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ASSESSMENT OF TEACHERS' PERCEPTION OF FACILITIES PROVISION IN TEACHERS' QUARTERS

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Abstract

The persistent issue of vacant teachers' quarters in Malaysia's East Coast Region has raised serious concerns regarding their management, maintenance, and overall liveability. This study seeks to evaluate the facilities of these quarters through a questionnaire survey, aiming to identify key factors influencing occupancy rates. A quantitative research approach is employed, incorporating descriptive analysis, frequency tables, the Relative Importance Index (RII), and Spearman's Rho correlation to analyse responses. The survey examines various aspects of the quarters' facilities, including housing conditions, available amenities, security features, accessibility, and overall maintenance quality. Findings indicate that poor maintenance, outdated infrastructure, inadequate security measures, and insufficient amenities are major contributors to low occupancy rates. The study also explores the correlation between facility conditions and teachers' willingness to reside in these quarters, highlighting the need for regular maintenance, enhanced security, and modernized living spaces to improve occupancy. By addressing these challenges, this study aims to support the development of a more sustainable and conducive housing environment for educators.

Keywords: Teachers Quarters, Issues, Existing Facilities, Satisfaction

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INTRODUCTION

Housing is a fundamental necessity, playing a crucial role in individual well-being and societal progress (National Housing Supply and Affordability Council, 2024). Government-sponsored teachers' quarters are designed to provide educators with comfortable living conditions, particularly in rural and underdeveloped areas, helping to alleviate financial burdens and support their teaching responsibilities (NRY Architects, 2000; Mohammad Izzat, 2023).

However, many of these quarters in Malaysia face significant challenges. Issues such as poor maintenance, unsuitable designs, economic constraints, and shifting demographics have contributed to their increasing abandonment (Malaysiakini, 2019). Recent reports indicate that over 39.1% of teachers' quarters remain unoccupied, primarily due to deteriorating conditions, lack of maintenance, and inadequate amenities that fail to meet educators' needs (Malay Mail, 2023).

To address these concerns, the Ministry of Education is implementing policy adjustments, infrastructure improvements, and better housing allocations. With vacancy rates continuing to rise in teachers' quarters across Malaysia's East Coast, it is essential to understand teachers' perspectives and the root causes of this issue. A comprehensive approach is necessary to develop sustainable solutions that ensure these housing facilities are effectively utilized.

LITERATURE REVIEW

The term "housing" is widely used in the environmental field. According to Frediani et al. (2019), housing is a fundamental human need that plays a crucial role in overall well-being, influencing various aspects of life, including health, education, and living standards.

George et al. (2023) highlight that shelter is a fundamental component of humanitarian aid, functioning to ensure safety from threats while facilitating essential family activities. Moreover, shelters play a crucial role in safeguarding displaced populations from environmental hazards, while also providing emotional support and comfort during crises (UNHCR, 2024).

Zihan Kan et al. (2022) highlight housing as a crucial social determinant of health, encompassing factors such as living conditions, affordability, and tenure—each of which significantly impacts mental health outcomes. Similarly, Marnane and Greenop (2023) describe adequate housing as providing security of tenure, essential services, and necessary materials and facilities to meet residents' needs. Their work particularly focuses on the practical aspects of housing in the context of informal settlements and housing inequality. Mee Kam Ng (2021) emphasizes that housing should consider both affordability and the quality of living conditions, as these factors are essential for fostering a healthy lifestyle. Similarly, Hurtubise, Babin, and Grimard (2009) define shelters as locations that

provide protection from danger or discomfort, serving as communal spaces for individuals without alternative housing options.

DEFINITION OF GOVERNMENT QUARTERS

Zulkanain, Jaafar, and Salim (2022) describe government quarters as housing provided by the government for its employees, ensuring they have appropriate living conditions that support their well-being and productivity. These residences are funded by government allocations specifically designated to create housing facilities for employees across various ministries, including teachers and military personnel. For example, Ibrahim Ngah (2012) highlights various government initiatives aimed at enhancing rural infrastructure and public services. Initiatives include the development of government facilities that symbolize the state's physical presence in underdeveloped areas. Such measures form part of a comprehensive strategy to promote rural development and ensure more equitable access to essential government services nationwide.

The origins of government quarters date back to the colonial era when they were first built to accommodate British administrators. After independence, these properties were repurposed for Malaysian civil servants, reflecting a legacy of colonial policy (Wan Saiful & Zalkapli, 2020). Moreover, government quarters contribute to broader social infrastructure by providing a stable environment that promotes community development among government employees (Zulkanain, Jaafar, & Salim, 2022).

By offering such housing, the government reduces the pressure on public servants to seek accommodations in the private market, thereby lowering their living expenses and enhancing their economic stability (Wan Saiful & Zalkapli, 2020). Despite their importance, many government quarters face challenges such as poor maintenance, underutilization, and a lack of nearby amenities, which can compromise their effectiveness as quality housing solutions (Zulkanain, Jaafar, & Salim, 2022).

DEFINITION OF CATEGORY OF QUARTERS

The following outlines the definitions of the categories of the quarters identified through secondary data collected from various stakeholders.

Figure 1: Category of Teacher's Quarters

Category of Quarters	Photo Description
Cluster/ Kelompok A neighborhood area designated for teachers' quarters will feature Teacher's Houses (RG) and Departmental Special Houses (RKJ), located both within and outside the school compound	

Category of Quarters Photo Description 2. Landed Teacher's House (RGB)/ Rumah Guru Bertanah (RGB) A type of accommodation that comes in the form of a house, which can be either a standalone house or a terrace house Jenis Rumah Guru (RG) di (multi-storey). RG SMKA Johor Bharu (Johor) Multi-storey Teacher's House (RGT) / Rumah Guru Bertingkat (RGT) A type of multi-storey housing for staff at educational institutions, including apartments, flats, and condominiums. Rumah Guru Bertingkat (RGT) di RG SMK Permas 2 (Johor) 4. Departmental Special House / Rumah Khas Jabatan (RKJ) A house constructed specifically by the Department for the residence of a key officer who must always be available at their workplace or a designated location within the district, such as the headmaster's or principal's residence, as Rumah Khas Jabatan (RKJ) di RKJ Aminuddin Baki, Kuala Lumpur well as the warden's house. 5. Educational Institution Quarters (KIP) / **Kuarters Institusi Pendidikan (KIP)** - Quarters were developed either by the Ministry of Education (KPM) or through a concession granted to ENCORP Systembilt Sdn Bhd for a period of 30 years, from 1998 to 2028, amounting to a total of 10,000 units across the involved states, which include Kedah, Penang, Jenis Kuarters Institut Pendidikan di KIP Temin di Jerantut, Pahang Perak, Perlis, Selangor, Johor, Pahang, Sabah, and Sarawak. Others (Gotong Royong Houses and Others) / Lain-Lain (Rumah Gotong Royong dan Lain-lain) A type of gotong royong house that is developed through joint funding or KPM, Jenis Kuarters Institut Pendidikan di commonly found in Sarawak.

IMPORTANCE OF TEACHER'S QUARTERS

Providing quality housing for teachers is essential for attracting and retaining educators, especially in rural and underserved areas. Safe and comfortable living conditions create a supportive atmosphere for teaching, enabling educators to

KIP Temin di Jerantut, Pahana

focus on their work and build stronger connections with their students (UNESCO, 2024). The Malaysia Education Blueprint (2013) underscores the importance of robust housing support to strengthen the teaching profession and optimize resource allocation. Addressing issues such as vacancies and maintenance in teachers' quarters can enhance these living spaces and improve the overall quality of life for educators (UNESCO, 2024). Accessible and affordable housing not only attracts teachers to underserved regions but also encourages experienced educators to remain in their positions by providing stability and fostering a sense of community (MDPI, 2024; Eacott, 2024). Moreover, living close to schools reduces commuting time and stress, allowing teachers to dedicate more energy to their classrooms (Education Week, 2023). Ultimately, well-managed teachers' housing plays a critical role in enhancing teacher welfare, strengthening education systems, and ensuring a stable, effective workforce. Governmentsponsored teachers' quarters are designed to alleviate financial pressures and support educators, particularly in rural and underserved areas. However, these housing units face significant challenges, including poor maintenance, outdated infrastructure, limited amenities, and insufficient security measures. Recent statistics indicate that over 36.6% of teachers' quarters remained unoccupied as of November 2023, highlighting the urgent need for improvements to fully realize their potential benefits.

DISTRIBUTION OF TEACHER QUARTERS IN MALAYSIA

According to the Ministry of Education (KPM) statistics from November 2023, there are 47,855 quarters, with 17,524 units—or 36.6%—currently unoccupied. The table below shows the distribution of vacant units for Pahang, Terengganu, and Kelantan as of that date. Notably, Pahang has the highest vacancy rate at 56.5%, corresponding to 3,475 units, followed by Terengganu at 51.7%, and Kelantan at 38.1%.

Table 10: Distribution of Total Vacant Units as of November 2023 for Pahang, Terengganu and Kelantan

States	No of Quarters	No of Occupie d Units	% Occupied units	Number of Vacant Unit	% Vacant Unit
Pahang	6,146	2,671	43.5	3,475	56.5
Terengganu	1,885	911	48.3	974	51.7
Kelantan	1,254	776	61.9	478	38.1

Source: Ministry of Education, KPM (2023)

Additionally, statistics from the Ministry of Education (KPM) detail the distribution of teacher's quarters by type across three states. The Educational Institution Quarters (KIP) category leads with 4,354 units, followed by Landed

Teacher's Houses (RGB) at 3,934 units, while Departmental Special Houses (RKJ) have the fewest, with just 70 units.

Table 2: Number of units based on the categories of teacher's quarters

States	No of Quarters	RGB	RGT	RKJ	KIP
Pahang	6,146	2,384	371	33	3,358
Terengganu	1,885	839	180	22	844
Kelantan	1,254	711	376	15	152

Source: Ministry of Education, KPM (2023)

Pahang tops the list with the most Educational Institution Quarters (KIP), totalling 3,358 units, while Kelantan has the fewest at just 152 units. Additionally, Pahang leads in Landed Teacher's Houses (RGB) with 2,384 units, compared to Kelantan's 711 units. In contrast, Kelantan takes the lead in Multistorey Teacher's Houses (RGT) with 376 units, whereas Terengganu has the lowest number at 180 units.

RESEARCH METHODOLOGY

This study employed a quantitative approach to data collection and analysis, gathering numerical data to deepen the understanding of the subject matter. It combined primary data from both offline and online questionnaires with secondary data obtained from literature reviews and content analysis of books, journals, seminar articles, and reports. The research methodology also incorporated both quantitative and theoretical analyses of secondary sources. A questionnaire survey was distributed among teachers residing in government quarters and staff support personnel to gain a comprehensive understanding of the factors influencing teachers' satisfaction with their living conditions, the efficiency of the application process, and challenges related to occupancy.

Focusing on teachers in the East Coast region of Malaysia—specifically Pahang, Kelantan, and Terengganu—and including both primary and secondary school educators, the sample size was determined to ensure reliability and representativeness. According to data from the Department of Statistics Malaysia (2022), there are 34,635 teachers in the region. With a 95% confidence level and a 5% margin of error, a minimum of 380 respondents was needed; however, 560 respondents were selected to allow for a more comprehensive analysis. Sampling was based on the number of teachers' quarters in each state, with proportional stratified random sampling used to ensure representation across different districts.

The allocation of respondents was proportional to the number of available teachers' quarters in each state. Pahang, with 6,146 quarters, was assigned 200 respondents. Kelantan, with 1,885 quarters, also received 200 respondents, while Terengganu, with 1,254 quarters, was allocated 100

respondents. This approach ensured that the data accurately reflected the living conditions, satisfaction levels, and key concerns of teachers residing in these quarters.

Table 3: Proposed target respondents for the study

No.	Respondents Adress	No of Teachers Quarters	Percentage (%)	No of Target Respondent	Percentage (%)
1.	Pahang	6,146	66.2	200	50
2.	Kelantan	1,885	20.3	100	25
3.	Terengganu	1,254	13.5	100	25
	Total	560	9,285	100	400

Source: Author's Calculation

Descriptive statistics were employed to summarize the key characteristics of the dataset, using measures such as percentages, means, the Relative Importance Index (RII), and standard deviations. This analysis helped reveal trends—such as the percentage of vacant teachers' quarters across various states and the satisfaction levels of respondents regarding existing facilities. The RII was used to rank the factors that influenced teachers' decisions to reside in these quarters based on their perceived importance. The ranking was determined by the weightage value, which reflected the total number of respondents for each scale value used in the study; a higher weightage value indicated a more significant issue. In addition, inferential statistical methods were applied to examine relationships, differences, and potential causal factors that affected the occupancy rates of teachers' quarters. Statistical tests, including frequency distributions and Spearman's Rho correlation, were conducted to provide deeper insights into the data.

ANALYSIS AND DISCUSSION

Table 4 presented the details of the respondents' profiles. Information regarding the respondents' backgrounds was crucial, as it provided context for their responses in the subsequent sections of the survey. A total of 560 individuals responded to the survey.

Table 4: Detailed background on respondent's profile

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No.	Items	Frequency	Percentage (%)		
Gender	Male	203	36.3		
Gender	Female	357	63.8		
Marital Status	Single	52	9.3		
Maritai Status	Married	508	90.7		
	Certificate	70	12.5		
Education	Diploma	34	6.1		
Level	Bachelor's Degree	422	75.4		
Level	Master's Degree	33	5.9		
	PhD or equivalent	1	0.2		
	Less than 25 years	1	0.2		
	25 – 29 years	26	4.6		
	30 - 34 years	69	12.1		
Age	35 – 39 years	102	18.2		
_	40 – 44 years	138	24.6		
	45 – 49 years	98	17.5		
	More than 50 years	127	22.7		
	RM 2,500 and below	32	5.7		
Household	RM 2,501 – RM 5,000	140	25.		
Monthly	RM5,001 - RM8,000	212	37.9		
Income	RM 8,001 – RM 11,000	96	17.1		
	RM 11,001 – RM 14,000	56	10.0		
	Less than 1 year	10	1.8		
	2-5 years	82	14.6		
Duration of	6-10 years	92	16.4		
working as	11 – 15 years	129	23.0		
Teacher/	16 – 20 years	59	15.9		
Support Staff	21 – 25 years	74	13.2		
	26 – 30 years	75	13.4		
	More than 30 years	9	1.6		
Residents	Yes	217	38.8		
of Teachers	No	343	61.3		
Quarters	Total	560	100		

Source: Author's Calculation

Referring to Table 4, 63.8% of respondents were female, and a significant majority (90.7%) were married. Additionally, 65.0% of the participants were over 40 years old, while only 4.8% were under 30. In terms of income, 37.9% of respondents earned a middle-income salary between RM5,001 and RM8,000 per month, compared to 25.0% who earned between RM2,501 and RM5,000. Furthermore, 75.4% of respondents held a bachelor's degree, and the largest group (23.0%) had between 11 and 15 years of work experience. Out of 560 respondents, 343 (61.3%) reported that they did not reside in these accommodations.

Based on the feedback provided by the respondents, a Relative Importance Index (RII) analysis was conducted. This analysis was calculated using the weightage value assigned to each response and the total number of respondents for each scale value. The resulting ranking indicated that a higher weightage value corresponded to a more significant issue.

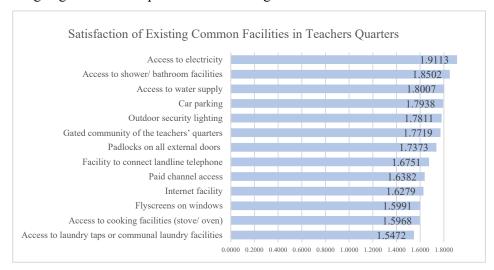


Figure 2: Results of the RII Calculation for Respondents' Satisfaction Levels with the Facilities Provided in Teachers' Quarters.

Figure 1 presented the Relative Importance Index (RII) values for respondents' satisfaction with various facilities in teachers' quarters. A higher RII value indicated a greater level of satisfaction with a facility. Access to electricity ranked the highest, with an RII value of 1.9113, suggesting that respondents were most satisfied with this facility and that the electricity supply was relatively stable and met their needs. Facilities such as shower/bathroom access (1.8502), water supply (1.8007), and car parking (1.7938) also ranked high, reflecting a generally positive perception of these essential services.

Security-related facilities, including outdoor security lighting (1.7811) and a gated community (1.7719), received a fair level of satisfaction, although there was still room for improvement. Facilities like padlocks on all external doors (1.7373) and the ability to connect a landline telephone (1.6751) showed moderate satisfaction, suggesting that while these amenities were functional, they might not have been as essential or effective as others.

Access to laundry taps/communal laundry facilities had the lowest RII value at 1.5472, indicating the least satisfaction among respondents. This low rating suggested that laundry facilities were inadequate, inconvenient, or poorly maintained. Similarly, other facilities with lower satisfaction scores included access to cooking facilities (1.5968), flyscreens on windows (1.5991), internet access (1.6279), and paid channel access (1.6382), highlighting potential gaps in convenience and connectivity-related services.

Table 5: Spearman Rho Analysis Between Satisfaction Levels with the Provided Facilities and Respondents' Background

No	Existing Facilities	Respondents Age		Respondents Household Income	
		cc	p-value	cc	p-value
1.	Gated Community of the Teachers' Quarters	-0.164*	0.015	-0.217**	0.001
2.	Car Parking	-0.136*	0.046	-0.136*	-0.152*
3.	Padlocks on all external doors	-0.136*	0.046	-0.015	0.827
4.	Outdoor security lighting	-0.123	0.072	-0.124	0.069
5.	Flyscreens on Windows	-0.023	0.740	-0.013	0.852
6.	Facility to connect landline telephone	-0.091	0.180	0.035	0.612
7.	Access to electricity	-0.108	0.113	0.058	0.395
8.	Access to water supply	-0.086	0.206	0.001	0.986
9.	Access to shower/ bathroom facilities	-0.608	0.321	-0.006	0.933
10.	Access to laundry taps or communal laundry facilities	-0.108	0.112	-0.065	0.338
11.	Access to cooking facilities (stove/ oven)	-0.134*	0.049	-0.096	0.311
12.	Paid channel access	-0.039	0.569	0.084	0.217
13.	Internet Facility	0.020	0.772	0.151	0.026

Note: * and ** Correlation is significant at the 0.01 level (2-tailed). cc= correlation coefficient.

In terms of respondents' age, significant negative correlations were found with satisfaction regarding the gated community of the teachers' quarters (cc = -0.164, p = 0.015), car parking (cc = -0.136, p = 0.046), padlocks on all external doors (cc = -0.136, p = 0.046), and access to cooking facilities (cc = -0.134, p = 0.049). These findings indicate that older respondents tended to be less satisfied with these specific facilities. Regarding household income, significant negative correlations were observed with satisfaction toward the gated community (cc = -0.217, p = 0.001) and car parking (cc = -0.136, p = 0.046), with an additional significant correlation at the 0.01 level for car parking (p = 0.152). This suggests that respondents with higher household incomes were less satisfied with these facilities. However, no significant correlations were found between household income and satisfaction with other facilities. Overall, these results highlight how demographic factors—particularly age and household income—can influence satisfaction with specific aspects of the provided facilities, especially those related to security and parking.

CONCLUSION

Based on the RII scores and the Spearman's Rho analysis, key insights emerged regarding the satisfaction levels of teachers residing in quarters. Essential utilities such as electricity, water supply, and bathroom facilities received high satisfaction ratings, whereas modern convenience and security-related facilities

were rated moderately to lower. Notably, laundry facilities, cooking amenities, and internet access received the lowest scores, indicating potential gaps in meeting contemporary housing expectations.

Furthermore, the analysis revealed that demographic factors—particularly age and household income—significantly influenced satisfaction with certain facilities. Older respondents and those with higher household incomes were less satisfied with aspects of security infrastructure, such as the gated community and padlocks on external doors, as well as with parking facilities. This suggests that as teachers' needs and expectations evolve, the current facilities may no longer adequately address their concerns regarding security, convenience, and accessibility.

Overall, these findings underscore the need for targeted upgrades to enhance the quality, safety, and modernity of teachers' quarters. Addressing the identified deficiencies in laundry services, cooking facilities, and internet access—along with improvements in security infrastructure—could help increase overall satisfaction and potentially boost occupancy rates in these quarters.

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REFERENCES

- Eacott, S. (2024). The systemic implications of housing affordability for the teacher shortage: the case of New South Wales, Australia. *Australian Educational Researcher*, 51(2), 733–755. https://doi.org/10.1007/s13384-023-00621-z
- Education Week. (2023). 'Lesson planning in the laundry room': What housing for teachers looks like. Retrieved from https://www.edweek.org/leadership/lesson-planning-in-the-laundry-room-what-housing-for-teachers-looks-like/2023/12
- Frediani, A. A., Cociña, C., & Roche, J. M. (2023). Improving Housing in Informal Settlements: Assessing the Impacts in Human Development. Habitat for Humanity International & International Institute for Environment and Development (IIED). Retrieved from https://www.habitat.org/sites/default/files/documents/Home-Equals-Launch-Report Full.pdf
- George, J. W., Guthrie, P., & Orr, J. J. (2023). Redefining shelter: Humanitarian sheltering. *Disasters*, 47(2), 482–498. https://doi.org/10.1111/disa.12555
- Housing Supply, N., & Council, A. (2024). *State of the Housing System 2024*. https://nhsac.gov.au/sites/nhsac.gov.au/files/2024-05/state-of-the-housing-system-2024.pdf
- Hurtubise, R., Babin, P.-O., & Grimard, C. (2009). Shelters for the homeless: Learning from research. In J. D. Hulchanski, P. Campsie, S. Chau, S. Hwang, & E. Paradis (Eds.), *Finding Home: Policy Options for Addressing Homelessness in Canada* (Chapter 1.2). Cities Centre, University of Toronto.

- Izzat Bin Zulkanain, M. (2023). *Adaptive reuse practice of teachers' quarters in Malaysia* [Unpublished master's thesis]. Universiti Sains Malaysia. Retrieved from http://eprints.usm.my/60265/1/Pages%20from%20MOHAMAD%20IZZAT%20BIN%20ZULKANAIN%20-%20TESIS.pdf
- Kan, Z., Kwan, M. P., Ng, M. K., & Tieben, H. (2022). The impacts of housing characteristics and built-environment features on mental health. *International Journal of Environmental Research and Public Health*, 19(9), 5143. https://doi.org/10.3390/ijerph19095143
- MalayMail. (2023). Deputy minister says over 18,000 units of teachers' quarters unoccupied across Malaysia. Retrieved from https://www.malaymail.com/news/malaysia/2023/03/15/deputy-minister-says-over-18000-units-of-teachers-quarters-unoccupied-across-malaysia/59702
- Malaysiakini. (2019). Abandoned teachers' quarters to be refurbished, leased out. Retrieved from https://www.malaysiakini.com/news/489393
- Marnane, K., & Greenop, K. (2023). Housing adequacy in an informal built environment: Case studies from Ahmedabad. *Journal of Housing and the Built Environment*, 38(3), 2059–2082. https://doi.org/10.1007/s10901-023-10029-x
- Medlin, L., Eacott, S., Gilbert, C., MacDonald, K., & Pettit, C. J. (2024). Housing the Teacher Workforce: A Scoping Review. *Education Sciences*, 14(5), 537. https://doi.org/10.3390/educsci14050537
- Ministry of Education. (2013). *Malaysia Education Blueprint*, 2013-2025. Ministry of Education. https://www.pmo.gov.my/wp-content/uploads/2019/07/Malaysia-Education-Blueprint-2013-2025.pdf
- Ngah, I. (2012). Rural transformations development: A review on Malaysia's transformation program. In *Proceedings of the International Conference on Social Sciences & Humanities UKM 2012 (ICOSH-UKM 2012)*. Universiti Teknologi Malaysia. https://www.researchgate.net/publication/233922563
- Ng, M. K., Yeung, T. C., Kwan, M. P., Tieben, H., Lau, T. Y. T., Zhu, J., & Xu, Y. (2021). Place qualities, sense of place and subjective well-being: A study of two typical urban neighbourhoods in Hong Kong. *Cities & Health*, 6(6), 1122–1133. https://doi.org/10.1080/23748834.2021.1993038
- NRY Architects. (2024). *Teachers' quarters*. Retrieved from https://nry.com.my/portfolio/teachers-quarters/
- UNESCO. (2024). *Global Report on Teachers Addressing teacher shortages and transforming the profession*. https://doi.org/10.18356/9789231006555
- UNHCR. (2024). Strategic Considerations in Shelter Responses. Retrieved from https://emergency.unhcr.org/emergency-assistance/shelter-camp-and-settlement/shelter-and-housing/strategic-considerations-shelter-responses
- Wan Saiful, W. J., & Zalkapli, A. (2020). From council flats to government quarters: GE-14 in urban Malay constituencies. In F. E. Hutchinson & H. A. Lee (Eds.), *The defeat of Barisan Nasional: Missed signs or late surge?* Cambridge University Press. https://www.cambridge.org/core/books/abs/defeat-of-barisan-nasional/from-council-flats-to-government-quarters-ge14-in-urban-malay-constituencies/2456E931816DE6F64483935C4D775D90
- Zulkanain, M. I., Jaafar, M., & Salim, N. A. A. (2022). Identification of concept, factors affecting and the need for adaptive reuse of government teachers' quarters in Malaysia. *International Journal of Real Estate Studies*, 16(1), 112–122. https://doi.org/10.11113/intrest.v16n1.208

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