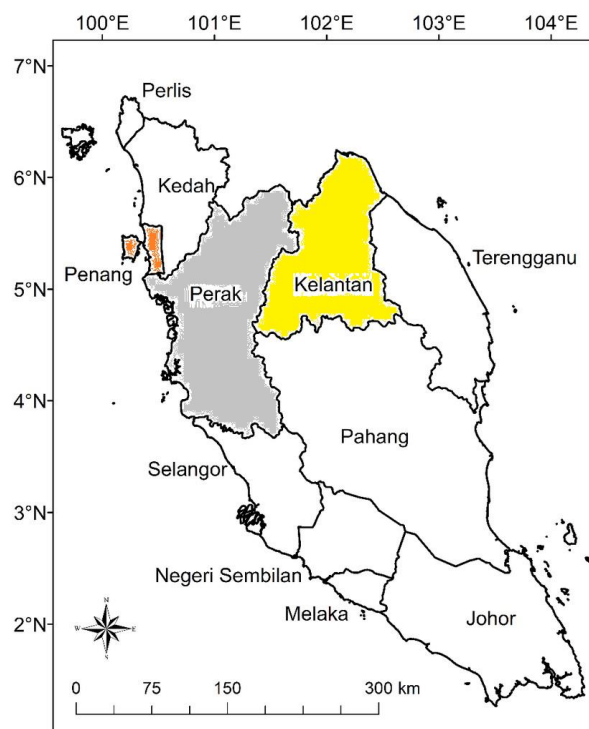


Figure 1. The selected states represent the study area in Peninsular Malaysia
Note: (Perak-grey, Penang- orange and Kelantan-yellow)

The selection of these states as a case study is justified by the British divide-and-rule policy, which aimed to establish colonial administration by implementing a separation of powers. The Federated Malay States (FMS) encompassed Perak (chosen for this study as it was the first FMS introduced under British Military Administration), Selangor, Negeri Sembilan, and Johor.

On the other hand, the Unfederated Malay States (UFMS) included Kelantan (representing the UFMS), Terengganu, Kedah, and Perlis. The Anglo-Siamese Treaty of 1909, also known as the Bangkok Treaty of 1909, was signed between the United Kingdom and the

Kingdom of Siam on 10th March 1909 in Bangkok. Ratifications were exchanged in London on 9th July 1909. As part of the treaty, Thailand relinquished its claims to sovereignty over Kedah (Thai: ไทรบุรี, romanized: Saiburi), Kelantan (กลันตัน, Kalantan), Perlis (ปะลิส, Palit), and Terengganu (ตรังกานู, Trangkanu). These four states entered the British sphere of influence as protectorates and later became known as the Unfederated Malay States. Penang and Malacca were classified as the Strait Settlements, while Singapore was designated as the Crown Colony. These areas are excluded from the scope of this study.

Preparation of Questionnaire Instrument

The preparation of the questionnaire instrument involved several actions. First, a visit was made to the study area to gather first-hand information. Key informant interviews were conducted with officers from state administrative authorities using an informal checklist. This step aimed to identify issues relevant to the study objectives. The questionnaire consisted of two sections: Section A focused on respondents' socio-demographic information, while Section B addressed perceptions of land administration and colonial forestry during the British-Malaya era. Section A primarily included structural questions, capturing data such as age, gender, marital status, race, religion, and education of the respondents.

In Section B, a five-point Likert scale was used to measure respondents' perceptions. The Likert scale allowed participants to indicate their level of agreement or disagreement on eight statements related to land administration during the British-Malaya era. The scale ranged from "Strongly disagree" to "Strongly agree," with a corresponding score of 1 to 5. This balanced scale provided a nuanced understanding of the respondents' perspectives, beyond a simple yes or no response.

Additionally, the same Likert scale was used to assess respondents' perceptions of land administration and colonial forestry during the British-Malaya era. These statements, combined with those on land administration, formed a comprehensive representation of the issues at hand.

To ensure the reliability of the questions in Section B, a pilot study was conducted. The questions were tested using Cronbach's Alpha (CA) in the Statistical Package for Social Science (SPSS) software. This step aimed to assess the internal consistency and reliability of the questionnaire items.

A pilot study was conducted to evaluate the instrument's reliability and alignment with the study objectives (Demaio, 2006). Reliability refers to the consistency and stability of the measurement used to assess a variable. The reliability analysis focused on Cronbach's Alpha (CA), which tests the internal consistency among variable items (Carmines & Zeller, 1979). CA values range from 0 (indicating no internal consistency) to 1 (representing perfect internal consistency). In most social science studies, a reliability coefficient of ≥ 0.7 is considered acceptable (Nunnally, 1978; Creswell, 2002; Withana & Auch, 2014). However, values exceeding 0.95 may suggest redundancy rather than ideal reliability (Hulin et al., 2001).

During the pilot study, 35 questionnaires (about 10% of the sample size) were randomly administered to targeted respondents based on the questionnaire items. Based on the pilot study results, some questions were modified, resulting in the use of 21 questionnaires for the actual survey. The CA value for the issue of land administration during the British-Malaya era was 0.86, which is considered acceptable. Similarly, the CA values for land administration and colonial forestry during the same era were 0.73 each (Table 1 and Table 2).

Table 1

Land administration of the British-Malaya era scale reliability test.

Reliability Statistics		
Scale	Cronbach's alpha value	No. of items
Reliability statistics of land administration during the British-Malaya era scale.	.862	10
Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The National Land Code was enacted based on the Federated Malay State Land Code 1926 (law applicable to Negeri Sembilan, Pahang, Perak and Selangor before 1 January 1966.	.663	.839
The system practised in the nine Malay States is commonly known as the Torrens system or the title registration system originating from the British.	.608	.846
The Torrens system of the British establishes and recognizes, under the authority of the Government, the ownership of undisputed land titles in all land matters.	.421	.866
It is the Torrens principle that is the basis for the determination of individual ownership and interest in a land that is in dispute in Malaysia.	.640	.843
Illegal occupation of land belonging to others or simply contrary ownership is prohibited been enacted under the British era system	.655	.840
British land administration and ownership practised today are guaranteed, but it is not absolute.	.728	.831
The Deeds Land Ordinance System (cap.113), the Torrens System-FMS Land Code 1928, and the Land Enactment for the Non-Associated Malay States and the Straits Settlements are the basis for the enactment of existing land administration laws.	.649	.841
The mirror principle is a Certificate of title that displays the latest facts accurately and ideally about a person's title is the concept of British land administration	.525	.854
The curtain principle currently practised is related to an individual not having to refer to information other than the Certificate of Title or any previous information introduced by the British.	.654	.765
The Division of Boundary Subdivision, Subdivision and Consolidation in the National Land Code was taken from the British administration, the Federated Malay States Land Code 1928, and applies to this day.	.489	.677

Table 2

Land administration and colonial forestry during the British-Malaya era scale reliability test.

Reliability Statistics		
Scale	Cronbach's alpha value	No. of items
Reliability statistic land administration and colonial forestry during the British-Malaya era scale	.736	11
Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The forestry development in Malaya has a strong relationship with the British land and economic policy.	.481	.699
The Sultan was provided with absolute power by the British to ensure for selection of the appropriate Malay candidates to secure the Malay rights on land and forest-related matters.	.377	.724
The post-independence era of 1957 and the change in the trend of the forest policies by the government of independent Malaya after the 1960s can be considered as the starting point of the new era of forest development in the country. All the characteristics considered inter-linked and relevant have contributed to the formulation of the country's present forestry policy and development.	.498	.696
Land administration became the basis power of British colonial administrators, a power which was formerly linked with the Malay Sultanate period. However, the agreement with the Malay Sultans has terminated in British residents and advisers being authorised to manage all aspects of the country's political and economic sectoral development.	.452	.705
In colonial forestry, the argument is that maps were techniques of political control utilized for promoting inclusion through the legal and spatial definition of reserved forest and exclusion of popular access and local non-commercial production.	.645	.657
Colonial Malaya was bestowed with the colonial trend of forest administration after establishing the first forest department in 1883. Although formed within different historical conditions, socio-economic and political structure backgrounds, like any other British colony, Malaya shared the experiences of forest management by foresters trained in Europe, especially Germany, at the Oxford Forestry School and Dehra Dun in India.	.423	.711
Malaya's forestry management practices were also directed according to the British management of	.324	.741

Burma teak forests and Java in the 1850s. After the first Anglo-Burmese (1824-1826) war, the British initially exploited the teak forest of Tenasserim under the system of <i>laissez-faire</i> forestry.		
The analysis of the picture of the Malay Forest is based on the writings of British officials and writers of the colonial period, such as Maxwell, Clifford, Swettenham and others. It shows that the forest is an important thing to the British.	.644	.768
The placement of colonial officials in Malaya contributed indirectly to the history of Malaysia through writings on the ethnography of the Malay community and the forest by British officials	.465	.677
Our land laws and forest management system are still influenced by the system introduced by the British.	.545	.741
The dependency of our land administration and forest management system on the colonial system will remain as long as no party takes the initiative to improve this system in the future.	.472	.701

Process of Sampling and The Selection of Respondents.

This study employed a two-stage sampling approach (Table 3). The target group for respondents consisted of individuals residing in the states, and personal interviews were conducted to collect data. In the first stage, representative or stratified sampling was utilized, which involved dividing the population into groups based on the Federated Malay State, Strait Settlement, and the Unfederated Malay State during the British-Malaya era. This stratified sampling method ensured that the selected sample represented the population accurately in terms of key characteristics relevant to the research question. Consequently, the study's findings can be generalized to the entire population.

In the second stage, convenience sampling was employed due to the challenging circumstances posed by the Movement Control Order (MCO) during the Covid-19 pandemic and the limited time available for data collection. Convenience sampling was deemed suitable under these circumstances where other sampling methods were difficult or impractical to implement. All respondents were officers, with 42% belonging to grade 41 and above, and the remaining 58% from grades below 41 (Table 4). The total population consisted of officers in both grade 41 and above, as well as those below 41. The sample size was determined using Yamane's (1967) simplified sample size formula. Respondents for the survey were selected randomly.

Table 3

Sampling procedure for the study

Stage	Sampling unit	Selection Procedure	Selection criteria
1 st	State /Federal level	Representative/ Stratification	i. Respondents are working with the Office of Lands and Mines of the state. ii. The selected respondent holds the position of Assistant Officer (Grade below 41) and Officer (Grades 41) and above.
2 nd	Respondent	Convenient sampling	i. Respondents' availability and willingness to interview.

Note: In Malaysia, civil servants are categorized into various grades, Grade 41 and below Grade 41. The key difference between employees in Grade 41 and below Grade 41 is their level of seniority and job responsibilities. Grade 41 is considered a mid-level management grade, while employees below Grade 41 are generally considered to be in entry-level or junior positions.

Table 4

Selected respondents from each state with the specified grade level and sample number.

State	Level of Grade	Respondents no.
Penang	Grade 41 and above	46
	Below grade 41	54
Perak	Grade 41 and above	41
	Below grade 41	59
Kelantan	Grade 41 and above	39
	Below grade 41	61
	Total	300
Percentage respondents from grade 41 and above (all state)		= 42%
Percentage respondents below grade 41 (all state)		= 58%

In order to ensure the sample size is representative of the target population, Nyariki (2009) emphasized the need for careful selection. The sample size was determined using the simplified formula proposed by Yamane (1967), which is as follows.

$$n = \frac{N}{1 + Ne^2}$$

Where, n = sample size, N= population size and e = precision level.

The simplified formula is derived from the following formula.

$$n_0 = \pi r^2 = \frac{z^2 p(1 - p)N}{z^2 p(1 - p) + Ne^2}$$

Where, n_0 = sample size, z = confidence interval, p = population proportion, N= population size

and e = precision level

The respondent population for the study was 1180 from Penang (Strait Settlement), Kelantan (Unfederated Malay State) and Perak (Federated Malay State), with a precision level considered 0.05. Therefore, the calculated sample size for this study using the simplified formula is as follows.

$$n = \frac{1180}{1 + 1180(0.05)^2}$$

$$= 298.73 \approx 299$$

Data for this study were gathered using a combination of methods, including surveys completed by respondents, field observations, and discussions with key informants. Primary data collection involved conducting multiple field visits in February 2021, March 2021, July 2021, October 2021, and February 2022. Additionally, secondary data were obtained from printed reports and local authorities.

Data Analysis

The collected data from the survey, which involved the use of a questionnaire, were coded, inputted, and analysed using the Statistical Package for Social Science (SPSS) software. Data analysis encompassed a combination of descriptive and inferential techniques. Descriptive statistics were employed to analyse the characteristics, behaviour, and experiences of the respondents, as outlined by Glover (2005) cited in (Hassan et al., 2014). This involved utilizing measures such as frequency, percentage, mean, and standard deviation to describe socio-demographic characteristics. Mean, sum, and standard deviation (SD) were also employed to describe perception items.

In order to assess whether the mean of a continuous numeric variable was equal to a hypothesized value of the population means, a t-test was conducted. The t-test is an inferential statistic used to determine if there is a significant difference between the means of two groups. Specifically, the two-sample t-test (Snedecor & Cochran, 1989) was employed in this study to determine if the means of two perception variables were equal or if there was no difference in the variance of perception agreement between them. The formula of the t-test is as follows.

$$t = \frac{(\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

Where \bar{X}_1 is the mean of the first sample, \bar{X}_2 is the mean of the second sample, μ_1 is the mean of the first population, μ_2 is the mean of the second population, s_1 is the standard deviation of the first sample, s_2 is the standard deviation of the second sample, n_1 is the size of the first sample, n_2 is the size of the second sample. The degrees of freedom can be calculated as the sum of two sample sizes minus two. Degrees of freedom, $df = n_1 + n_2 - 2$.

A confidence interval for the difference between two means specifies a range of values within which the difference between the means of the two populations may lie. The difference between the means of the two populations can be estimated based on the following formula: The difference in population means = Difference in sample means +/- T*standard error

$$(\bar{x}_1 - \bar{x}_2) \pm t^* \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$$

In the above formula, the standard error is the square root term. The significant value for the t-test is a p-value report. If a p-value from a t-test is less than 0.05, then that result is said to be statistically significant.

Results and Discussion

Respondents' Socio-Demographic Profile

The demographic profile of the respondents encompassed various characteristics, including gender, age, race, marital status, religion, and education level. This profile is presented in Table 5. Out of the 300 respondents surveyed, 201 were male, accounting for 67% of the total. In contrast, the remaining 99 respondents (33%) were female, indicating that the majority of officers in the Office of Lands and Mines of the state were men.

There were notable differences observed among different age groups in terms of their experience and knowledge. The respondents had a mean age of 44.67 years, with a standard deviation of 12.91. The highest proportion of respondents fell within the 41-50 years age category compared to other age groups. The oldest respondent was 62 years old, while the youngest was 25 years old. The age distribution revealed that the majority of respondents were in the middle-aged range. Specifically, 241 respondents (80%) were between 31 and 60 years old, constituting three-fourths of the total. Only 55 respondents (18%) were below 30 years old, and 4 respondents (4%) were above 60 years old.

The majority of the respondents, consisting of 200 individuals (66%), were married. In contrast, only 94 respondents (31%) were single, 4 (1.3%) were widowed, and 2 (0.6%) were divorced. When it comes to ethnic background, more than ninety percent (97.6%) of the respondents identified as Malay/Bumiputra, while only 4 respondents (1.3%) were Chinese, and three respondents (1%) were Indian. The religious affiliation of almost all respondents (96.3%) was Muslim. Among the remaining respondents, five individuals (1.6%) identified as Christian, 3 (1%) as Buddhist, and 3 (1%) as Hindu. Education plays a crucial role in broadening knowledge and expanding one's perspective (Kabir, 2015). The majority of respondents, accounting for 83%, possessed a college or university education, while the remaining 17% had completed formal secondary education.

Table 5

Demographic profile of the respondents (n:300)

Variables	Attribute/Value	Number (n)	Percent (%)	Mean & SD
Gender	Male	201	67.0	
	Female	99	33.0	
Age	18-30 yrs	55	18.0	44.67 yrs. SD 12.91
	31- 40 yrs	72	24.0	
	41-50 yrs	102	34.0	
	51-60 yrs	67	22.0	
	> 60 yrs	4	4.0	
Marital status	Single	94	31.0	
	Married	200	66.0	
	Widow	4	1.3	
	Divorced	2	0.6	
Race	Malay/Bumiputra	293	97.6	
	Chinese	4	1.3	
	Indian	3	1.0	
Religion	Islam	289	96.3	
	Christian	5	1.6	
	Buddha	3	1.0	
	Hindu	3	1.0	
Educational level	Secondary school	51	17.0	
	College/university	249	83.0	

The Perceptions of British Colonial Land Law Influence and Dominations in Land Administration

The respondents were aware of the changes in land law that occurred during the British era, and these changes had an impact on land administration in Peninsular Malaysia. Table 6 presents the responses of the respondents regarding their perception of land administration during the British-Malaya era. A majority of the respondents (>55%) agreed with ten statements indicating that land administration during the British-Malaya era influenced the current land administration. Furthermore, approximately 79% of the respondents agreed that the "National Land Code was enacted based on the Federated Malay State Land Code 1926," which was the law applicable to Negeri Sembilan, Pahang, Perak, and Selangor before January 1, 1966.

Table 6

Perception of the land administration during the British-Malaya era.

Legislation related to land administration during the British-Malaya era	Frequency and percent of respondents				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The National Land Code was enacted based on the Federated Malay State Land Code 1926 (law applicable to Negeri Sembilan, Pahang, Perak and Selangor before 1 January 1966.	2(*0.6)	19(6.3)	42(14.0)	147(49.0)	90(30.0)
The system practiced in the nine Malay States is commonly known as the Torrens system or the title registration system originating from the British.	3(1.0)	17(5.6)	29(9.6)	168(56.0)	83(27.6)
The Torrens system of the British establishes and recognizes, under the authority of the Government, the ownership of undisputed land titles in all land matters.	10(3.3)	42(14.0)	64(21.3)	152(50.6)	32(10.6)
The Torrens principle is the basis for the determination of individual ownership and interest in land in dispute in Malaysia.	2(0.6)	29(9.6)	61(20.3)	161(53.6)	47(15.6)
Illegal occupation of land belonging to others or simply contrary ownership is prohibited been enacted under the British era system	33(11.0)	48(16.0)	61(20.3)	126(42.0)	32(10.6)
British land administration and ownership practiced today are guaranteed, but it is not absolute.	18(6.0)	52(17.3)	58(19.3)	133(44.3)	39(13.0)
The Deeds Land Ordinance System (cap.113), the Torrens System-FMS Land Code 1928, and the Land Enactment for the Non-Associated Malay States and the Straits Settlements are the basis for the enactment of existing land administration laws.	40(13.3)	70(23.3)	64(21.3)	109(36.3)	17(5.6)
The <i>mirror principle</i> is a Certificate of title that displays the latest facts accurately and ideally about a person's title is the concept of British land administration	3(1.0)	17(5.6)	39(13.0)	190(63.3)	51(17.0)
The <i>curtain principle</i> currently practiced is related to an individual not having to refer to information other than the Certificate of Title or any previous information introduced by the British.	35(11.6)	71(23.6)	64(21.3)	112(37.3)	18(6.0)

The Division of Boundary Subdivision, Subdivision and Consolidation in the National Land Code was taken from the British administration, the Federated Malay States Land Code 1928, and applies to this day.	2(0.6)	29(9.6)	61(20.3)	162(54.0)	46(15.3)
	18.1%		18.1%	63.8%	

* Figures in parenthesis indicate percent

Regarding the other statements, around 20% of the respondents answered neutrally, while more than half of the respondents agreed with them (except for 43.3% disagreement with the statement, "The curtain principle currently practised is related to an individual not having to refer to information other than the Certificate of Title or any previous information introduced by the British"). On the other hand, 80.3% of the respondents agreed that the mirror principle, which is a Certificate of Title that accurately and ideally reflects the latest facts about a person's title, is a concept derived from the British land administration. It is worth noting that three statements received responses of neutral, disagree, and strongly disagree from more than 47% of the respondents. This could be attributed to the high level of uncertainty associated with those statements. The specific statements are as follows.

- i. Illegal occupation of land belonging to others or simply contrary ownership is prohibited been enacted under the British era system (47.3%).
- ii. The Deeds Land Ordinance System (cap.113), the Torrens System-FMS Land Code 1928, and the Land Enactment for the Non-Associated Malay States and the Straits Settlements are the basis for the enactment of existing land administration laws (57.9%).
- iii. The *curtain principle* currently practiced is related to an individual not having to refer to information other than the Certificate of Title or any previous information introduced by the British (56.5%).

The Perception of Colonial Forest Management Policy During the British Malaya Era.

Table 7 presents the frequency and percentage of respondents' perceptions regarding the colonial forest management policy during the British Malaya era. Interestingly, only a small number of respondents strongly disagreed with the eleven statements regarding their perception of the colonial forest management policy during that time. This could be attributed to their good knowledge and confidence in forest-related aspects and administration, enabling them to grasp the subject more easily.

Table 7

Perception of colonial forest management policy during the British Malaya era.

Item of colonial forest management policy during the British Malaya era.	Frequency and percent of respondents				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The forestry development in Malaya has a strong relationship with the British land and economic policy.	1(*0.3)	18(6.0)	42(14.0)	149(49.6)	90(30.0)
The Sultan was provided with absolute power by the British to ensure for selection of the appropriate Malay candidates to secure the Malay rights on land and forest-related matters.	3(1.0)	10(3.3)	29(9.6)	175(58.3)	83(27.6)
The post-independence era of 1957 and the change in the trend of the forest policies by the government of independent Malaya after the 1960s can be considered as the starting point of the new era of forest development in the country. All the characteristics considered inter-linked and relevant have contributed to the formulation of the country's present forestry policy and development.	5(1.6)	30(10.0)	64(21.3)	167(55.6)	34(11.3)
Land administration became the basis power of British colonial administrators, a power which was formerly linked with the Malay Sultanate period. However, the agreement with the Malay Sultans has terminated in British residents and advisers being authorized to manage all aspects of the country's political and economic sectoral development.	2(0.6)	20(6.6)	61(20.3)	170(56.6)	47(15.6)
In colonial forestry, the argument is that maps were techniques of political control utilized for promoting inclusion through the legal and spatial definition of reserved forest and exclusion of	23(7.6)	46(15.3)	61(20.3)	136(45.3)	34(11.3)

popular access and local non-commercial production.					
Colonial Malaya was bestowed with the colonial trend of forest administration after establishing the first forest department in 1883. Although formed within different historical conditions, socio-economic and political structure backgrounds, like any other British colony, Malaya shared the experiences of forest management by foresters trained in Europe, especially Germany, at the Oxford Forestry School and Dehra Dun in India.	10(3.3)	32(10.6)	78(26.0)	141(47.0)	39(13.0)
Malaya's forestry management practices were also directed according to the British management of Burma teak forests and Java in the 1850s. After the first Anglo-Burmese (1824-1826) war, the British initially exploited the teak forest of Tenasserim under the system of laissez-faire forestry.	10(3.3)	12(4.0)	97(32.3)	159(53.0)	20(6.6)
The analysis of the picture of the Malay Forest is based on the writings of British officials and writers of the colonial period, such as Maxwell, Clifford, Swettenham and others. It shows that the forest is an important thing to the British.	3(1.0)	17(5.6)	39(13.0)	190(63.3)	51(17.0)
The placement of colonial officials in Malaya contributed indirectly to the history of Malaysia through writings on the ethnography of the Malay community and the forest by British officials	3(1.0)	23(7.6)	81(27.0)	167(55.6)	26(8.6)
Our land laws and forest management system are still influenced by the system introduced by the British.	1(0.3)	19(6.3)	43(14.3)	147(49.0)	90(30.0)
The dependency of our land administration and forest	3(1.0)	16(5.3)	30(10)	168(56.0)	83(27.6)

management system on the colonial system will remain as long as no party takes the initiative to improve this system in the future.					
	0.4%		20.8%	78.8%	

* Figures in parenthesis indicate percent

The majority of respondents (78.8%) agreed with the statements highlighting the influence of the British era on forest land administration and policy. The highest level of agreement (85.6%) was observed for the statement asserting that the British granted the Sultan absolute power to ensure the selection of suitable Malay candidates and protect Malay rights in land and forest-related matters. The second highest level of agreement (83.6%) was for the statement emphasizing that our land administration and forest management system continues to depend on the colonial system until someone takes the initiative to improve it in the future.

Two statements received neutral responses from more than 27% of the participants. These statements are

- i. The placement of colonial officials in Malaya contributed indirectly to the history of Malaysia through writings on the ethnography of the Malay community and the forest by British officials.
- ii. Malaya's forestry management practices were also directed according to the British management of Burma teak forests and Java in the 1850s. After the first Anglo-Burmese (1824-1826) war, the British initially exploited the teak forest of Tenasserim under the system of *laissez-faire* forestry.

Furthermore, approximately 10% of the respondents disagreed or strongly disagreed with all the statements. This indicates that these respondents possess a greater level of confidence, agreement, and knowledge regarding the significant British influence on forest management policy in Malaya during the British era.

Comparison of Perception Agreement of Land Law Influences Land Administration and Forest Management Policy During the British Malaya Era

Figure 2 shows a bar chart that compares the two perceptions regarding the influence of land law on land administration and forest management policy during the British Malaya era. The questionnaire results indicate the following levels of agreement; (i) 63.8% agreement on land law influencing land administration, and (ii) 78.8% agreement on land law influencing forest management policy.

To examine any statistically significant difference between these two sets of perceptions, a t-test was conducted. A "significant difference" implies that the observed results are unlikely to occur by chance or sampling error. The t-test is a statistical test that compares the means of two samples. The critical value used for comparison with the t-statistic is obtained from a table of probabilities for the distribution, a portion of which is presented in Table 8. The p-value is reported as the significant value for the t-test. If the p-value obtained from the t-test is less than 0.05, then the result is considered statistically significant.

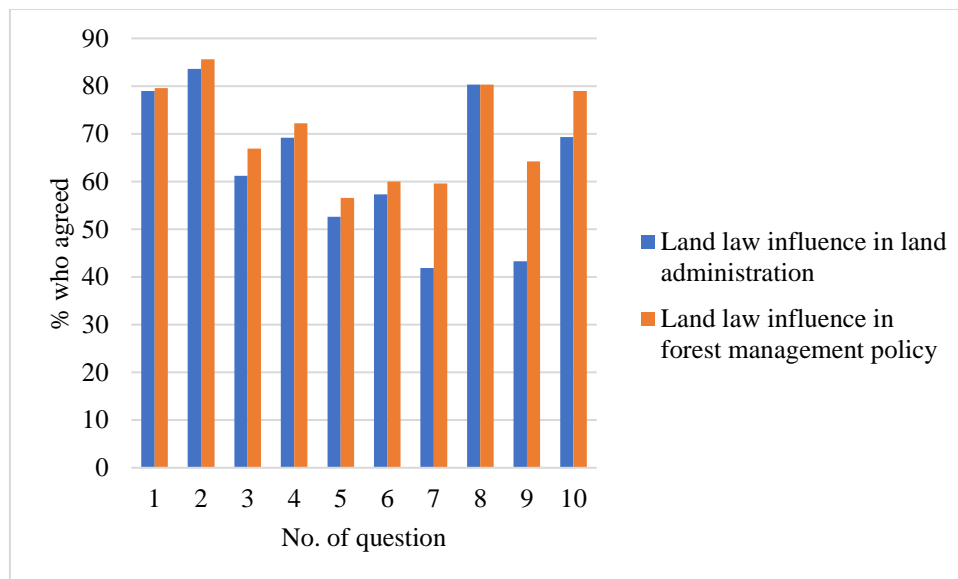


Figure 2. A chart compares the two perceptions of the land law that influenced land administration and forest management policy during the British Malaya era.

Table 8

The result of the t-test (two-tail) for variance

Mean	62.07777778	69.37777778
Variance	221.4144444	107.8469444
Observations	9	9
df	8	8
F	2.053043279	
P(F<=f) one-tail	0.164515875	
F Critical one-tail	3.438101233	
P two-tail	0.348110086	

(Significance level at 0.05)

The variance for the set of questions pertaining to the agreement on land law's influence on land administration was calculated as 221, while the variance for the agreement on land law's influence on forest management policy was 107. The t-test resulting p-value was determined to be 0.3, which exceeds the threshold of 0.05. Consequently, these findings indicate that there is no significant difference in perception agreement between land administration and forest policy influenced by British land law during the British-Malaya era.

In other words, the data suggest that both land administration and forest management policy were similarly influenced by British land law, as the level of agreement did not significantly differ between the two aspects.

Conclusion

The evolution of land law during the British era had a significant influence on land administration in Peninsular Malaysia. The majority of respondents agreed that the land administration during the British-Malaya era continued to shape the present land administration. Furthermore, a significant percentage of respondents recognized the

influence of British land administration principles such as the "mirror principle" and the enactment of the National Land Code based on the Federated Malay State Land Code 1926. However, several statements received mixed responses, with a considerable number of participants expressing neutrality, disagreement, or strong disagreement. These statements pertained to the illegal occupation of land, the basis for existing land administration laws, and the "curtain principle" in land administration.

It is worth noting that the perception of the colonial forest management policy during the British Malaya era also elicited disagreement among respondents, although there was a general agreement on the influence of the British era on forest land administration and policy. Statistical analysis using a T-test revealed no significant difference between the perceptions of land law's influence on land administration and forest management policy during the British Malaya era. The variances for both set of questions were calculated, and the resulting P-value was greater than 0.05, indicating no statistically significant distinction. The percentages of agreement were 63.8% for land administration and 78.8% for forest management policy. In conclusion, the results indicate a significant British influence on land administration and forest management policy in Malaya during the British era. However, it is important to note that there were variations in the perceptions among the respondents.

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