



PLANNING MALAYSIA:

Journal of the Malaysian Institute of Planners

VOLUME 23 ISSUE 2 (2025), Page 536 – 551

A REVIEW OF LAND ACQUISITION PROCEDURES AND COMPENSATION PRACTICES FOR THE PAN BORNEO HIGHWAY PROJECT IN SARAWAK, MALAYSIA

**Ahmad Shazrin Mohamed Azmi¹, Vanissa Saur Petrus Adan²
& Nur Lesya Firsya Johaimi Ling³**

*^{1,2,3}Centre of Studies for Estate Management and Building Surveying,
College of Built Environment,
UNIVERSITI TEKNOLOGI MARA*

Abstract

The Pan Borneo Highway is one of the mega projects in Malaysia aimed at improving the infrastructure and enhancing connectivity in Sabah and Sarawak. With over 2000 kilometres in span, the Pan Borneo Highway project required the government to conduct massive land acquisitions and pay a huge compensation amount. Although receiving the compensation, many landowners felt it was insufficient and remained unsatisfied. Some landowners had expressed their dissatisfaction in the newspapers, which gave a negative impression of the project. This paper seeks to understand the land acquisition procedures and fair compensation determination practice in Sarawak. The qualitative research method examines the legislative resources to determine the land acquisition procedures and compensation. The study also interviewed personnel from the Land and Survey Department, Sarawak, to confirm the practice. The study discovered that the legislation is in place and clear to standardize the practice. This legislation clearly sets out the principles for determining fair compensation. The land acquisition procedures in Sarawak differentiate between land with a title deed and land under the Native Customary Rights (NCR) gazette. The paper concluded with suggestions to explore compensation principles for communal rights.

Keywords: Land Acquisition, Procedures, Compensation, Pan Borneo Highway, Sarawak

¹ Corresponding author. Email: ahmadshazrin@uitm.edu.my

INTRODUCTION

The Pan Borneo Highway connects major cities on the island of Borneo, which concentrates on the coastline of the states of Sarawak and Sabah in Malaysia, as well as Brunei and Kalimantan regions in Indonesia. Launched in 2015 under the 11th Malaysia Plan, the 2,239 kilometres Pan Borneo Highway is not entirely a new highway network system. Instead, it joins the existing road networks by upgrading, widening, realigning, and adding new stretches. It furnishes a previously Trans-Borneo Highway connection constructed in the 1960s and 1970s. Intentionally, the highway serves as a medium to balance up the regional physical and economic development of Borneo through better road connections between places and with no tolls (Bernama, 2023a; Che Rose & Imau, 2020).

While it brings positive impacts, but it was also unavoidable that the government needed to acquire lands from the people, which in quite a few cases had urged the people to relocate their activities on the land. All the reclaimed lands were compensated by the Federal Government based on the market value of the affected properties and the government's financial ability (I. Abdullah, 2022; Utusan Borneo Online, 2016). According to the Deputy Works Minister in 2016, the compensation cost to acquire lands for the construction of the whole Pan Borneo Highway was totalling RM2.8 billion, resulted from the estimation of RM2 billion for Sabah and RM800 million for Sarawak (Chen, 2016). However, at the end of the project, the costs for land acquisition in Sarawak escalated to RM900 million for various reasons (Lorna, 2023).

The study was motivated by the affected people who claimed they were not receiving a considerable amount of compensation compared to the suffering and losses they had experienced (Zacchaeus, 2017). This study chose the Pan Borneo Highway in Sarawak because, at the time of the study, many highway sections in Sabah were still ongoing and behind the targeted completion schedule. The study aims to establish an understanding of the land acquisition procedures and fair compensation based on the practices in Sarawak. It was guided by the objectives of exploring the land acquisition procedures for the Pan Borneo Highway in Sarawak, investigating the principles to determine adequate compensation based on the practices of Sarawak, and finally corroborating between the land acquisition procedures and practice with the responsible authority to confirm the practice in Sarawak. This paper intended to provide the public with insights into the general procedures for land acquisition in Sarawak and fill up the knowledge gap because of the abundance of previous literature were focusing on the land acquisition practice in Peninsular Malaysia.

LITERATURE REVIEW

Pan Borneo Highway

The Pan Borneo Highway is a mega project in the Eastern Malaysia territories to connect the states of Sarawak and Sabah from Sematan to Tawau. It is the effort

of the Federal Government under the Economic Transformation Programme (ETP) to transform Malaysia into a high-income country like other developed countries (Ikau, Rashid, Muhammad, & Wahi, 2019). The existence of this highway would complement the government's initiatives to balance development in both Western and Eastern Malaysian regions. Facilitating better transportation of goods and services to wider areas, the highway would spur economic growth and support businesses to expand into wider markets because travelling is faster, cheaper, and more comfortable.

The construction of the Pan Borneo Highway is divided into three (3) phases and many work packages in both the states of Sabah and Sarawak. It was designed as a four-lane dual-carriageway and does not impose any toll on its users. As of the end of 2023, Phase 1 of the highway in Sarawak has almost completed and already opened for traffic in staggered (Wong, 2023). This was contrary to the situation in Sabah, which was quite slow and had caught the attention of the Federal Government (Bernama, 2023b). The Minister of the Ministry of Works declared that the work progress in February 2024 had reached 98.91% in Sarawak. Meanwhile, in Sabah, the progress for Phase 1A has reached 87%, and Phase 1B is still in the tendering process (Bernama, 2024).

The project faced many challenges, including the topography, people, politics, movement control orders during the Covid-19 pandemic, and shortage of labours (Bernama, 2016, 2021; Wong, 2023). However, the most significant challenge was when the Federal Government changed the project implementation concept from the Project Delivery Partner (PDP) concept into the conventional project approach in 2019 (Povera & Yunus, 2020). Initially, the Government of Malaysia and the State Government of Sarawak established the Lebuhraya Borneo Utara (LBU) as a private entity to function as a special purpose vehicle (Akob, Zaidee, Hipni, & Koka, 2019). The LBU undertook the project as a Project Delivery Partner (PDP) for the Government of Malaysia and the State Government of Sarawak. The government had officially ended the PDP contract, which took effect on 20th February 2020 and passed the responsibility to the state Public Works Department as the implementing agency. This caused a serious delay to the project because all the involved parties were unclear on the implementation directions and needed to revise their works (Bernama, 2023b; Lorna, 2023).

Land Acquisition

Sarawak Land Code [Cap. 81] 1958 Edition is the promulgated land statute for Sarawak and covers all land administration aspects, including the land acquisition provisions. It was enacted to consolidate all the previously enacted land-related laws in Sarawak (Adam, 1998). By consolidating the previous land laws and some amendments to date, the 1958 Land Code has become the most comprehensive land legislation in Sarawak and has been sustained until now. It

also becomes a strategic instrument to modernise its land system and facilitate Sarawak's development. On a different note, the Sarawak Land Code follows the Torrens system principles, which place the register at its core and grant the registered proprietor of the land with indefeasible rights once the interest is registered in the register and the document of title is issued (Buang, 2015; Osman & Kueh, 2010; Toh, Tan, Tan, Ujang, & Thoo, 2019). So, land registration is vital in every aspect of land administration.

Land acquisition is a process used by the government to acquire any land for the public, including developing infrastructure, utilities, and other necessary projects for the country. The basic principle of land acquisition is based on the reason that the interests of the public or country can override any interest or rights of a person over the ownership of his property (Alias, 2014). Land acquisition laws are also needed to help the government deal with hurdles such as first, the unwillingness of the owner to surrender the property regardless of the offered price and second, the situation where the land is subject to a certain category of land use that the authorities feel contrary to their plans (Buang, 2015, 2021). Land acquisition must be coordinated under the law because Article 17 of the Universal Declaration of Human Rights (UDHR) 1948 recognises property rights as part of human rights and prohibits property from being deprived arbitrarily (United Nations, 1948).

Sarawak includes the land acquisition in its Sarawak Land Code. It is unlike the Land Acquisition Act 1960 and Land Acquisition Ordinance (Sabah Cap. 69) for Peninsular Malaysia and the state of Sabah, which legislated as a piece of dedicated land acquisition statutes. The Sarawak Land Code provides the land acquisition provisions in Part IV, specifically in Section 45 until 83. Nevertheless, it does not fail to address the local concern about acquiring land under the status of Native Customary Rights, which makes it different from the other two land acquisition statutes.

According to the Sarawak Land Code, there are five classifications of land in Sarawak, namely the Mixed Zone Land, Native Area Land, Native Customary Land, Reserved Land, and Interior Area Land that the Minister can declare by notification in the Gazette. According to Sections 113 and 118 of the Land Code, every grant, lease, instrument, or dealings must be duly registered in the Register (Section 112), and the government will issue a document of title to the proprietor (Section 117). In Section 123, however, the issuance of the document of title may not necessarily be made for some reasonable causes. Still, the intended usage or interest can be effective through the Gazette. The state government will make declarations in the Gazette to reserve the land or to specify the communal rights and interest in the land for the usage of any intended community that deserves under the native customary rights (NCR) (refer to Sections 4, 5 and 6 of the Sarawak Land Code). Land acquisition procedures for

lands with the document of title and NCR lands under the Gazette are different, as depicted in Figure and Figure.

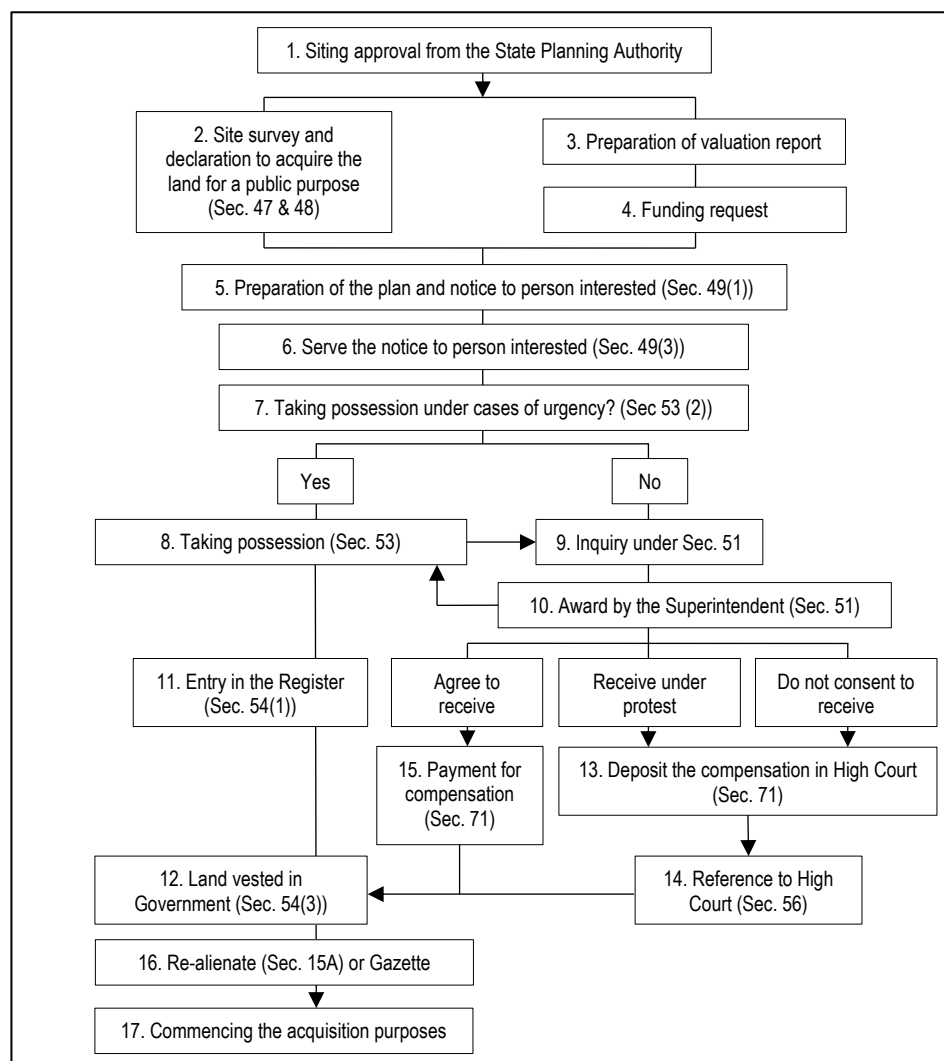


Figure 1: Process flow diagram for the compulsory acquisition of land with registered titles in Sarawak

(Source: Adapted from the Sarawak Land Code and Department of Land and Survey, Sarawak)

In brief, any intention for land acquisition by the state government or its agencies needs to get siting approval from the Sarawak State Planning Authority. After obtaining the siting approval, a declaration through the Gazette will be issued to inform the public about the intentions of land acquisition and

commencement of land surveying works. Once the land survey has confirmed the lands that will be needed, the Superintendent will notify the proprietors and persons interested through a notice and summon them for the inquiry session to determine the compensation claims. All acquired land will be vested to the government after entering the land register, and the proprietor and person interested will receive the compensation. Afterward, the government can alienate the land to the acquiring agencies or gazette for acquisition earlier.

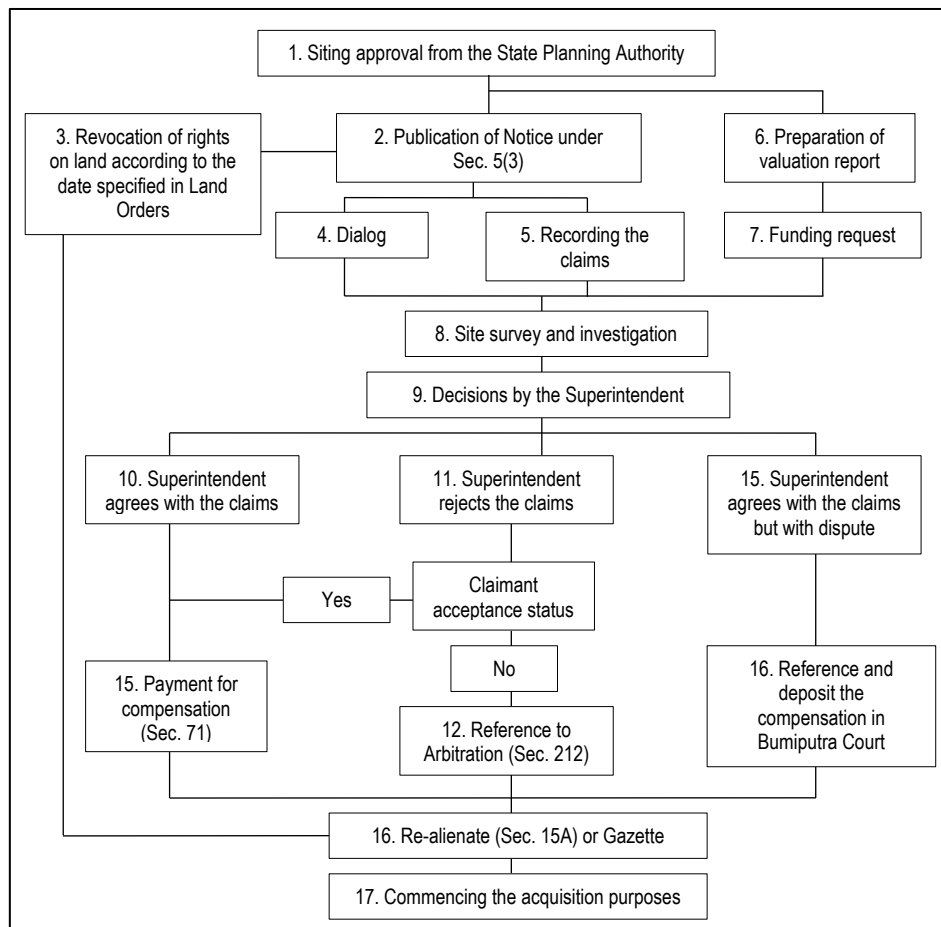


Figure 2: Process flow diagram for the compulsory acquisition of land gazetted under the native customary rights (NCR) (without registered titles) in Sarawak
 (Source: Adapted from the Sarawak Land Code and Department of Land and Survey, Sarawak)

There is a difference in the procedure for taking land that is gazetted under the NCR. The process begins with obtaining siting approval from the State Planning Authority. Then, the government will publish a cancellation notice for

native customary rights on the land along with the effective date using the clause under Section 5(3). It subsequently reverts the lands held under such rights to the State and can proceed with land surveying and investigation works. At this stage, all affected persons must take part in a dialogue and inquiry session to establish claims records. The government requires all affected persons to submit their claims in the prescribed form within the stipulated time (Sections 5(3)(b) and 5(3)(c) of the Sarawak Land Code) and record them. The Superintendent needs to decide on all compensation claims. If the Superintendent agrees to the claim, the person concerned will receive compensation accordingly. Suppose the Superintendent does not agree to the claim or agrees under dispute, the person concerned can take the matter to Arbitration as outlined in Section 5(4) and Section 212 or to the Bumiputra Court for a decision. Afterward, the government can alienate the land or gazette it to the acquiring agency to start the project.

The Sarawak Land Code has specified the required land acquisition procedures as guidance to standardise the process throughout the state. The Land and Survey Department may produce its internal process flow to improve efficiency, save cost, and reduce time. If facing any dispute, the Superintendent or any person interested may bring the matter concerned to the court to get elaborations on the procedures, clarify the issues, and get a decision.

Overall, all land acquisition statutes in Malaysia have the forcing power to acquire any land from the proprietor compulsorily. Although not exactly like the buying and selling concept, the land proprietor needs to surrender his proprietorship and be compensated fairly regardless of his willingness (Alias, 2014). The objectives of these statutes are to standardise the land acquisition procedures in the states and to provide a speedy mechanism for acquiring lands compulsorily while maintaining the balance between government needs and depicting justice to the deprived land owners (Buang, 2015). These three statutes carry the same legislative spirit, which protects the individual's rights on property in the land acquisition process. It is consistent with Article 13 of the Federal Constitution of Malaysia, which guarantees two things: first, to hinder the deprivation of an individual's rights to the property saved under law, and second, the need for adequate compensation in compulsory acquisition or use of property.

Compensation

In line with Article 13 of the Federal Constitution, all legislation relating to land acquisition in Malaysia would constitute the provisions for compensation payment. The legislation helps to provide standard elements for the compensation process and considerations to ensure fairness and adequacy to the proprietors and persons interested. The compensation must include the value of the land taken as well as other losses suffered as a consequence of the acquisition because, fundamentally, the purpose of compensation is to achieve the principle of equivalence (Usilappan, 1999). This means placing the affected person in the

same position, no worse nor better than before the acquisition (Alias, 2014; Usilappan, 1999). It can be a challenging process to determine adequate compensation because it involves many factors to consider and demands from the landowners who want higher compensation for their losses. Many criteria needed to be considered in determining the compensation, including the level of nonconformity to the laws that denied the owners the full compensation amount.

Referring to the Sarawak Land Code, the authorities will determine the compensation for the acquired lands based on the market value. Although the land acquisition statutes in the country do not explicitly provide the meaning of market value apart from providing principles to derive compensation amounts based on market value, various references and sources, including court cases, have interpreted the market value. One of them, as taken from the Malaysian Valuation Standards, Sixth Edition, published by the Board of Valuers, Appraisers, Estate Agents & Property Managers in 2019:

"The estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion."

(Board of Valuers, Appraisers, Estate Agents & Property
Managers, 2019).

Overall, the determination of market value must comprise the willing seller, willing buyer, and reasonable price, and it must allow for a bargaining process within a considerable time (Alias, 2014). Valuation by professional valuers is required to conduct the process according to what has been specified in the law. Although there is no hard and fast rule on the method to assess the market value for land acquisition purposes, the comparison method has become the most common valuation method because the courts in the country are inclined to use the sale evidence from the same land or similar land as the safest guide (A. H. Abdullah, 1999; Buang, 2021). However, other valuation methods such as cost method, investment method, residual method, and profit method are also being used. The valuation procedure for others usually takes the inspection date as the valuation date. Still, for the land acquisition, the authorities determine the valuation date at the notice publication date. In Sarawak, the market value is taken at the date of the publication of the notification under Section 47. If no publication has been made, the market value is taken at the date of the posting of the declaration made under Section 48.

The market value is determined by considering the matters that are outlined in Sections 60 and 61 of the Sarawak Land Code. Among other things

that should be taken into consideration are the increase in value of the other land of the person interested likely to accrue from the acquired land, the damage because of land severance or injuriously affecting the other land and property, disturbance such as moving out from the place or disruption to the owner's life or business, and any improvements made to land with the Superintendent consent.

Conversely, some matters such as the degree of urgency, personal attachment to the land, damages caused by a private person, any increase in land value that is likely to accrue result from the use in the future after the acquisition, and any speculative value are among the things that should not be considered and need to be disregarded in determining the compensation. Also included are any improvements made to the land after the declaration under Section 48 and without prior consent from the Superintendent. Apart from what has been specified in Sections 60 and 61, there are some other things that should be observed as well. According to Buang (2021), the considerations include the express and implied conditions on the land, the incapability of reaching mathematical accuracy on the compensation, sale transaction evidence from the locality, potential development value, post-acquisition damage, reinstatement value, principle of equivalence, method of valuation, business compensation, reasonable expenses, illegal or unlawful acts and payment of interest. These considerations would need scrutiny and deliberation to ensure all the details are validated and fair to the landowners.

It is also the reason for the Superintendent to conduct the inquiry session with the landowners and persons interested in inquiring into any objections to the land measurement, the value of the land, and any interests of the person claiming the compensation (Section 51). The inquiry session would be an appropriate platform to discuss and justify the compensation with the landowners.

RESEARCH METHODOLOGY

This study aims to give an overview of the land acquisition process in Sarawak and compensation determination. For that, the qualitative method is suitable for this study because it explored the real-life system through multiple sources of information collection and analysis to present a case description and case themes (Hyett, Kenny, & Dickson-Swift, 2014). Direct involvement between the researchers and informants would get more accurate findings for the study.

This study, which took the Pan Borneo Highway project as the case, found that people expressed dissatisfaction with the compensation package offered by the government. Motivated by the expression of dissatisfied people, this study had set three objectives. It starts with exploring the land acquisition procedures in Sarawak. This study then set its second objective to investigate the adopted compensation principles and finally to corroborate the land acquisition procedures and practices with the responsible authority in Sarawak.

To achieve the objectives, the researchers did a document search on the land acquisition practice. They conducted semi-structured interviews with the

valuer from Sarikei Division of the Land and Survey Department, Sarawak. The selection of the informant was done through contacts, but with background checking and experience verification. To ensure the information was precisely gathered, the researchers prepared the questions for the interview in three parts. First to understand the background of the informant's organization. It was purposely done to understand the roles played by the Land and Survey Department of Sarawak. The second part discussed land acquisition procedures. This part was crucial because land acquisition involved many steps and would easily confuse the public. The third part was to rationalise the consideration of the compensation based on what has been outlined in the Sarawak Land Code. The interview session was conducted in the office, and audio was recorded. The recorded audio was then transcribed into text in preparation for the analysis.

The qualitative analysis for this study was done using document analysis and thematic analysis. Document analysis was scoped only to examine written documents, which in this study include statutes, journals, and other written references. It helped the study explore the land acquisition procedures together with the ruling laws. Meanwhile, thematic analysis was used to group the information in textual data as themes. Thematic analysis was suitable for this study because it helped to find, evaluate, and interpret patterns of meaning from the qualitative information obtained from the interview (Vaismoradi, Turunen, & Bondas, 2013). It greatly helped the study improve the understanding of the land acquisition practice in Sarawak.

FINDINGS AND DISCUSSION

The focus of the interviews with the Land and Survey Department was mainly on the land acquisition procedures and compensation determination. Using thematic analysis, the study analysed the findings from the interview and grouped the information into three main findings as follows.

Administrative Matters

The Land and Survey Department handles matters related to land acquisition in Sarawak. It involves two levels of process, which are at the division of the State and the Headquarters in Kuching. At the state's division level, the Land and Survey Department needs to conduct the land acquisition procedures, including gathering information about the acquired land and similar land comparable as evidence. It needs to prepare a compensation proposal and recommendations before being brought up to the Headquarters to finalise the decision.

At the Headquarters, a committee led by the Assistant Director of Valuation would study and do an inspection to verify the submitted compensation proposal. The Valuation and Property Services Department (JPPH) is not involved unless assessing the Federal Lands in Sarawak.

An inquiry session will be conducted to offer the compensation amount to the landowners and discuss any arising issues. It is consistent with Section 51 of the Sarawak Land Code, which needs to be conducted as specified by the Land Superintendent. There will be no earlier discussion with the landowners about determining the compensation. Private valuers can be involved in the inquiry session to represent the landowners. If there is an objection from the landowner, the case will be taken to court following the provisions in Section 56 of the Sarawak Land Code. Therefore, the landowner may appoint a lawyer and private valuer. According to the informant, only 3-5% of land acquisition cases were referred to the court mostly because the acquisition affected landowners' investments and businesses on the land.

The informant had informed that the organisation charters for the Land and Survey Department are to complete any land acquisition process within six months if it does not involve objections and references to the court. However, in the case of the Pan Borneo Highway, they were unable to finish the land acquisition cases within that period because many factors affected them when involved with such a big-scale project.

Principles for Compensation

The determination of the compensation for land acquisition in Sarawak follows the principles set in Sections 60 and 61 of the Sarawak Land Code. The authority understands that the compensation must be adequate and is determined based on the market value of the land at the time of acquisition based on the date notified in the Gazette. It considers the possible market price if the land had been sold on the open market to a willing buyer and a willing seller.

There are three types of land use, namely agriculture, residential and industrial. Agricultural land refers to land with a size of below 100 hectares. Meanwhile, the estate land is 100 hectares and above. Besides that, the express and implied conditions of the land are also imperative. The same has been mentioned by Buang (2021) and cannot be ignored when determining compensation. Those available restrictions on the land will significantly affect the compensation amount in land acquisition because the authority must comply with the stated principles. This matter is hard for the public to understand and has become the reason for them to be dissatisfied with the compensation amount offered by the government.

The informant informed that 98% of the land acquisition for constructing the Pan Borneo Highway involved agricultural land. It was a directive from the government and the Public Works Department to avoid acquiring lands with buildings or built-up structures. It consequently minimises the hardship of the people from relocating their living and prevents the government from paying higher compensation amounts.

According to the informant, the authority typically relies on the comparison method as the preferred valuation method to assess the market value of the land. The evidence taken for comparison is from recent transactions of nearby properties with similar characteristics. This follows the court's preference for comparison as the primary valuation technique. The cost method will be applied to value the buildings and built-up structures, considering the materials, age, and depreciation. Under certain circumstances, other valuation methods need to be applied when the comparison and cost methods are unsuitable for assessing the property. It has also been informed that the principles of betterment, severance, and injurious affection are rarely applied in Sarawak. It shows the practice in Sarawak and Peninsular Malaysia is slightly different.

Adequacy of compensation

The principle of determining the adequacy of the compensation is mainly based on the market value. However, it is always being questioned by dissatisfied landowners. The questions include the compensation amount for the whole acquired land, compensation for land with multiple ownerships that involved many people interested, the compensation for different rights on the land, and compensation for other losses.

The informant mentioned that the inquiry session, as specified in Section 51 of the Sarawak Land Code, is the platform for the authority to communicate with the landowners to seek adequate compensation. In brief, if the land has a document of title, the authority will examine the shares of ownership and rights attached to it. So, every landowner and person interested in the land will receive their compensation in fractions. Other than that, the authority also differentiates the compensation components for land, trees, and structures. There will be different valuation assessments for these three components before merging them as one value.

Meanwhile, the compensation for lands without the document of title under the Native Customary Rights (NCR) is determined either using the valuation method or granting the ex gratia. When the authority compensated the losses using the valuation exercise, they gathered the comparison evidence by capturing the transaction price from nearby lands with a document of title.

Suppose the government intends to give ex gratia. It must be decided before the acquisition because it is not a regular practice for the government to give ex gratia since the people who live on the state's lands do not have any rights to the land. In the acquisition of the Pan Borneo Highway project, however, the government agreed to give ex gratia to the residents. The amount of the ex gratia was determined by the Minister's discretion, not by the market value. It shows that the Government is concerned about the landowners and ensuring that the project can progress without much protest.

CONCLUSION

This study has examined the Sarawak Land Code to study the provisions related to land acquisition in Sarawak. Although the provisions are not extensive, like the Land Acquisition Act 1960 and the Sabah Land Acquisition Ordinance (Sabah Cap. 69), the Sarawak Land Code still provides the fundamental provisions to acquire land. The authority would need to refine the acquisition process by introducing internal procedures or, when necessary, would refer to the court to ensure an effective and smooth land acquisition process.

The Sarawak Land Code has categorised lands in Sarawak into five categories. Still, it can be broadly distinguished by either the land possessing the document of title or the land declared under the Gazette, which has no document of title. In the land acquisition process in Sarawak, the authority would see these categories of land, especially lands under the NCR status, because they have different procedures and compensation approaches.

From the interview and analysis, this study identified three themes related to land acquisition in Sarawak, which were grouped into administrative matters, compensation principles, and adequacy of compensation. In terms of administrative matters, land acquisition involves the Land and Survey Department in both the state divisions and headquarters. The compensation principles would follow all the principles set in the Sarawak Land Code. Meanwhile, the determination of compensation adequacy will be based on the valuation and information gathered during the inquiry.

Examining the legislation and information gathered during the interview, this study would like to suggest exploring compensation principles for communal rights to be included in the land acquisition legislation. This study expects that exploring compensation principles for communal rights can solve some ambiguity in compensation and its adequacy. Also, it is high time for any land administrator to keep up with the latest technology in land administration to ensure the highest service standards for people and the country.

ACKNOWLEDGEMENT

We sincerely thank Universiti Teknologi MARA (UiTM) and the College of Built Environment, UiTM for their generous academic and financial support throughout this research. Our sincere appreciation also goes to the Land and Survey Department, Sarawak, for providing valuable information and insights that greatly aided our research and the preparation of this article. We are equally grateful to the editorial board of Planning Malaysia Journal for the opportunity to share our work through publication in this esteemed journal.

REFERENCES

- Abdullah, A. H. (1999). Compensation for land taken under Land Acquisition Act 1960 (as amended). In *Monograph on land acquisition* (pp. 83–88). Valuation and

- Property Services Department, Ministry of Finance Malaysia.
- Abdullah, I. (2022, January 6). 50 rumah terpaksa diroboh beri laluan Projek Lebuhraya Pan Borneo [50 houses have to be demolished to make way for the Pan Borneo Highway Project]. *BH Online*. Retrieved April 14, 2024, from <https://www.bharian.com.my/berita/wilayah/2022/01/908355/50-rumah-terpaksa-diroboh-beri-laluan-projek-lebuhraya-pan-borneo>
- Adam, R. J. (1998). Native customary rights over land in Sarawak. *Journal of Malaysian and Comparative Law*, 25, 217–232.
- Akob, Z., Zaidee, M., Hipni, A., & Koka, R. (2019). Coordination and collaboration of information for Pan Borneo Highway (Sarawak) via common data environment (CDE). *IOP Conference Series: Materials Science and Engineering*, 512(1), 012001. <https://doi.org/10.1088/1757-899X/512/1/012001>
- Alias, A. (2014). *Pengambilan Tanah: Hak dan Panduan Pemilik Tanah*. Penerbit Universiti Malaya.
- Bernama. (2016, February 5). Projek Lebuhraya Pan Borneo Hadapi Halangan [Pan Borneo Highway Project Faces Obstacles]. *MStar*. Retrieved April 14, 2024, from <https://www.mstar.com.my/lokal/semasa/2016/02/05/halangan-projek-pan-borneo>
- Bernama. (2021, December 8). COVID-19, penduduk enggan pindah punca kelewatan Pan Borneo Sabah [COVID-19, residents reluctant to move causing delay of Sabah Pan Borneo]. *Astro Awani*. Retrieved April 14, 2024, from <https://www.astroawani.com/berita-malaysia/covid19-penduduk-enggan-pindah-punca-kelewatan-pan-borneo-sabah-335313>
- Bernama. (2023a, October 9). Govt confident Pan Borneo Highway will be completed as promised, says Fadillah. *Edgeprop.my*. Retrieved January 16, 2024, from <https://www.edgeprop.my/content/1907371/govt-confident-pan-borneo-highway-will-be-completed-promised-says-fadillah>
- Bernama. (2023b, December 7). Fed govt views seriously delay in implementation of Pan Borneo Highway in Sabah—PM Anwar. *NST Online*. Retrieved January 16, 2024, from <https://www.nst.com.my/news/nation/2023/12/987712/fed-govt-views-seriously-delay-implementation-pan-borneo-highway-sabah-pm>
- Bernama. (2024, February 8). Projek Pan Borneo Sarawak dapat disiapkan tahun ini—Alexander [Sarawak Pan Borneo Project can be completed this year—Alexander]. *Astro Awani*. Retrieved April 14, 2024, from <https://www.astroawani.com/berita-malaysia/projek-pan-borneo-sarawak-dapat-disiapkan-tahun-ini-alexander-457425>
- Board of Valuers, Appraisers, Estate Agents & Property Managers. (2019). *Malaysian valuation standards*. Board of Valuers, Appraisers, Estate Agents & Property Managers.
- Buang, S. (2015). *Malaysian Torrens system* (2nd ed.). Dewan Bahasa dan Pustaka.
- Buang, S. (2021). *Land acquisition—A primer*. Thomson Reuters Asia Sdn. Bhd.
- Che Rose, R. A., & Imau, V. K. A. (2020). Impak sosioekonomi lebuhraya Pan Borneo terhadap komuniti tempatan [Socioeconomic impact of the Pan Borneo Highway on the local community]. *Akademika*, 90(1), 123–136.
- Chen, S. F. (2016, May 27). Govt to bear RM2.8b cost of Pan Borneo Highway land acquisition. *The Edge Malaysia*. Retrieved January 16, 2024, from

- <https://theedgemalaysia.com/article/govt-bear-rm28b-cost-pan-borneo-highway-land-acquisition>
- Hyett, N., Kenny, A., & Dickson-Swift, V. (2014). Methodology or method? A critical review of qualitative case study reports. *International Journal of Qualitative Studies on Health and Well-Being*, 9, 23606. <https://doi.org/10.3402/qhw.v9.23606>
- Ikau, R. A., Rashid, A. F. A., Muhammad, W. M. N. W., & Wahi, N. (2019). A preliminary study of safety management practices on Pan-Borneo highway construction sites in Kuching, Malaysia. *Journal of Physics: Conference Series*, 1349(1), 012006. <https://doi.org/10.1088/1742-6596/1349/1/012006>
- Land Code [Cap. 81 1958 Ed.]. Sarawak Land Code. , Chapter 81 1958 Edition § (1958).
- Lorna, N. V. (2023, December 4). Land acquisition alone for Pan Borneo Highway cost RM900 mln: Fadillah. *New Sarawak Tribune*. Retrieved January 16, 2024, from <https://www.newsarawaktribune.com.my/land-acquisition-alone-for-pan-borneo-highway-cost-rm900-mln-fadillah/>
- Osman, S., & Kueh, H. U. (2010, April). Land administration, land management and spatial information in Sarawak, Malaysia. Paper presented at *The XXIV FIG International Congress 2010*, Sydney, Australia. Retrieved from https://www.fig.net/resources/proceedings/fig_proceedings/fig2010/papers/fs03g/fs03g_osman_kueh_4572.pdf
- Povera, A., & Yunus, A. (2020, July 23). Completion date for Pan Borneo Highway extended due to PDP termination. *NST Online*. Retrieved January 16, 2024, from <https://www.nst.com.my/news/nation/2020/07/610944/completion-date-pan-borneo-highway-extended-due-pdp-termination>
- Toh, M. L., Tan, L. C., Tan, W. V., Ujang, M. U., & Thoo, A. C. (2019). A preliminary study on the formation of land legislation and cadastre system in Sarawak, Malaysia. *International Journal of Engineering and Advanced Technology*, 8(5C), 788–797. <https://doi.org/10.35940/ijeat.E1112.0585C19>
- United Nations. (1948, December 10). *Universal declaration of human rights*. Retrieved November 8, 2024, from <https://www.un.org/en/about-us/universal-declaration-of-human-rights>
- Usilappan, M. (1999). Land valuation—A question of determining the fair market value. In *Monograph on land acquisition* (pp. 51–63). Valuation and Property Services Department, Ministry of Finance Malaysia.
- Utusan Borneo Online. (2016, March 30). Lebuhraya Pan Borneo melibatkan pengambiln semula 820km tanah [Pan Borneo Highway involves the acquisition of 820km of land]. *Utusan Borneo*. Retrieved January 16, 2024, from <https://www.utusanborneo.com.my/2016/03/30/lebuhraya-pan-borneo-melibatkan-pengambiln-semula-820km-tanah>
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398–405. <https://doi.org/10.1111/nhs.12048>
- Wong, J. (2023, February 7). Phase two of Pan Borneo highway to start soon. *The Star Online*. Retrieved January 16, 2024, from <https://www.thestar.com.my/business/business-news/2023/02/07/phase-two-of-pan-borneo-highway-to-start-soon>

Zacchaeus, W. (2017, March 10). Kecewa dengan pampasan projek Pan Borneo [Disappointed with the compensation for the Pan Borneo project]. *Utusan Borneo Online*. Retrieved April 14, 2024, from <https://www.utusanborneo.com.my/2017/03/10/kecewa-dengan-pampasan-projek-pan-borneo>

Received: 28th January 2025. Accepted: 10th March 2025