



PLANNING MALAYSIA:

Journal of the Malaysian Institute of Planners

VOLUME 23 ISSUE 6 (2025), Page 490 – 501

**ESTABLISHING BASELINE CONDITIONS FOR A SUCCESSFUL
IMPLEMENTATION OF LAND READJUSTMENT (LR) IN MALAYSIA**

**Siti Fairuz Che Pin¹, Anuar Alias², Nikmatul Adha Nordin³,
Asma Senawi⁴, Nor Azalina Yusnita Abd Rahman⁵**

*^{1,2,3}Centre for Sustainable Planning and Real Estate (SUPRE),
Faculty of Built Environment,
UNIVERSITI MALAYA, MALAYSIA*

*^{1,4,5}Department of Built Environment Studies and Technology,
Faculty of Built Environment,
UNIVERSITI TEKNOLOGI MARA PERAK BRANCH*

Abstract

Land readjustment (LR) shows potential to address the challenges of urban development amid rapid urbanisation. Unlike eminent domain or expropriation which involves the compulsory acquisition of property for public use or its reallocation to third parties for municipal objectives, land readjustment offers an alternative mechanism for restructuring land. Notably, LR is recognised as an innovative form of land pooling and can help in solving urban restructuring problems particularly in underdeveloped countries. In Malaysia, although LR was approved as a land development method in 1999, its practical implementation remains absent. Thus, this study aims to establish the baseline conditions necessary for successful LR initiatives in Malaysia. The study is based on a survey of 37 urban planners who are directly involved in land development projects. As a result, nine of the baseline conditions significantly impact the successful implementation of urban land readjustment, with the landowner's participation as an essential aspect. Conversely, suitable topography and land distribution play a less impactful role. Findings from this study provide a foundational understanding of the baseline conditions crucial for planning and executing successful LR projects that are valuable for policymakers, urban planners, developers and community stakeholders in shaping sustainable urban landscapes through land readjustment strategies. As the first empirical study of LR baseline conditions in Malaysia, it complements international LR literature by highlighting local context considerations.

Keywords: Urban Development, Land Readjustment, Development Tool, Public Infrastructure

¹ Corresponding author. Email: sitif288@uitm.edu.my

INTRODUCTION

Urbanisation is a global trend and cities in Malaysia are experiencing rapid growth and development. However, this rapid urban growth brings significant challenges, including traffic congestion, inadequate infrastructure, and housing shortages (Rosni et al., 2016). Traditional methods of urban planning, such as eminent domain and expropriation, often involve the compulsory acquisition of private property, which can lead to resistance and social conflict. In contrast, Land Readjustment (LR) offers a voluntary and cooperative approach to land consolidation enabling the reorganisation of land parcels and infrastructure without the need for compulsory acquisition. LR is known for its innovative potential and serves as an effective strategy to address the challenges of urban redevelopment, especially in underdeveloped areas ((Kresse & van der Krabben, 2021); Needham & Hong, 2007).

Land readjustment (LR) is a tool that facilitates the reorganisation of land for urban development by consolidating adjacent unplanned land into a unified layout with designated streets, open spaces and building plots (Lai et al., 2022). Some building plots can be sold to cover the necessary costs while the remaining plots are redistributed among the original landowners. LR offers an inclusive approach to urban land management which includes land acquisition, site preparation, subdivision, and the provision of planned urban spaces (Van der Krabben, Tiwari, et al., 2020).

In this method, the government oversees the planning of roads, infrastructure, and public facilities, ensuring that each landowner receives a smaller, yet more valuable, fully developed plot of land (Sorensen, 2000; Alterman, 2007; Turk & Korthals Altes, 2011; De Souza, 2018). As a self-financing mechanism, LR benefits the government by enabling urban improvements without the need for expropriation, while improving living conditions and increasing the value of land for landowners (Needham & Hong, 2007; Byahut, 2014).

Although LR has been widely and successfully implemented in several European and Asian Countries (Ballaney et al., 2022; Mugisha et al., 2024), its application in Malaysia remains unexplored despite its potential for urban development. Key challenges that hinder the implementation of LR in Malaysia include funding constraints, limited public participation and the absence of specific legal frameworks for LR (Che Pin et al., 2024). Thus, this study aims to establish the baseline conditions needed to implement LR initiatives in Malaysia. By offering the first empirical analysis explicitly focused on the Malaysian context, it addresses a gap in the national LR literature. It complements international research by focusing on local stakeholder perspectives which helps distinguish Malaysia's unique context such as its institutional arrangements and legal structure.

LITERATURE REVIEW

Baseline Conditions for Land Readjustment

Establishing the baseline conditions is a crucial step in starting a land readjustment project as it provides a starting point based on existing conditions and factors. However, it is essential to note that the necessary conditions for a successful implementation of land readjustment may vary depending on factors such as the specific type of project, its objectives, and the context in which it is being carried out, as pointed out by Vitikainen in 2004. By identifying current challenges and opportunities, baseline conditions inform strategic planning, set realistic goals and enable effective monitoring and evaluation of ULR initiatives. In Malaysia, where LR was approved in 1999 but has yet to be implemented, establishing these conditions is important to ensure the success and sustainability of LR projects.

Existence of Land Fragmentation

According to FAO (2002), land fragmentation is a crucial factor in implementing land readjustment. Furthermore, researchers such as Van Dijk (2007), Bullard (2007), Long (2014), and Demetriou (2014) acknowledged that land fragmentation is a significant issue in unplanned neighbourhoods.

Willingness to Participate

Van Dijk (2007) posits that the success of land readjustment hinges on the willingness of stakeholders to participate, as it affects private properties. In this regard, the exchange of land among owners becomes necessary and cannot be overlooked, although there is no compulsion for the landowners to participate in the program (Louwsma et al., 2017)).

Furthermore, UN-Habitat introduced the Participatory and Inclusive Land Readjustment (PILaR) approach in 2014 and 2016. PILaR is designed to help national governments and local authorities address urbanisation challenges, such as urban sprawl and slums, using a rights-based approach that prioritises participation, inclusiveness, and the coordination of private and public sector roles and responsibilities (Lemmen & Bennett, 2015). PILaR strongly emphasises securing property rights for owners through active participation during land acquisition (Uisso & Tanrıvermiş, 2024).

Reliable Land Information

Demetriou et al. (2013) contend that a dependable land information system is vital when stakeholders are willing to participate in land readjustment without coercion. This system provides a comprehensive inventory of ownership and use rights, including platforms for verifying claims, among other functions (Sonnenberg, 2002). To achieve this, an effective land information system is

required that details the various rights, boundaries, and proposed developments in the area (Jansen et al., 2010).

When developing an LR model suitable for such contexts, it is imperative to draw on experiences from cadastral practices. In recent years, extensive efforts have been made to modernise cadastral systems including renewed cadastral surveying, updated cadastral records and integration of modern technologies into existing data sets.

For instance, the introduction of GIS and other technologies can provide consistent and precise data for planning, partitioning, and redistribution of land, thereby enabling the efficient implementation of land readjustment (Demetriou, See, & Stillwell, 2013).

Existence of Land Banks

Land banks play a crucial role in facilitating land readjustment, as they provide a means for stakeholders to acquire, manage, redistribute and lease land to improve its allocation. According to Damen (2004), land banks aid in the acquisition and management of land for this purpose. Similarly, Jansen et al. (2010) argue that land banks offer opportunities for expanding and shaping land for infrastructure development, while Hartvigsen (2014) suggests that they increase land mobility by providing flexible pathways for land readjustment, thus facilitating the reallocation process.

In essence, land banks are managed by the state through laws to successfully acquire, hold, and reallocate land for future infrastructure provision (Van den Berg, Revilla, Menken, et al., 2005).

Enabling Legal Frameworks

The success of Urban Land Readjustment (ULR) projects hinges on a robust legal framework and its practical implementation. These legal mechanisms play a crucial role in ensuring that the processes of land acquisition, redistribution, and urban development are conducted transparently, fairly, and in compliance with local and national regulations (Mahandhar, 2019).

Jensen et al. (2010) categorised land readjustment into two broad categories: legal and institutional requirements, which involve legislation and regulations that empower state institutions for implementation, as well as all other baseline conditions. Bullard (2007) contends that legislation is necessary to address land fragmentation and prevent its recurrence, while Thapa and Niroula (2008) argue that without preventive mechanisms, land fragmentation becomes a recurring cycle. Thus, the regulation of laws on inheritance, land sizes and disjointed land is critical in preventing land fragmentation (Thapa & Niroula, 2008).

Meanwhile, in Germany, LR (Umlegung) is embedded in the national planning code (Baugesetzbuch), requiring alignment with approved land-use plans (UCLG, 2016). This law has certainly made LR mandatory in new developments and ensured consistent implementation. The clear rules on how to convert underdeveloped land into buildable plots prevent conflicts and provide predictability for all stakeholders (Mansour, 2024).

Favourable Landownership Structure

The ownership structure of land also plays a crucial role in facilitating the reallocation of land. According to Lemmen, Jansen, and Rosman (2012) and Abubakari, Van der Molen, Bennet, et al. (2016), land tenure can either facilitate or impede readjustment. Therefore, private owners and users of land need to participate in readjustment without any element of compulsion.

In this regard, the structure of land ownership is critical. Multiple co-ownership of land limits the ability to exchange land without the consent of the other owners, making it less attractive compared to individual ownership, where the owner can decide to exchange the land or not at any point in time (Demetriou, Stillwell, & See, 2012). Therefore, a favourable land ownership structure that allows for individual ownership can facilitate land readjustment processes.

Availability of Technical Expertise

Technical expertise and adequate infrastructure are crucial for the successful implementation of land readjustment. It is a technical task that requires professionals with the ability and capacity to perform the duties of reorganising, restructuring and redistributing the land to an acceptable quality by all parties involved. Therefore, there is a need for land use planners, surveyors, land valuation experts, administrators and environmental managers who have specialist knowledge to be provided with the appropriate infrastructure to implement land readjustment successfully (Van Dijk, 2007). These professionals must possess the necessary skills and tools to handle the technical aspects of land readjustment (Uisso & Tanrıvermiş, 2024).

Moreover, countries need to adopt and modify the examples of countries that have successfully implemented land readjustment to meet their land and infrastructural needs. This highlights the importance of technical expertise and adequate infrastructure in the successful implementation of land readjustment.

Financial Viability/ Cost Recovery

LR's self-financing nature depends on mechanisms to capture land value increases. Cost recovery model such as selling a portion of the land or retaining land for future sale are crucial. For instance, German LR law allows

municipalities to retain up to 30% of consolidated land to fund infrastructure (Zhao & Choy, 2019).

Uisso and Tanrivermis (2024) affirm that land readjustment is beneficial in countries where government funding is limited as it results in gains in property value that are distributed and shared among various parties making it a self-financing method. The redistributed serviced plots, although smaller in size have greater economic value ensuring that landowners are compensated through increased asset worth rather than monetary payments ((Müller-jökel, 2004)

Land Readjustment in Malaysia

The Land Readjustment System (LRS) was introduced in Malaysia in 1987 through a series of studies and research conducted by PLAN Malaysia (formerly known as the Department of Town and Country Planning of Peninsular Malaysia) in collaboration with experts from the Japan International Corporation Agency (JICA). However, the services of JICA experts ended in December 2003.

In 1995, a feasibility study on the introduction of LRS in Malaysia was conducted by JICA and PLAN Malaysia, which concluded that the LRS could be implemented in Malaysia. On June 23, 1999, a Cabinet Meeting decided that the LRS would be one of Malaysia's land development methods. The Steering Committee for the Implementation Plan Study, chaired by the Secretary General of the Ministry of Housing and Local Government (KPKT) on August 25, 2006, agreed to expand the planning and implementation of projects using the LRS to other areas across the country.

In Malaysia, two sites were identified as locations for two pilot projects namely Kampung Pulau Meranti, Sepang, and Kampung Skudai Kiri, Johor. However, no land readjustment projects have been completed yet. This is due to various challenges encountered during the implementation phase including disagreements among landowners regarding the project and a lack of government funding (JPBD, 2014). The complexities arising from landowner conflicts and financial constraints have hindered the implementation of land readjustment efforts in Malaysian context.

RESEARCH METHODOLOGY

A preliminary study was conducted due to a small set of surveys undertaken as (Fraser et al., 2018) explained in their pilot testing research. The research approach for this study consisted of three steps: (1) a literature review to identify potential baseline conditions, (2) a practitioner survey to gather perceptions on these conditions and (3) statistical analysis of the survey data. The rationale for this deductive approach was based on the generalisability of the finding (Bougie & Sekaran, 2020). The survey questionnaire included two distinct sections: (1)

demographics and (2) perceptions on the baseline conditions for ULR implementation.

Survey Administration

The survey was conducted via email. Purposive sampling was used to gather necessary data from the targeted population, which consists of planners directly involved in urban land development and likely familiar with LR issues. Among the 80 questionnaires distributed to the targeted population, 37 were valid, resulting in a 46% response rate. Since the primary purpose of a preliminary study is not hypothesis testing, the sample size is often not calculated (In, 2017). Browne (1995) recommended over 30 samples per group as a magic number for the scholar to apply to a pilot study. Therefore, a sample of 37 was deemed sufficient for this exploratory study. However, the findings from this sample should be interpreted as preliminary and further research with a larger sample can be conducted to enhance the results.

Additionally, all respondents participated voluntarily and were informed about the purpose of the study. Informed consent was obtained from the respondents prior to data collection. Respondents were assured of confidentiality and their responses were anonymised in the analysis.

DATA ANALYSIS

Quantitative data were analysed using IBM SPSS Statistics (SPSS) version 27.0. The SPSS procedure included two techniques: (1) descriptive statistics with measures of central tendency and frequency analysis and (2) parametric tests namely, one-sample t-tests. The baseline conditions were ranked based on frequency analysis, which used values derived from central tendencies such as the standard deviation and mean scores.

On the other hand, one (single) – sample t-test of the mean was performed to assess the significance of the baseline conditions influencing successful implementation of urban land readjustment. Instead of assuming mean values above 3.0 to be essential or critical, it was considered appropriate to conduct statistical tests, such as a t-test to determine whether the mean values differed significantly from 3.0 or even 3.5 (to agree on a five-point scale). Previous studies have used a cut-off point of 3.5 for a five-point scale in a one-sample t-test analysis. According to Kavishe et al. (2019), the value of ‘3’ represents mid-point of the identified variables, equivalent to 50% success and resulting in equidistance.

Respondent’s Characteristics

The characteristics of the survey respondents are displayed in Table 1. An analysis of the table shows that the majority of the survey respondents (59.5%)

were the planners from PLANMalaysia, while the remainder were from state and local authorities. Based on working experience, 51.4% of the respondents have over 10 years of working experience.

Table 1: Frequency distribution of organisation and working experiences (n=37)

Variables	Freq.	Per cent
Organisation		
State Authority	5	13.5
Local Authority	10	27
PLANMalaysia	22	59.5
Working Experience		
1-5 years	7	18.9
6-10 years	11	29.7
11-20 years	19	51.4

Source: Authors' research, 2023

RESULTS

This section presents the findings of a quantitative research study that aimed to establish baseline conditions for implementing land readjustment in Malaysia. The practitioners were requested to rate the importance of nine baseline conditions that could influence the successful implementation of LR in Malaysia using a five-point Likert scale. The perceptions of the practitioners are shown in Table 2 below:

Ranking of the Baseline Condition

The baseline conditions that influence the successful implementation of ULR were ranked in descending order, as presented in Table 2. One sample t-test was conducted to determine whether these baseline conditions significantly affected the successful implementation of ULR.

Table 2: Ranking of baseline conditions

Baseline Conditions	Mean	SD	<i>t</i>	<i>p</i>
Existence of Legal Structure	4.35	0.79	6.560	.000
Participation of Landowner	4.30	0.81	5.973	.000
Cost Recovery / Self-financing	4.19	0.81	5.169	.000
Favourable land ownership structure	4.14	0.92	4.209	.000
Sharing of the Project Benefits and Costs	4.14	0.82	4.700	.000
Suitable Topography and land distribution	4.08	0.83	4.262	.000
Availability of technical experts	4.05	0.85	3.974	.000
Establishment of an Implementing Body (IB)	4.00	0.85	3.579	.001
Quality of Cadastral Map	3.95	0.85	3.119	.003

Source: Authors' research, 2023

Generally, the importance ratings of all nine baseline conditions were higher than 3.0. All the factors were statistically significant ($p < .05$), indicating their positive effects on the success of LR implementation. The results also show that seven out of the nine determinants had a mean score above four, signifying their relatively high importance in affecting the success of LR implementation. As shown in Table 3, most respondents believed that the existence of a Legal Structure, participation by the landowner, and self-financing are the three most important baseline factors affecting the successful implementation of ULR.

In addition, the literature confirms these baseline conditions, mentioning four legal issues including a lack of legislation, legal backup, or regulatory framework (Mittal, 2014), a complicated legal system (Turk, 2005), land ownership structure (Turk, 2005, 2008), and enhanced protection of property rights (Alterman, 2007), as among the most challenging regulatory issues in the Land Readjustment literature.

Furthermore, an efficient financing mechanism must be considered to cover upfront costs. Other alternatives could be considered such as borrowing from financial institutions. (Che Pin et al., 2024; Mugisha et al., 2023).

DISCUSSION AND CONCLUSION

This study establishes the baseline conditions essential for successful LR implementation in Malaysia. The top-ranked factors include a clear legal structure, landowner participation and financing mechanisms provide a foundational understanding necessary for planning and executing practical LR projects.

For instance, the implementation of LR requires the active participation of all stakeholders, including landowners, government agencies and private developers. Transparent communication and consultation processes should be established to address concerns, build trust and encourage voluntary participation. Strategies such as public education campaigns and community meetings may help foster support for LR projects. Active engagements also ensure that local communities understand the benefits and long-term impacts of LR initiatives.

Moreover, a clearly defined legal framework is essential for the successful implementation of LR. For instance, the rights of landowners and the role of government agencies must be clearly outlined in the legislation. Legal provisions similar to Germany's planning code, which mandates LR in conjunction with approved development plans (BauGB Sections 45-84), could be adapted (UCLG,2016) in the Malaysian context.

Additionally, promoting financial viability through self-financing models should be encouraged to reduce dependence on government funding. This can be achieved through land value capture where a portion of the increased land value resulting from the infrastructure improvements is reinvested into the project. For example, municipalities retaining a portion of reconfigured land as has been done in Germany or charging for the value increase less than 30%.

These recommendations align with international experiences. For example, Japan's and South Korea's postwar LR programmes achieve significant urban redevelopment by gaining support from landowners and using value capture mechanisms. The Gangnam LR project demonstrated how capturing land value uplift can finance infrastructure without heavy subsidies (Kim, 2023). Similarly, Germany's longstanding LR (Umlegung) has been practised since 1902, with over 80% of new building plots in some regions developed via LR. German law ensures owners keep a parcel and municipalities capture added value through land readjustment (Muñoz Gielen & Mualam, 2019). These cases highlight the importance of the conditions outlined in this study, which include a strong legal framework, public participation, and self-financing through land value capture. By taking into the Malaysian context, this study provides a baseline that Malaysian planners and policymakers can use to prepare for LR projects. The identified conditions particularly legal and participatory factors are consistent with successful LR regions elsewhere.

In conclusion, while LR presents a viable alternative for land development in Malaysia, specific enhancements are required to facilitate its successful implementation. Strengthening the legal framework, promoting public participation and adopting suitable financial models are essential so that LR can be effectively applied in various regions and adapted to their specific needs. Future research should further investigate these factors for example using multivariate or regression analysis could examine how baseline conditions interact and predict the successful implementation of LR.

ACKNOWLEDGEMENT

The authors wish to acknowledge and thank the respective reviewers for their valuable comments on this paper.

REFERENCES

- Archer, R. W. (1981). Republic of China. Department of Land Administration. In Archer, R. W. (op. cit.), Appendix (Vol. 1).
- Archer, R. W. (1992). Introducing the urban land pooling readjustment technique into Thailand to improve urban development and land supply. *Public Administration and Development*, 12.
- Ballaney, S., Faust, A., Swarankar, R. C., Belliappa, S. G., & Bank, D. (2022). *Land pooling in South Asia*, 88.
- Browne, R. H. (1995). On the use of a pilot sample for sample size determination. *Statistics in Medicine*, 14(17), 1933–1940.
- Byahut, S. (2014). Post-earthquake reconstruction planning using land readjustment in Bhuj (India). *Journal of the American Planning Association*, 80(4), 440–441. <https://doi.org/10.1080/01944363.2014.989132>
- Che Pin, S. F., Alias, A., Nordin, N. A., Senawi, A., & Mohamed Saraf, M. H. (2024). Challenges in implementing urban land readjustment (ULr) in Malaysia from town planner's perspectives. *Planning Malaysia*, 22(5), 52–65. <https://doi.org/10.21837/pm.v22i34.1573>
- De Souza, F. F. (2018). What is land readjustment? *Land readjustment: Solving urban problems through innovative approach*, 1–60.
- Fraser, J., Fahlman, D. W., Arscott, J., & Guillot, I. (2018). Pilot testing for feasibility in a study of student retention and attrition in online undergraduate programs. *International Review of Research in Open and Distributed Learning*, 19(1).
- In, J. (2017). Introduction of a pilot study. *Korean Journal of Anesthesiology*, 70(6), 601–605. <https://doi.org/10.4097/kjae.2017.70.6.60>
- Kresse, K., & van der Krabben, E. (2021). Housing supply limitations, land readjustment and the ecological performance of the urban landscape. *Sustainability (Switzerland)*, 13(17). <https://doi.org/10.3390/su13179774>
- Lai, L. W. C., Davies, S. N. G., Chau, K. W., Choy, L. H. T., Chua, M. H., & Lam, T. K. W. (2022). A centennial literature review (1919–2019) of research publications on land readjustment from a neo-institutional economic perspective. *Land Use Policy*, 120, 106236. <https://doi.org/10.1016/j.landusepol.2022.106236>

- Louwsma, M., Lemmen, C., Hartvigsen, M., Hiironen, J., Du Plessis, J., Chen, M., & Laarakker, P. (2017). Land consolidation and land readjustment for sustainable development—The issues to be addressed. *Proceedings of the FIG Working Week*, 8973. https://www.fig.net/resources/proceedings/fig_proceedings/fig2017/papers/p06g/P06G_louwsma_lemmen_et_al_8973.pdf
- Mansour, A. H. N. (2024). Comparative study of land readjustment policy implementation methodologies in developing countries. *HBRC Journal*, 20(1), 872–892. <https://doi.org/10.1080/16874048.2024.2393468>
- Mugisha, J., Kombe, W. J., Babere, N. J., & Uwayezu, E. (2023). Uncovering ‘sleeping beauty’: Land readjustment for self-financing urbanisation in developing countries. *Social Sciences and Humanities Open*, 8(1), 100539. <https://doi.org/10.1016/j.ssaho.2023.100539>
- Mugisha, J., Uwayezu, E., Babere, N. J., & Kombe, W. J. (2024). Enabling planned urban settlements through land readjustment—A case study from Kigali, Rwanda. *Habitat International*, 145, 103025. <https://doi.org/10.1016/j.habitatint.2024.103025>
- Müller-jökel, R. (2004). Land readjustment—A win-win-strategy for sustainable urban development. *Intercontinental Athenaeum Athens*, 1–7.
- Muñoz Gielen, D., & Mualam, N. (2019). A framework for analyzing the effectiveness and efficiency of land readjustment regulations: Comparison of Germany, Spain and Israel. *Land Use Policy*, 87, 104077. <https://doi.org/10.1016/j.landusepol.2019.104077>
- Needham, B., & Hong, Y.-H. (2007). Analyzing land readjustment. In *Analyzing land readjustment: Economics, law, and collective action* (pp. vii–xx).
- Rosni, N. A., Noor, N. M., & Abdullah, A. (2016). Managing urbanisation and urban sprawl in Malaysia by using remote sensing and GIS applications. *Planning Malaysia*, 4(Special Issue 4), 17–30. <https://doi.org/10.21837/pmjournal.v14.i4.145>
- Sorensen, A. (2000). Conflict, consensus or consent: Implications of Japanese land readjustment practice for developing countries. *Habitat International*, 24(1), 51–73. [https://doi.org/10.1016/S0197-3975\(99\)00029-6](https://doi.org/10.1016/S0197-3975(99)00029-6)
- Turk, S. S., & Korthals Altes, W. K. (2011). Potential application of land readjustment method in urban renewal: Analysis for Turkey. *Journal of Urban Planning and Development*, 137(1), 7–19. [https://doi.org/10.1061/\(asce\)jup.1943-5444.0000035](https://doi.org/10.1061/(asce)jup.1943-5444.0000035)
- Uisso, A. M., & Tanrivermiş, H. (2024). Impediments to urban land development and transformation in Tanzania: Evaluating conventional approaches and proposing innovative solutions. *Survey Review*, 1–12. <https://doi.org/10.1080/00396265.2024.2370599>
- Zhao, Y., & Choy, L. (2019). *A comparative analysis of land readjustment at international context*. https://doi.org/10.15396/eres2019_87

Received: 30th April 2025. Accepted: 4th September 2025