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# Modelling Factors Influencing the Replacements'

# Characteristics of Malay Reserved Land Using PLS-SEM in

# Klang Valley, Selangor, Malaysia

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### ABSTRACT

Malay Reserve Land (MRL) is one form of land ownership that has been dedicated to the Malay native community and following Article 89 of the Federal Constitution which protects the Malay Reserve Land (MRL), the area must be ensured not to be reduced in the event of revocation. According to the Ministry of Natural Resources, up to the present time, there have been fluctuations in the area of Malay Reserve Land (MRL) in Selangor and various states across Peninsular Malaysia. These fluctuations have been influenced by the revocation and substitution of Malay Reserve Land (MRL) to develop public infrastructure and reclaim the land for public facilities development. Hence, these have been a caused the occurrence in a mismatch between the replacements' characteristics of the Malay Reserve Land (MRL) and the Revocation Land. Therefore, this study specifically aims to key factors influencing the assess the replacements' characteristics for the Malay Reserve Land (MRL) in Klang Valley (KV), Selangor, Malaysia. Ten (10) replacements' characteristics have been evaluated through the PLS-SEM model assessment and involved the distribution of 366 questionnaires to a target group comprising Klang Valley (KV) residents in the

<sup>1\*</sup> Corresponding author. *E-mail address*: drfirdausishak@gmail.com https://doi.org/10.24191/bej.v22i1.944 study area. The data collection was carried out through Systematic Random sampling. As a result, the modelling analysis revealed that Applicant's Dependent Cost characteristic did not significantly influence the replacements' characteristics for the Malay Reserve Land (MRL) in the study area. Thus, characteristics of Malay Reserve Land (MRL) replacement in the existing guidelines have been assessed in the Klang Valley (KV)'s area and the gap has been identified.

### **INTRODUCTION**

Land holds significant value from political, economic and social standpoints. According to Aliasak (2017), the ownership or possession of land is a highly sensitive matter crucial for the survival of a nation or community within a particular country or region. When considered from an economic standpoint, land is among the fundamental human necessities, alongside food, clothing and shelter. Kalfas et al. (2023) state that the increasing level of urbanization, especially in urban areas nowadays, has caused uncontrolled land use which includes direct drivers such as population expansion, infrastructure system modifications, public facilities and amenities i.e. the construction of highways, airports, water treatment plants and etc. As a result, a wide range of land use disputes have arisen. In addition, these land use disputes are also related to the factors of loss and depletion of Malay Reserve Land (MRL) as shown in the Fig. 1.

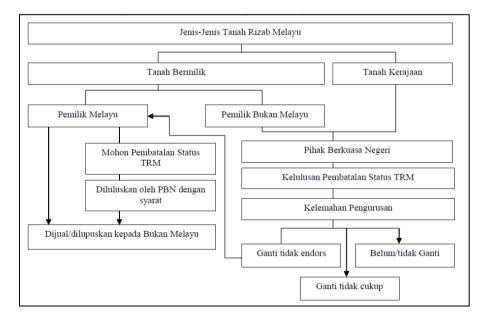


Fig. 1. Summary of Loss and Shrinkage of Malay Reserve Land (MRL)

Source: Aliasak (2017)

Based on Fig. 1, the 2013 Auditor General's report highlighted significant weaknesses in the management of MRL across several states in Peninsular Malaysia. The audit identified various issues, including inadequate management practices, a lack of information or data, time constraints on staff, and insufficient monitoring of land management (*Kelemahan Pengurusan*). These problems, particularly errors in records and registers, have led to the failure to endorse MRL as "Malay Savings Areas," allowing

transactions of these lands to non-Malays. The oversight persisted for over 30 years due to the incompetence of responsible officers in monitoring these cases. However, the Audit Department recommended remedial measures to reinstate MRL's that had been transferred to non-Malays. Additionally, there were instances where the replacement policy for MRL's, whose status was revoked, did not comply with the rules and regulations outlined in the Federal Constitution. This failure was attributed to constraints or limitations in adhering to the conditions stipulated for similar-character replacements. Notably, no Auditor General's report was conducted for the states of Perak and Kelantan. For Perak, data on MRL was sourced from the 2014 Annual Report of the Perak State Department of Land and Mines.

As a result, issues related to MRL management in these states remain unidentified, leaving the reported land areas, as conveyed through mainstream newspapers, open to dispute regarding their actual area, location and other details (Aliasak, 2017). The Management weaknesses have caused the mismatch between the replacement characteristics of the MRL and Revocation Land. According to the Selangor Land and Mines Director's Circular No. 3/2015, state that "...*jika mana-mana tanah terhenti menjadi tanah rizab orang Melayu, mana-mana tanah lain yang serupa jenisnya (similar in character) dengan tanah itu dan seluas tidak lebih daripada luas tanah itu hendaklah dengan serta-merta diisytiharkan sebagai tanah rizab orang Melayu"* (Federal Constitution, 2012). Hence, it has become a question that needs to be explored in identifying the best replacement characteristics of the MRL to be practiced by all states in Peninsular Malaysia. Therefore, this study aimed to assess the key factors influencing the replacements' characteristics of MRL in Klang Valley (KV), Selangor, Malaysia.

In identifying the applicable and the most significant characteristics of Malay Reserved Land Replacement specifically in Selangor, literature reviews in this study indicated that there are three (3) types of toolkits that can guide and being adapted into the research aims of this study which is to assess the key factors influencing the replacements' characteristics of MRL in KV, Selangor, Malaysia as follows:

- (i) Article 89(3) of the Federal Constitution (2009)
- Selangor Land and Mines Director's Circular No. 3/2015 : Replacement Characteristics of the Malay Reserved Land (2015)
- (iii) UN Land Administration Guidelines (1996)

Based on these three (3) toolkits, this study uses the Article 89(3) of the Federal Constitution and Replacement Characteristics of the MRL (Selangor Land and Mines Director's Circular No. 3/2015, 2015) as a primary basis for the formation a set of Malay Reserved Land Replacement Characteristics (MRLRC) because these characteristics are in line with the research aims of this study. Meanwhile, the UN Land Administration Guidelines (1996) (based on: board concept of land administration and land management paradigm) was used to add one (1) characteristic which is Market Value to the main characteristics of MMRLRC to suit the Malaysian circumstances. Fig. 2 shows the 10 replacements' characteristics of the MRL have been assessed in this study.

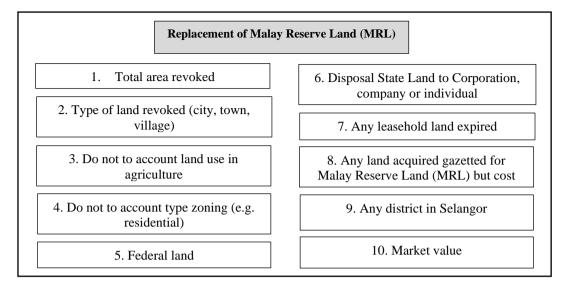


Fig. 2. Ten (10) Replacements' Characteristics Of The Malay Reserve Land (MRL)

Source: Adapted from Article 89(3) of the Federal Constitution and Replacement Characteristics of the Malay Reserved Land (Selangor Land and Mines Director's Circular No. 3/2015, 2015) and the UN Land Administration Guidelines (1996)

### CONCEPTUAL STRUCTURAL MODEL

This study formulated a conceptual structural model using ten (10) major domains i.e. Market Value, Total Land Area, Type of Land, Land Use, Land Zoning, Government Land to be Disposed (GLD), Federal Government Property, Expired Lease, Land Replacement and Applicant's Dependent Cost as per Fig. 3. This study also intends to contribute toward expanding the literature on the relationship between the highlighted domains. Thus, the PLS-SEM model assessment has been used to verify the hypotheses of this study; ten (10) hypotheses have been proposed based on one (1) research question: How does Market Value, Total Land Area, Type of Land, Land Use, Land Zoning, GLD, Federal Government Property, Expired Lease, Land Replacement and Applicant's Dependent Cost positively influence the replacements' characteristics of MRL in the study area?

- H1: Market Value has significantly positive influence on the MRL
- H2: Total Land Area has significantly positive influence on the MRL
- H3: Type of Land has significantly positive influence on the MRL
- H4: Land Use has significantly positive influence on the MRL
- H5: Land Zoning has significantly positive influence on the MRL
- **H6:** GLD has significantly positive influence on the MRL
- H7: Federal Government Property has significantly positive influence on the MRL
- H8: Expired Lease has significantly positive influence on the MRL
- H9: Land Replacement has significantly positive influence on the MRL
- H10: Applicant's Dependent Cost has significantly positive influence on the MRL

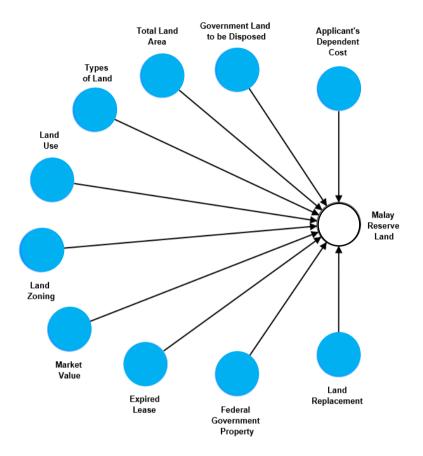


Fig. 3. Conceptual Structural Model

### METHOD AND STUDY AREA

This study has been conducted in five (5) districts of KV, Selangor namely Petaling, Hulu Langat, Kuala Langat, Gombak and Klang districts. The target group for this study consisted of 366 residents from the KV. This sample size was determined using the Raosoft Sample Size Calculator, based on a population size of 1,000, a 99% confidence level, and a 5% margin of error. Systematic random sampling was employed to select the respondents. The quantitative and qualitative methodologies have been applied in this study through inferential statistical analysis – closed-ended questions in questionnaire survey form (Smart PLS Statistics) and content analysis (open-ended question in questionnaire survey form). Five-point Likert scale has been used in evaluating the measurement instruments which comprises seven (7) items of Market Value, six (6) items of Total Land Area, six (6) items of Type of Land, six (6) items of Land use, six (6) items of Land Zoning, six (6) items of GLD, five (5) items of Federal Government Property, five (5) items of Expired Lease, five (5) items of Land Replacement and five (5) items of Applicant's Dependent Cost and five (5) items of Demographic Profile. Data analysis concerning this study involved descriptive analysis performed using IBM SPSS and inferential analysis performed using Smart-PLS 4 (Two (2) stages: measurement model analysis and structural model analysis). Table 1 shows the items loadings that have been assessed in Smart-PLS 4 of this study. There are ten (10) independent variables with 57 measurement items and one (1) dependent variable with 12 measurement items.

Table. 1. The Item Loadings

Model Construct	Measurement Item	Item Represent
Independent Variable		
(1) Market Value (MV)	B1_B1	Land replacement according to the market value of the land use taken
	B1_B2	Land replacement according to land location
	B1_B3	Land replacement according to the shape of land use
	B1_B4	Land replacement according to the size of the land
	B1_B5	Land replacement according to land use circumstances
	B1_B6	Land replacement according to land zone
	B1_B7	Land replacement over any land use with an equal or greater market value
(2) Total Land Area	B2_B1	The land replacement area according to the area taken
(TLA)	B2_B2	The area of the land replacement is less than 3 acres
	B2_B3	Land replacement area 3 acres – 6.99 acres
	B2_B4	Land replacement area 7 acres – 9.99 acres
	B2_B5	Land replacement area 10 acres - 12 acres
	B2_B6	The area of land replacement exceeds 12 acres
(3) Type of Land	B3_B1	Land replacement according to the type of land use taken
(TL)	B3_B2	Mukim's land replacement type (e.g.: Petaling's Mukim)
	B3_B3	Urban's land replacement type (e.g.: Ampang City)
	B3_B4	Town's land replacement type (e.g.: Pekan Batu Tiga)
-	B3_B5	Cities' land replacement type
	B3_B6	Any suitable land replacement
(4) Land Use	B4_B1	Land replacement according to the
(LU)		circumstances of land use taken
	B4_B2	Agriculture's land replacement type
	B4_B3	Building's land replacement building type
	B4_B4	Industrial's land replacement type
	B4_B5	Forest reserve's land replacement type
	B4_B6	Any suitable land replacement
(5) Land Zoning (LZ)	B5_B1	Land replacement according to the area (zoning) of the land use taken
	B5_B2	Land replacement for the residential zone
	B5_B3	Land replacement for the trade zone
	B5_B4	Land replacement for industrial zone
	B5_B5	Land replacement for agricultural zone
	B5_B6	Any suitable land replacement zone
(6) Government Land	B6_B1	The land is given to the State Corporation
to be Disposed (GLD)	B6_B2	Land is given to the state government
	B6_B3	Land is given to central government subsidiaries
	B6_B3 B6_B4	Land is given to central government subsidiaries Land is given to statutory bodies

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	B6_B6	Land is given to any government agency
(7) Federal Land	B7_B1	Land owned by the Federal Land Commissioner (PTP)
Commissioner –	B7_B2	Land owned by a statutory body
(PTP)	B7_B3	Land owned by central government subsidiaries
-	B7_B4	Land owned by Government Link Company (GLC)
-	B7_B7 B7_B5	Land owned by Government Link company (GLO)
(8) Expired Lease	B8_B1	Land replacement that has expired lease period
(EL) –		Land replacement that may expired lease period
-	B8_B2	
-	B8_B3	Land replacement lease that is ongoing
_	B8_B4	Land replacement that has just been leased
	B8_B5	Land replacement is a suitable type of lease
(9) Land Replacement	B9_B1	Land replacement in the same district
(LR)	B9_B2	Land replacement in the same district
-	B9_B3	Land replacement in the nearest district
-	B9_B4	Land replacement of any suitable district
-	B9_B5	Land replacement outside the district/state that is suitable
(10) Applicant's	B10_B1	The cost of land replacement must be fully borne by the applicant
Dependent Cost	B10_B2	The cost of land replacement must be fully borne
(ADC)		by the applicant including related compensation
-	B10_B3	The cost of land replacement must be fully borne by the applicant including related compensation or return to MRL which is suitable
	B10_B4	The cost of land replacement must be fully borne by the applicant
_	—	and replaced beyond the market value of the land or any suitable
	B10_B5	The cost of land replacement must be fully borne
Dependent Variable		by the applicant and any related costs
-	C1	Dry improving the characteristics of replacement and acquisition of
(11) Malay Reserve Land (MRL)	CI	By improving the characteristics of replacement and acquisition of MRL will have a good effect on the Malay community
	C2	The MRL replacement method provides continuity
_		and relevance to future generations of Malays
	C3	The existing MRL enactment including the circular letter is
-	<u> </u>	sufficient to maintain the position of MRL
	C4	The replacement of MRL based on market value will be able to
		mointain the position of the Molays in Molaysia
-	C5	maintain the position of the Malays in Malaysia The selection of the replacement characteristics of MRL is very
-	C5	The selection of the replacement characteristics of MRL is very
-	C5	The selection of the replacement characteristics of MRL is very
-	C5 C6	The selection of the replacement characteristics of MRL is very important in maintaining the value of real estate and the amount of MRL
-		The selection of the replacement characteristics of MRL is very important in maintaining the value of real estate and the amount of MRL
-		The selection of the replacement characteristics of MRL is very important in maintaining the value of real estate and the amount of MRL The MRL replacement feature based on the current market value is used as the main condition for land replacement The main feature of replacing MRL based on market value will be
-	C6 C7	The selection of the replacement characteristics of MRL is very important in maintaining the value of real estate and the amount of MRL The MRL replacement feature based on the current market value is used as the main condition for land replacement The main feature of replacing MRL based on market value will be able to increase the value of MRL
- - -	C6	The selection of the replacement characteristics of MRL is very important in maintaining the value of real estate and the amount of MRL The MRL replacement feature based on the current market value is used as the main condition for land replacement The main feature of replacing MRL based on market value will be able to increase the value of MRL The main feature of the replacement of MRL based on market
- - - -	C6 C7	The selection of the replacement characteristics of MRL is very important in maintaining the value of real estate and the amount of MRL The MRL replacement feature based on the current market value is used as the main condition for land replacement The main feature of replacing MRL based on market value will be able to increase the value of MRL The main feature of the replacement of MRL based on market value will be able to guarantee the economy of the Malay
- - - -	C6 C7 C8 C9	The selection of the replacement characteristics of MRL is very important in maintaining the value of real estate and the amount of MRL The MRL replacement feature based on the current market value is used as the main condition for land replacement The main feature of replacing MRL based on market value will be able to increase the value of MRL The main feature of the replacement of MRL based on market value will be able to guarantee the economy of the Malay The procedure for taking and replacing the existing MRL needs to be improved
- - - - -	C6 C7 C8	The selection of the replacement characteristics of MRL is very important in maintaining the value of real estate and the amount of MRL The MRL replacement feature based on the current market value is used as the main condition for land replacement The main feature of replacing MRL based on market value will be able to increase the value of MRL The main feature of the replacement of MRL based on market value will be able to guarantee the economy of the Malay The procedure for taking and replacing the existing MRL needs to be improved The existing MRL Enactment needs to be amended so that the
- - - - -	C6 C7 C8 C9	The selection of the replacement characteristics of MRL is very important in maintaining the value of real estate and the amount of MRL The MRL replacement feature based on the current market value is used as the main condition for land replacement The main feature of replacing MRL based on market value will be able to increase the value of MRL The main feature of the replacement of MRL based on market value will be able to guarantee the economy of the Malay The procedure for taking and replacing the existing MRL needs to be improved

C12	The MRL must be defended to ensure
	the fate of the Malays is preserved

# RESULTS

### **Demographic Profile**

This study comprised 366 respondents; 159 male (43.4%) and 207 female (56.6%). The majority comprised businessman (80.1%); the remaining government employees (7.1%) and private sector workers (10.1%). Most respondents belong to Petaling district comprising 194 respondents (53%) and other respondents are from Klang district (9.8%), Gombak district (17.5%), Hulu Langat district (18.9%) and Kuala Langat district (0.8%).

### **Measurement Model Analysis**

The first stage comprises measurement model analysis based on Confirmatory Factor Analysis consisting of reliability and validity tests. Table 2 indicates that all items representing every construct were reliable. This study confirmed that the representative items were consistent with other studies concerning different contexts and samples. Following the recommendations of Amin et al. (2016), the CV was assessed using factor loadings, Average Variance Extracted (AVE) and Composite Reliability (CR). The recommended values for loadings were set at > 0.5, CR at > 0.7 and AVE at > 0.5. R<sup>2</sup> represents the proportion of variance in the endogenous construct that is explained by its predictor constructs, indicating the model's explanatory power and Q<sup>2</sup> represents the predictive relevance of the model, indicating the ability of the model to predict the endogenous constructs based on cross-validated redundancy measures (Hair et al., 2021).

Table 2 shows the measurement model analysis. The results showed that all the reflectively measured construct was above the recommended value of 0.5 (Hashim et al., 2023). In this study, there are 28 measurement items consisting of lower loading items (< 0.5) and higher loading items (> 0.5) that were dropped to obtain better reliability and discriminant validity (Kashif et al., 2018; Rezaei et al., 2016) – these 28 measurement items indicate as not significantly results in this study to assess the key factors influencing the replacements' characteristics of MRL in KV, Selangor, Malaysia: 28 lower loading items i.e. B1\_B5 (0.679), B1\_B6 (0.713), B1\_B7 (0.490), B2\_B2 (0.637), B2\_B6 (0.552), B3\_B1 (0.602), B3\_B6 (0.355), B4\_B1 (0.712), B4\_B6 (0.429), B5\_B1 (0.666), B5\_B6 (0.377), B6\_B5 (0.776), B6\_B6 (0.526), B7\_B1 (0.684), B7\_B5 (0.559), B8\_B1 (0.537), B8\_B4 (0.557), B9\_B1 (0.708), B10\_B5 (0.741), C3 (0.403), C4 (0.297), C5 (0.555), C6 (0.503), C8 (0.329), C9 (0.490), C10 (0.361), C11 (0.335) and C12 (0.526).

The CR varied between 0 and 1. Hair et al. (2019) and Gholami et al. (2016) stated that, CR values of above 0.7 were still considered satisfactory and none of the CR values were above 0.9 which is an undesirable value. All the CRs had values above 0.8 (Gholami et al., 2016; Vinzi et al., 2010; Scholtz et al., 2016). The internal consistency reliability (after bootstrap) for all the constructs' reliability was considerably higher (lower) than the suggested minimum (maximum) thresholds (p-values < 0.01). Moreover, all the AVE assessed were higher than the critical value of 0.5 in this study. This indicates that the measurement model's analysis surpassed the proposed values hence suggesting adequate convergence validity.

Table. 2. Measurement Model Analysis

Model Construct	Measurement Item	Loadings	AVE	CR	_

Independent Variable				
(1) Market Value	B1_B1	0.506	0.526	0.771
(MV)	B1_B2	0.750	_	
	B1_B3	0.685	_	
	B1_B4	0.749	_	
(2) Total Land Area	B2_B3	0.853	0.737	0.893
(TLA)	B2_B4	0.931	_	
	B2_B5	0.786	_	
(3) Type of Land (TL)	B3_B2	0.853	0.679	0.893
	B3_B3	0.875		
	B3_B4	0.880		
	B3_B5	0.671		
(4) Land Use (LU)	B4_B2	0.826	0.610	0.862
	B4_B3	0.808		
	B4_B4	0.803	_	
	B4_B5	0.680	_	
(5) Land Zoning (LZ)	B5_B2	0.829	0.670	0.890
	B5_B3	0.827	_	
	B5_B4	0.821	_	
	B5_B5	0.796	_	
(6) Government Land	B6_B1	0.834	0.668	0.889
(GLD)	B6_B2	0.861	_	
	B6_B3	0.838	_	
	B6_B4	0.729	_	
(7) Federal Land	B7_B2	0.823	0.703	0.877
Commissioner	B7_B3	0.862	_	
(PTP)	B7_B4	0.831	_	
(8) Expired Lease	 B8_B2	0.778	0.546	0.782
(EL)	 B8_B3	0.694	—	
	B8_B5	0.742	_	
(9) Land Replacement	B9_B1	0.724	0.585	0.848
(LR) —	B9_B2	0.828	_	
	B9_B3	0.854	_	
	B9_B4	0.633	_	
(10) Applicant's	B10_B1	0.825	0.666	0.888
Dependent Cost	B10_B1	0.904		0.000
(ADC)	B10_B2 B10_B3	0.904	—	
	B10_B3	0.712	_	
Donandant Variable	D10_D4	0.712		
Dependent Variable (11) Malay Reserve	C1	0.924	0.540	0 707
LI II VIAIAV KESETVE	C1	0.834	0.560	0.787

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C7	0.543	

Table 3 and 4 show that all items were valid in representing the 10 primary constructs in this study. In Table 3, all construct values are higher than the construct's higher squared correlation values. The HTMT ratio in Table 4 also meet the threshold value of less than 0.85 or 0.95 (Salleh et al., 2022).

Table. 3	3.	Fornell	-Larker	Criterion
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	ADC	EL	FGP	GLD	LR	LU	LZ	MRL	MV	TLA	TL
ADC	0.816										
EL	0.399	0.739									
FGP	0.405	0.452	0.839								
GLD	0.454	0.382	0.636	0.817							
LR	0.303	0.444	0.396	0.346	0.765						
LU	0.326	0.328	0.313	0.327	0.393	0.781					
LZ	0.280	0.339	0.445	0.401	0.455	0.694	0.818				
MRL	0.115	0.233	0.227	0.233	0.244	0.256	0.313	0.748			
MV	0.269	0.310	0.441	0.356	0.408	0.349	0.432	0.204	0.680		
TLA	0.180	0.378	0.300	0.275	0.347	0.334	0.386	0.184	0.337	0.859	
TL	0.231	0.275	0.405	0.389	0.397	0.473	0.560	0.255	0.477	0.329	0.824

Source: Authors (2024)

Table. 4. Heterotrait-Monotrait Ratio (HTMT)

	ADC	EL	FGP	GLD	LR	LU	LZ	MRL	MV	TLA	TL
ADC											
EL	0.573										
FGP	0.514	0.654									
GLD	0.530	0.557	0.804								
LR	0.389	0.653	0.523	0.445							
LU	0.388	0.487	0.404	0.396	0.504						
LZ	0.336	0.485	0.549	0.473	0.565	0.847					
MRL	0.162	0.374	0.332	0.312	0.367	0.355	0.436				
MV	0.390	0.513	0.635	0.484	0.597	0.503	0.587	0.338			
TLA	0.231	0.548	0.372	0.339	0.445	0.425	0.467	0.271	0.468		
TL	0.276	0.397	0.500	0.463	0.500	0.585	0.670	0.364	0.648	0.402	

Source: Authors (2024)

Thus, the measurement model analysis and measurement model results were fulfilled with the substantive evidence for the next stage i.e. structural model analysis.

### **Structural Model Analysis**

To evaluate the structural models' predictive power, the  $R^2$  was calculated. As presented in Fig. 3, all the variances of the higher order construct  $R^2$  were equal to 1 (Becker et al., 2012) for the MRL constructs. https://doi.org/10.24191/bej.v22i1.944 The path analysis was carried out to test the hypotheses generated. The results of the bootstrapping procedure with 5000 samples and using the no sign changes option (Abu et al., 2021) revealed that all of the structural model relationships were significant and except one (1) replacements' characteristic. Table 5 shows the structural model analysis. Specifically, strong and significant statistical evidence was acquired for hypothesis; H1 (MV  $\rightarrow$  MRL,  $\beta = 0.014$ , p < 0.000), H2 (TLA  $\rightarrow$  MRL,  $\beta = 0.009$ , p < 0.000), H3 (TL $\rightarrow$  MRL,  $\beta = 0.063$ , p < 0.000), H4 (LU $\rightarrow$  MRL,  $\beta = 0.043$ , p < 0.000), H5 (LZ $\rightarrow$  MRL,  $\beta = 0.154$ , p < 0.049), H6 (GLD $\rightarrow$  MRL,  $\beta = 0.087$ , p < 0.000), H7 (FGP $\rightarrow$  MRL,  $\beta = 0.010$ , p < 0.000), H8 (EL $\rightarrow$  MRL,  $\beta = 0.102$ , p < 0.000), H9 (LR $\rightarrow$  MRL,  $\beta = 0.063$ , p < 0.000), H10 (ADC $\rightarrow$  MRL,  $\beta = -0.066$ , p < 0.327) in this study.

Hypothesis	Path Co- Efficient	Standard Deviation	<i>t</i> - Value	<i>p</i> -Value	Bias Confidence Intervals (BCI)		Results
	(β)				2.5%	97.5%	
H1: MV → MRL	0.014	0.061	0.233	0.000	0.115	0.118	Supported
H2: TLA $\rightarrow$ MRL	0.009	0.058	0.154	0.000	0.100	0.131	Supported
H3: TL $\rightarrow$ MRL	0.063	0.070	0.896	0.000	0.071	0.203	Supported
H4: LU → MRL	0.043	0.075	0.577	0.000	0.108	0.182	Supported
H5: LZ $\rightarrow$ MRL	0.154	0.078	1.972	0.049	0.001	0.299	Supported
H6: GLD → MRL	0.087	0.076	1.152	0.000	0.063	0.235	Supported
H7: FGP $\rightarrow$ MRL	0.010	0.078	0.134	0.000	0.137	0.176	Supported
H8: EL $\rightarrow$ MRL	0.102	0.065	1.577	0.000	0.030	0.223	Supported
H9: LR → MRL	0.063	0.066	0.952	0.000	0.063	0.202	Supported
H10: ADC $\rightarrow$ MRL	-0.066	0.067	0.981	0.327	-0.241	0.048	Not Supported

Table. 5. Direct Relationships for Hypothesis Testing

Source: Authors (2024)

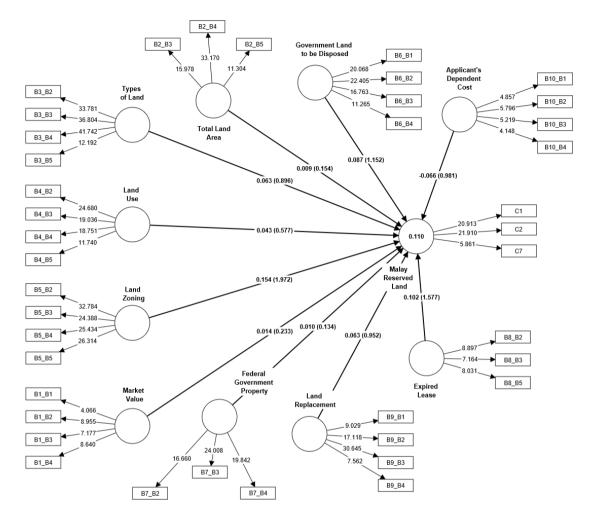


Fig. 4. Structural Model Relationship

The  $Q^2$  for MRL was 1.000. The values represented a predictive relevance for the endogenous construct or predictive accuracy of the PLS path model. A  $Q^2$  value greater than 0 indicates adequate predictive relevance for the model (Amin et al., 2016). The measurement model results show that the elements of the replacements' characteristics are measurable as each result agrees in convergent and discriminant validity. As a result, the relationship between 9 characteristics and the MRL of the study is reliable, valid and significant. Meanwhile, one (1) of replacements' characteristic namely, Applicant's Dependent Cost (ADC) is not reliable, valid and significant to the MRL of this study.

H1: Market Value (MV) has significantly positive influence on the MRL (*reliable, valid and significant*)
H2: Total Land Area (TLA) has significantly positive influence on the MRL (*reliable, valid and significant*)

**H3**: Type of Land (TL) has significantly positive influence on the MRL (*reliable, valid and significant*)

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H4: Land Use (LU) has significantly positive influence on the MRL (*reliable, valid and significant*)
H5: Land Zoning (LZ) has significantly positive influence on the MRL (*reliable, valid and significant*)
H6: GLD has significantly positive influence on the MRL (*reliable, valid and significant*)
H7: Federal Government Property (FGP) has significantly positive influence on the MRL (*reliable, valid and significant*)
H8: Expired Lease (EL) has significantly positive influence on the MRL (*reliable, valid and significant*)
H9: Land Replacement (LR) has significantly positive influence on the MRL (*reliable, valid and significant*)
H10: Applicant's Dependent Cost (ADC) has significantly positive influence on the MRL (*not reliable, not valid and not significant*)

## DISCUSSION AND FINDINGS

# Applicant's Dependent Cost Characteristic Did Not Significantly Positive Influence On The Replacements' Characteristics Of MRL In The Study Area – H10

The findings from the study on MRL in Selangor reveal several critical issues and challenges that are reflective of broader concerns associated with MRL across Malaysia. The lack of significant influence of the ADC characteristic on the decision to select replacement land highlights the complex financial dynamics that land applicants face. The study's insights into the challenges—such as bearing the full cost of land replacement, the need for substantial financial allocations, and the low attractiveness of costly replacement features—underscore significant financial hurdles.

### **Financial Burden on Land Applicants**

One (1) of the main challenges in the management and replacement of MRL is the financial burden placed on applicants. The requirement for applicants to bear the full cost of land replacement and compensation payments to landowners creates a significant barrier to the successful replacement of MRL. As highlighted in the study, these financial obligations can deter applicants from pursuing replacement options, especially when faced with limited financial resources. This issue aligns with broader concerns about the financial sustainability of MRL management in Malaysia, where the preservation of Malay cultural heritage through MRL is often at odds with economic realities (Abdullah et al., 2017).

### **Substantial Financial Allocation Requirements**

The study also points to the need for a large amount of funds for the acquisition of replacement land as a critical issue. This requirement further complicates the process for land applicants, many of whom may not have access to the necessary financial resources. The challenge of securing adequate funding is exacerbated by the high cost of land in urban areas like Selangor, where land values have been steadily increasing (Norazlina & Ismail, 2018). The rising cost of land makes it difficult for applicants to afford suitable replacement land, potentially leading to a decline in the number of successful MRL replacements

## **Financial Implications Deter Land Replacement**

The study's finding that the financial implications of replacement features make them less attractive to applicants is indicative of a broader issue in MRL management. The high cost of replacement land, combined with the financial burden of compensation payments, can lead applicants to seek alternative, less costly options. This trend poses a threat to the preservation of MRL, as it may result in a reduction in the https://doi.org/10.24191/bej.v22i1.944 ©Authors, 2025

number of successful replacements, ultimately leading to the decline of MRL (Khalid et al., 2020). The financial deterrents identified in the study suggest that without intervention, the sustainability of MRL as a cultural and historical asset may be at risk.

### **Policy and Guideline Challenges**

The application of the Selangor Land and Mines Director's Circulars No. 7/2001 and No. 3/2015, which govern the cancellation and replacement of MRL, represents a regulatory challenge in MRL management. While these policies are designed to protect and manage MRL effectively, their implementation can be cumbersome for applicants, particularly when financial resources are limited. The strict adherence required by these guidelines can place additional strain on applicants, making the replacement process even more challenging. This issue reflects broader concerns about the adequacy of current policies in addressing the financial and administrative hurdles associated with MRL replacement (Shamsuddin & Hamzah, 2017).

### Broader Implications for Malay Reserve Land (MRL) in Selangor

The issues identified in the study have broader implications of management and sustainability of MRL in Selangor and across Malaysia. The financial challenges faced by land applicants not only hinder the successful replacement of MRL but also threaten the long-term preservation of Malay cultural heritage. As the study suggests, the current financial and policy framework may not be sufficient to address these challenges, necessitating a re-evaluation of existing policies and the development of new strategies to support land applicants.

Therefore, the findings from the study on MRL in Selangor highlight significant financial and regulatory challenges that land applicants face in the process of land replacement. These challenges are reflective of broader issues in the management of MRL across Malaysia, where the preservation of cultural heritage is often at odds with economic realities. Addressing these challenges will require a concerted effort to revise existing policies and provide financial support to land applicants, ensuring the long-term sustainability of MRL.

# CONCLUSION

The MRL is the only property owned by the Malay community that aims to maintain the survival of the indigenous Malay race in Peninsular Malaysia. The enactment of the MRL law during the British colonial era was seen from two (2) different purposes, one (1) of which was to protect the interests of the land for the Malay community to continue into the next Malay generations. However, the issue and problem through the management and ownership of MRL is the attitude of owners and interested parties who see land as a commodity rather than as an asset. The Malay community's perception of land as a commodity is seen as the cause of the significant depletion and loss of the MRL. While from the perception of the stakeholders, that is in the context of those who manage and administer the MRL, it is seen more as weaknesses and errors in the handling and management of the MRL records that cause the MRL lands which originally cannot be transacted to non-Malays who have caused this to happen. Therefore, the emphasis on the replacement characteristics of the MRL should be taken into account and efforts should be made to fulfill the hopes and objectives of the Malay Rulers to ensure that the distribution area of the MRL reaches 50%.

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# CONFLICT OF INTEREST

All the authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funders.

# **AUTHORS' CONTRIBUTIONS**

All authors participated in conducting the research, drafting and revising the article, conceptualizing the central research idea, providing the conceptual framework model, reviewing and approving the article for submission.

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