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VERTICAL LAND CONSOLIDATION IN JAKARTA VERSUS LAND READJUSTMENT IN KOBE, JAPAN: CONCEPTS, AGREEMENTS, IMPLEMENTERS, AND STAGES

KONSOLIDASI TANAH VERTIKAL JAKARTA VERSUS LAND READJUSTMENT KOBE, JEPANG: KONSEP, KESEPAKATAN, PELAKSANA, TAHAPAN

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Abstract

Vertical land consolidation (VLC) in Jakarta and land readjustment in Kobe, Japan, both reorganize urban land but emerged from different contexts. This normative legal study uses a descriptive-comparative approach and a literature review to compare them on concept, consensus acquisition, implementing actors, and implementation stages. VLC reorganizes land and buildings vertically to renew dense settlements with shared land rights, whereas Kobe reorganized land parcels and infrastructure for reconstruction after the 1995 earthquake. VLC requires the approval of at least 60% of participants before the location is determined, whereas in Kobe the city set the planning framework first and residents' proposals were developed through machizukuri councils. VLC is carried out by central and regional governments, private partners, and residents; in Kobe, by the city government or local unions with residents and consultants. VLC follows four formal stages, while Kobe followed two planning steps.

Keywords : Consensus Acquisition, Implementation Stages, Implementing Actors, Land Readjustment, Vertical Land Consolidation.

Abstrak

Konsolidasi tanah vertikal (KTV) di Jakarta dan land readjustment di Kobe, Jepang, sama-sama menata kembali tanah perkotaan, tetapi lahir dari konteks yang berbeda. Penelitian hukum normatif dengan pendekatan deskriptif-komparatif ini membandingkan keduanya pada konsep, perolehan kesepakatan, pelaksana, dan tahapan pelaksanaan melalui studi kepustakaan. KTV menata tanah dan bangunan secara vertikal untuk peremajaan permukiman padat dengan hak atas tanah bersama,

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sedangkan di Kobe penataan bidang tanah dan prasarana dilakukan untuk rekonstruksi pascagempa 1995. Kesepakatan KTV disyaratkan minimal 60% peserta sebelum penetapan lokasi, sedangkan di Kobe kerangka rencana diputuskan pemerintah lebih dahulu dan usulan warga disusun melalui dewan machizukuri. KTV diselenggarakan pemerintah pusat dan daerah, mitra swasta, serta warga, sedangkan di Kobe oleh pemerintah kota atau serikat lokal bersama warga dan konsultan. KTV berjalan dalam empat tahap formal, sedangkan Kobe dalam dua tahap perencanaan.

Kata Kunci : Konsolidasi Tanah Vertikal, Land Readjustment, Pelaksana, Perolehan Kesepakatan, Tahapan Pelaksanaan.

1. INTRODUCTION

Limited land availability and high population density make the organization of urban settlements difficult to achieve solely through horizontal expansion. One approach developed in Indonesia is Vertical Land Consolidation (VLC)—a form of land consolidation designed for the development of areas and buildings with a vertical orientation. In the Special Capital Region of Jakarta (DKI Jakarta), VLC has been implemented through pilot projects in the sub-districts (kelurahan) of Palmerah (West Jakarta) and Tanah Tinggi (Central Jakarta) in 2024. This follows an earlier pilot project in Cipinang Besar Selatan (East Jakarta), where the challenges encountered were analyzed by Yustiningrum and Adianto. Adnan discusses methods for selecting locations for the reorganization of slum settlements via VLC, while Rachmasari et al. examine the redevelopment of Kampung Guji Baru using the VLC concept.

The success of VLC is determined not only by physical construction but also by the process of reaching agreements among residents, the entities managing the project, and the stages followed. Yustiningrum and Adianto found that a top-down approach and issues regarding land tenure security hindered the VLC project in Cipinang Besar Selatan; they also highlighted the requirement for 60% community approval, which underscores the importance of bottom-up planning. Rahimah Yusa and Warsono examine the implementation of policies for improving settlement quality through VLC in Tanah Tinggi, while Az-zahrah and Asirin outline the policies, procedural stages, and stakeholders involved in VLC initiatives in Palmerah and Tanah Tinggi. Beyond VLC, Aberta et al. discuss land consolidation involving Sultanate-owned land (tanah Kasultanan) for the rejuvenation of slum settlements in Kampung Jlagran, Yogyakarta, while Putraningtyas et al. explore the role of land consolidation in resolving conflicts in Parangtritis, Bantul.

As a point of comparison, Kobe, Japan, offers experience with land readjustment used for reconstruction following the 1995 Great Hanshin-Awaji Earthquake. Kubo and Doi, as well as Nakai et al., [examine this further]. ...examining the planning processes and machizukuri (community-building) activities within these projects. Hein situates the Kobe experience at the intersection of two Japanese planning approaches: toshikeikaku (government-initiated urban planning) and machizukuri (community development rooted in citizen participation). Meanwhile, Sorensen demonstrates that the practice of land readjustment in Japan diverges from the conventional perception of a purely consensus-based process. Siawsh et al. explore machizukuri initiatives in the context of building disaster-resilient communities, while Tatsuki and Kawami examine the relationship between pre-existing inequalities, shifts in the social environment, and the recovery of livelihoods following a disaster.

These studies generally address Jakarta's Kawasan Terpadu Vertikal (KTV—Integrated Vertical Area) and Kobe's land readjustment separately. This research proposes a comparative analysis based on four consistent dimensions: the underlying concept, the process of reaching agreement, the implementing entities, and the stages of implementation. This focus constitutes the core of the proposed analysis; it does not imply that no prior research has compared these two contexts. Here, "reaching agreement" is understood as a process—reflecting the extent to which residents can influence decisions, as illustrated by Arnstein's "Ladder of Citizen Participation"—rather than merely

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as a quantitative approval figure. Given that the legal and institutional frameworks for these two instruments differ, the comparison is conducted on a functional basis, without assuming they are identical.

Based on this, the research addresses four questions: (1) how do the concepts of KTV in Jakarta and land readjustment in Kobe compare; (2) how do the processes for reaching agreement in both cases compare; (3) who are the implementing entities, and what are the roles of the respective parties; and (4) how do the implementation stages compare? This study aims to compare the implementation of KTV (land consolidation/readjustment) in DKI Jakarta with land readjustment in Kobe, focusing on concepts, the process of reaching agreements, the entities responsible for implementation, and the stages of execution. It then draws implications for strengthening KTV in Indonesia—specifically regarding methods for securing agreements, the distribution of roles among implementing parties, and the structuring of implementation stages.

2. RESEARCH METHOD

This study is a normative legal research project with a descriptive-comparative nature. Normative legal research relies on library-based materials to identify legal rules, principles, and doctrines that address specific legal issues, while the descriptive-comparative approach is employed to describe and compare two land management practices. The study focuses on DKI Jakarta and Kobe, Japan, and is conducted entirely through literature review, without field data collection or interviews with residents. All materials consist of secondary data gathered through research into literature and documents, including legislation, scholarly journal articles, books, reports, and relevant presentation materials. These materials were selected based on their relevance to the four comparative aspects and the completeness of their bibliographic information.

The study employs three approaches. First, the statutory approach, which examines the Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 12 of 2019 concerning Land Consolidation, as well as the Decree of the Governor of DKI Jakarta Number 1333 of 2021 regarding the Land Consolidation Coordination Team. Second, the case approach, which investigates the implementation of Konsolidasi Tanah Vertikal (KTV—Vertical Land Consolidation) in Cipinang Besar Selatan, Palmerah, and Tanah Tinggi, alongside land readjustment practices in Kobe—specifically in the Takatori Higashi and Misuga areas following the 1995 earthquake. Third, the functional comparative legal approach, which compares institutions based on their functions and the issues they address, rather than on similarities in terminology or legal form. This approach is used because, although KTV and land readjustment operate under different legal frameworks, they remain comparable in certain specific aspects.

The analysis is conducted in a descriptive-qualitative manner across four stages: categorizing materials by region and aspect; documenting findings from each source; juxtaposing the findings from Jakarta and Kobe to identify similarities and differences; and interpreting these findings through the lenses of Arnstein's ladder of participation and the concept of legal certainty. If a source does not contain information regarding a specific aspect, this limitation is noted and is not taken as evidence that the practice in question did not occur. The four aspects of comparison are presented in Table 1.

Table 1. Aspects of Comparison: KTV Jakarta and Land Readjustment in Kobe

No.	Aspect	Focus of Comparison
1	Draft	Definition, purpose, and context of the emergence of land management instruments
2	Securing an agreement	Requirements and procedures for obtaining resident approval or agreement
3	Executor	Organizing parties and the roles of each party

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No.	Aspect	Focus of Comparison
4	Implementation stages	Sequence of activities from preparation through to results and management

Source: Author, based on problem identification, 2026.

3. RESULT AND DISCUSSION

Comparison of Concepts

Within the Indonesian legal framework, KTV (*Konsolidasi Tanah Vertikal—Vertical Land Consolidation) is a form of land consolidation designed for the development of areas and structures oriented toward vertical expansion. It reorganizes the tenure, ownership, use, and utilization of land and space through the construction of vertical buildings. As a type of non-agricultural land consolidation, KTV aims to optimize land use, improve environmental quality, provide legal certainty regarding land rights, and encourage community participation. The concept embodies the principle of "development without displacement," which seeks to enhance the quality of housing while ensuring that residents retain their rights and remain in their original locations. In Jakarta, this concept is applied to highly dense settlements. The Tanah Tinggi area, for instance, has a population density of 752 people per hectare, with 2 × 3-meter dwellings often housing six to seven individuals. The final outcome is a four-story apartment complex built on collectively owned land, with unit ownership formalized through a Sertipikat Hak Milik atas Satuan Rumah Surusun (SHMSRS)—a certificate of ownership for an individual apartment unit.

In Japan, "land readjustment" (kukakuseiri) is a method that aggregates scattered and irregularly shaped land parcels, facilitates the construction of roads and essential infrastructure, and subsequently re-parcels the land into new plots. Each landowner contributes a portion of their land—typically around 30%—to accommodate roads, parks, and reserve land, which is then sold to help finance the project. Hein describes a similar process: the reorganization and redistribution of land to provide public spaces, such as roads and green areas. In Kobe, this technique was employed for reconstruction following the Great Hanshin-Awaji Earthquake on January 17, 1995. The municipal government adopted a two-stage urban planning approach to achieve dual objectives: well-planned, prompt reconstruction and the development of a city centered on the needs of its residents. The scope of this planning encompassed the areas targeted for land readjustment, as well as basic infrastructure such as main roads and parks. The amount of land contributed in the Kobe case was significantly lower than what is typically observed in standard practice. In Takatori Higashi 1, the average reduction in land plot size was 9%, and in Misuga, it was approximately 10%; however, for owners of small plots, this remained a significant burden. The experience in Kobe is also inseparable from two Japanese planning approaches: toshikeikaku (urban planning), which is government-initiated, and machizukuri (community planning), which emerges from the grassroots level. The primary legal framework is the Land Readjustment Act—following a comprehensive revision in 1954—which, for the first time, granted land tenants formal rights to participate in implementing bodies, expanded the authority of local public agencies, and introduced processes for plan review and the participation of affected parties. Following the earthquake, special legislation for the recovery of damaged areas, in effect since February 26, 1995, paved the way for kukakuseiri (land readjustment) and saikaihatsu (urban redevelopment) over a two-year period.

Both instruments share a common purpose: reorganizing land in already developed areas to improve environmental quality, requiring landowners to relinquish a portion of their rights for the sake of collective planning. In the Kawasan Terbangun Vertikal (KTV—Vertical Redevelopment of Built-up Areas) model, individual rights are surrendered and reorganized into collective land rights. In the land readjustment model, owners cede a portion of their land for public facilities. They differ in terms of their planning dimensions, the catalysts that trigger them, and their scale. KTV involves the vertical reorganization of both land and buildings, whereas the land readjustment model in Kobe focuses on

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the arrangement of land parcels and infrastructure. KTV is typically prompted by issues related to dense, slum-like settlements, while the land readjustment model in Kobe was triggered by a disaster. The KTV project in Palmerah, for instance, consolidated two land parcels totaling 90 square meters, whereas the Misuga project in Kobe encompasses an area with a population of approximately 5,000. The closest point of convergence is actually found at a small scale in Kobe; in Takatori Higashi 1, participants relinquished their original, small plots in exchange for floor area and rights to the land beneath a new structure, effectively turning the land into a collectively owned asset. While this pattern resembles the concepts of collective land ownership and the SHMSRS (strata title/ownership of units in a multi-story building) used in KTV, in the Kobe context, it serves as a supplementary measure for plots that are no longer suitable for independent development, rather than as the primary mode of reorganization. Consequently, these two concepts are compared based on their functions and are not considered identical instruments.

Comparison of Deal Acquisition

In the context of Land Readjustment (KTV) in Jakarta, resident consensus is structured as a quantifiable requirement. Implementing KTV necessitates the approval of at least 60% of the participants, who must collectively represent 60% of the total land area to be consolidated. Once this approval is secured, the project site is formally designated through a "Location Determination Decree." Yustiningrum and Adianto note that this requirement poses a primary challenge, underscoring the critical importance of bottom-up planning. In practice, the consensus-building process begins with outreach and deliberation. In Palmerah, this process led to an agreement to merge two land parcels; following the formal site designation, residents signed an official record relinquishing their land rights, temporarily transferring the land to state control. In Tanah Tinggi, resident approval reached 100%—well above the 60% minimum threshold. Nevertheless, reaching such consensus was not without obstacles. In Tanah Tinggi, disputes arose due to overlapping claims among heirs and informal, "under-the-table" land transactions issues that required extensive mediation and outreach. Furthermore, some residents expressed concerns regarding the risks of displacement and the potential loss of their livelihoods.

In Kobe, consensus was not framed as a single, fixed approval threshold. During the initial phase, the municipal government rapidly established a planning framework. Development restrictions were imposed starting February 1, 1995, and by March 17, 1995 following only two weeks of public discussion a plan for a special recovery zone, encompassing 124.6 hectares of land readjustment, was officially approved. Under the 1968 City Planning Act, public hearings were optional, allowing major decisions to be made without direct debate among residents. This aligns with Sorensen's findings that, for government-initiated projects, the consent of landowners is not a legal requirement; the government is merely obligated to publicly display the plans and provide an opportunity for objections though project organizers typically strive to secure consent to ensure the smooth execution of the project. In Misuga, residents were angered when the announcement of a reconstruction plan involving the implementation of land readjustment was made two months after the earthquake. Subsequently, the residents formed a machizukuri (community planning) council. In Takatori Higashi 1, this council was established on July 2, 1995; the layout plan was decided on November 30, 1995; and the district plan was approved on November 5, 1996. This rapid progress is attributed to the positive relationship between the residents, consultants, and the government. By way of comparison, for projects carried out by a landowners' association, the consent of at least two-thirds of the owners and tenants who together control two-thirds of the land area is required before the association can be formed; organizers typically aim for the consent of all owners.

The process in Kobe also revealed certain limitations. Nakai et al. identified difficulties in incorporating residents' opinions into the layout proposals, stemming from structural weaknesses in the machizukuri planning process. Hein has even argued that kukakuseiri (land readjustment) itself leaves little room for resident participation. Sorensen cautions that labeling land readjustment as a "consensus-based" process can be misleading, as government organizers often spend years securing

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such consent. Analytically, the difference compared to the situation in Jakarta lies in the stage at which agreement is reached. In Jakarta, agreement serves as a prerequisite—it must be obtained and verified before a site is designated. In Kobe, the basic framework is determined by the government first, with consensus built subsequently through discussions on more detailed plans. Viewed through the lens of Arnstein's "ladder of participation," the 100% consent rate in Tanah Tinggi indicates strong resident support, though the sources examined do not clarify the extent to which residents actually influenced the content of the plans. Conversely, while the machizukuri forums in Kobe provided a channel for residents' proposals, this did not guarantee that all their aspirations would be accommodated. The time required for these processes also differed. In Japan, local governments typically spend five to ten years—involving hundreds of meetings—engaging in nemawashi, a practice of securing group consensus through consultation and persuasion before a project is legally initiated. In Jakarta, the relocation process in Palmerah took approximately three to four months, while the outreach process in Tanah Tinggi was extended to resolve disputes. The sources examined do not yet indicate how long it took to reach an agreement with residents prior to the formal designation of project sites in Jakarta; therefore, a direct comparison of the duration at this stage cannot yet be made. This interpretation is analytical in nature and requires verification through field data.

Comparison of Implementers

The implementation of land consolidation (KTV) in Jakarta involves a collaboration between the central government, local government, the private sector, and residents. Jakarta Governor's Decree Number 1333 of 2021 established a Land Consolidation Coordination Team, chaired by the Regional Secretary, with the Head of the Jakarta Regional Office of the National Land Agency (BPN) serving as the executive chair. Its members include, among others, the Head of the Public Housing and Settlement Areas Agency and the Head of the Human Settlements, Spatial Planning, and Land Agency. The decree's appendix outlines the team's responsibilities, which include appointing planning/implementation teams for specific locations and providing recommendations for site selection. In the projects in Palmerah and Tanah Tinggi, the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN)—through its regional and local land offices—acted as a regulator and legal authority, conducting land surveys and issuing formal confirmations of consolidation objects, collective land-use rights (HGB), and strata-title ownership certificates (SHMSRS). The Jakarta Provincial Government served as the initiator and facilitator for permits and regional coordination. The Buddha Tzu Chi Foundation provided corporate social responsibility (CSR) funding and constructed buildings, contributing approximately IDR 1.887 billion for the project in Palmerah. Residents participated by engaging in deliberations, relinquishing land rights, and forming an association of unit owners and residents (PPPSRS), while academics assessed the impacts and formulated alternative financing models. The "Rumah Cinta Damai" (House of Peaceful Love) program in Tanah Tinggi was also developed through the collaboration of the Jakarta Provincial Government, the Ministry of ATR/BPN, and the Buddha Tzu Chi Foundation.

In Japan, land readjustment projects can be implemented by individuals, landowner associations, local governments, administrative bodies, or public corporations, such as the Japan Housing and Urban Development Corporation. The first two categories are classified as private implementers, while the latter three are considered public implementers. Sorensen observed that, in practice, local governments plan and initiate nearly all such projects—even those that are legally designated as association-led projects. In the reconstruction of Kobe, key projects were implemented by the Kobe municipal government, while other projects were carried out by local associations. Alongside these implementing entities, there were "participatory implementers"—machizukuri organizations composed of residents, landowners, and business owners—which served to formulate proposals for the municipal government. In the Takatori Higashi 1 project, the plan was executed through a tripartite collaboration between residents, consultants, and the government. The consultants acted as intermediaries between the residents and the government, facilitating study meetings and

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providing support for the land readjustment process. Furthermore, the residents' council was assisted by urban development experts deployed to the field, as well as by a local advisory office.

While both approaches involve the government, residents, and supporting parties, their organizational structures differ. In Jakarta, implementation relies on central and local governments, with private-sector funding provided through Corporate Social Responsibility (CSR) initiatives; consequently, the process remains dependent on CSR funds, and there is a lack of specific technical guidelines or cost standards for KTV (community-based vertical housing/redevelopment) projects. In Kobe, the implementation structure consists of the municipal government or local associations working alongside residents' organizations, supported by consultants. Another significant difference lies in the timing of the residents' involvement: in KTV projects, formal residents' organizations (such as the PPPSRS—association of apartment owners and residents) typically become active only after construction is complete and ownership rights have been issued, whereas in Kobe, residents' organizations are involved as early as the planning stage. This distinction is relevant to the quality of the agreements reached, as discussed previously. Financing also shapes the roles of the implementing parties. In Kobe, the costs of kukakuseiri (land readjustment) are borne by public institutions with no expectation of financial return a contrast to saikaihatsu (urban redevelopment) projects, which allow for the sale of surplus floor area. In Jakarta, the development in Palmerah was covered by CSR funds from private-sector partners; thus, the program's sustainability hinges on the willingness of these partners rather than on a stable, established financing scheme.

Comparison of Implementation Stages

Minister of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) Regulation Number 12 of 2019 governs the implementation of Konsolidasi Tanah Vertikal(KTV—Vertical Land Consolidation) in four primary stages. The planning stage includes an assessment of spatial planning compliance based on the Detailed Spatial Plan (RDTR), an inventory of socio-economic conditions, the preparation of an environmental impact analysis, preliminary design and cost estimation, and the attainment of at least 60% approval, followed by the formal designation of the project site. The implementation stage encompasses an inventory of physical and legal data; the valuation of land, structures, and vegetation; the calculation of the Proportional Comparison Value (NPP); the development of detailed designs and property descriptions (pertelaan); stakeholder consultations; the relinquishment of land rights; and the formal confirmation of the consolidation objects. The construction and completion stage involves providing temporary relocation and compensation, constructing multi-story residential buildings along with the necessary infrastructure, facilities, and utilities, issuing a collective land certificate (which serves as the basis for individual strata-title ownership certificates, or SHMSRS), and establishing an association of apartment owners and residents (PPPSRS). Oversight is conducted by a Coordination Team through construction monitoring and the evaluation of socio-economic impacts.

In practice, this process is adapted to local conditions. In Palmerah, the stages began with public outreach and securing resident consent, followed by the formal designation of the site via Jakarta Governor’s Decree Number 369 of 2024, the relinquishment of rights and confirmation of consolidation objects, a temporary relocation period of approximately three to four months (supported by a rental subsidy of IDR 500,000 per month), the construction of a four-story building, and finally, the issuance of collective land certificates and individual strata-title ownership certificates (SHMSRS). The rental subsidy, however, falls short of the average actual rental cost of IDR 700,000. Furthermore, as there are no specific technical guidelines for KTV, the implementing parties have had to adapt existing regulations intended for horizontal land consolidation. The process in Tanah Tinggi followed a similar trajectory, albeit with greater social and legal complexity; 12 strata-title ownership certificates (SHMSRS) were handed over to residents on September 27, 2024. In Kobe, the process transitioned from an emergency response phase to collaborative planning with residents. Following the earthquake on January 17, 1995, initial policy directions were announced on January 31, construction restrictions were imposed on February 1, and special legislation for the recovery of

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damaged areas came into effect on February 26. The first phase of the plan was established on March 17, 1995. This initial phase encompassed areas targeted for land readjustment and basic infrastructure, while the second phase covered neighborhood streets and local parks. Between these two phases, residents' councils—such as the one in Takatori Higashi 1, formed on July 2, 1995—were established to develop proposals with the support of experts. The development plan was finalized on November 30, 1995, the land-exchange project was established on August 28, 1996, and the district plan was approved on November 5, 1996. For plots that were too small, cooperative housing (kyōdō tatekae) was utilized as a form of collective reconstruction. A comprehensive comparison of these stages is presented in Table 2.

Table 2. Comparison of the Implementation Stages of KTV in Jakarta and Land Readjustment in Kobe

Stage	KTV in Jakarta	*Land Readjustment in Kobe*
Preparation and dissemination	Assessment of compliance with the Detailed Spatial Plan (RDTR), socio-economic inventory, environmental impact analysis, preliminary design, public outreach, and community consultation.	Earthquake on January 17, 1995; initial policy direction on January 31; construction restrictions on February 1; special legislation on February 26.
Determination	Approval from at least 60% of the participants and 60% of the land area, followed by a Location Determination Decree (in Palmerah: Governor's Decree 369/2024).	Phase one plan, March 17, 1995: main roads, parks, and the target area for land readjustment (124.6 ha).
Involvement and detailed planning	Inventory of physical and legal data, valuation, proportional value (NPP), detailed design, unit breakdown (pertelaan), and deliberation.	Takatori Higashi 1 Community Development Council (July 2, 1995): study meetings with consultants and experts, a layout plan (November 30, 1995), followed by second-phase planning (neighborhood streets and local parks).
Regulation of land rights and land	Relinquishment of rights to become state land on a temporary basis, and confirmation of the object of consolidation.	Land readjustment project (August 28, 1996) and district plan (November 5, 1996); an average 9% reduction in plot size in Takatori Higashi 1.
Development, results, and management	Temporary relocation, construction of low-cost rental apartments (rusun) and public/social facilities (PSU), collective land certificates, strata title ownership certificates (SHMSRS), apartment owners' and residents' associations (PPPSRS), and oversight by a Coordination Team.	Housing reconstruction, including cooperative housing on small plots; the oversight mechanism is not detailed in the sources reviewed.

Source: compiled from Az-zahrah and Asirin, Hein, Cabinet Office, and Shimizu.

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As shown in Table 2, the primary difference lies in the nature of the sequence. The KTV process is sequential and formal: resident consent must be secured before the site is designated, followed by the relinquishment of land rights, construction, and the issuance of new property rights. In contrast, the Kobe approach separates high-level framework decisions made rapidly from detailed planning, which is developed in consultation with residents; this is intended to facilitate early reconstruction while ensuring a resident-oriented development process. In the KTV model, opportunities for resident input primarily occur during the planning and deliberation phases prior to the relinquishment of rights. In the Kobe case, such opportunities are situated between two distinct stages of the planning process. These two structures reflect different contexts, and neither can be deemed superior or inferior to the other without comparable outcome data.

Synthesis and Implications for KTV Implementation

A summary of the comparison across the four aspects is presented in Table 3.

Table 3. Summary Comparison of KTV in Jakarta and Land Readjustment in Kobe

Aspect	KTV in Jakarta	*Land Readjustment in Kobe*
Draft	Structuring land and building tenure vertically for the rejuvenation of dense settlements; converting individual rights into collective land rights and strata-title ownership (SHMSRS); adhering to the principle of "development without displacement."	Land parcel arrangement and infrastructure provision for post-1995 earthquake reconstruction; owners contributed a portion of their land; two-stage planning process; an integration of toshikeikaku (urban planning) and machizukuri (community-based planning).
Securing an agreement	Approval from at least 60% of participants and 60% of the land area is required prior to site designation; this involves outreach, deliberation, and the relinquishment of rights—reaching 100% for the Tanah Tinggi area.	The basic framework is determined by the city; proposals from residents are formulated through a machizukuri (community planning) council; the consent of property owners is not a legal requirement for government-led projects, whereas a two-thirds majority is required for projects initiated by associations.
Executor	Coordination Team (Regional Secretary and Head of the BPN Regional Office), Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN), Jakarta Provincial Government, Buddha Tzu Chi Foundation (CSR), residents, and academics.	The City of Kobe and local associations serve as project implementers, alongside machizukuri organizations (comprising residents, landowners, and business operators) supported by consultants and experts.
Stages	Four stages according to Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) Regulation 12/2019: planning, implementation, development of outcomes, and supervision.	Development restrictions, first-phase planning, formation of a residents' council, proposals, second-phase planning, and project implementation.

Source: Compiled from the discussion in the previous section.

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Based on this comparison, the strengthening of the Kampung Improvement Program (KTV) in Indonesia could focus on several areas. First, resident consent should be distinguished from a consensus reached through mutual understanding. While a 60% approval threshold provides a clear metric, the experience in Tanah Tinggi suggests that even with high levels of consent, there remains a need for mediation regarding inheritance disputes and clear explanations for residents concerned about potential displacement. Second, community organizations could be involved at an earlier stage. In the KTV model, formal resident associations (PPPSRS) typically become active only after construction; however, the experience in Kobe demonstrates the value of forums that gather proposals as early as the planning phase though such forums must ensure fair representation, as accommodating all resident aspirations can remain challenging. Third, the role of consultants or facilitators who act as intermediaries between residents and the government, as seen in Takatori Higashi 1 could be considered as a supplement to the KTV implementation team. Fourth, the implementing body requires support through technical guidelines and a financing structure that does not rely solely on corporate social responsibility (CSR) funds. Fifth, the implementation guidelines should clearly outline each stage of the process including how to address resident objections to ensure that participation extends beyond mere formal consent.

A top-down approach may still be necessary to ensure coordination, policy certainty, and operational capacity—as reflected in the foundational framework decisions in Kobe and the role of the Coordination Team in Jakarta. Nevertheless, this approach must be complemented by bottom-up participation that provides genuine space for residents. These conclusions represent a synthesis of the literature reviewed; they do not imply that the same mechanisms will necessarily yield identical outcomes in every location.

Limitations of the Analysis

This discussion relies on secondary literature, which varies in terms of context and focus. Studies on KTV in Jakarta examine the obstacles to and implementation of the program, whereas sources concerning Kobe focus more on the planning process and community involvement in reconstruction. Information regarding the construction phase and post-project oversight in Kobe is not fully available; consequently, the comparison of these stages in the final section remains incomplete. Future research should examine primary documents and field data including interviews with residents, government officials, and project implementers to explore how consensus was reached, which groups were represented, and whether the proposals put forward by residents actually influenced the final decisions.

4. CONCLUSION

Based on a literature review, the Kawasan Terpadu Vertikal (KTV Integrated Vertical Area) model in Jakarta and the land readjustment model in Kobe share similarities as instruments for urban land management, yet they differ across the four aspects examined. In terms of concept, KTV organizes land and building tenure vertically to redevelop dense settlements through shared land rights, whereas the Kobe model focuses on reconfiguring land parcels and infrastructure for post-earthquake reconstruction. Regarding the attainment of consensus, KTV requires approval from at least 60% of participants (in terms of both the number of individuals and the total land area) prior to site designation, while the Kobe model builds consensus through a two-stage planning process and proposals from machizukuri (community-based urban planning) councils. In terms of implementation, KTV is carried out by the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN), the Jakarta Provincial Government, private partners, and residents; in Kobe, it is managed by the municipal government or local associations, in collaboration with community organizations and consultants. Regarding the procedural stages, KTV follows a four-stage process as mandated by regulation, whereas the Kobe model incorporates space for resident deliberation between the two planning stages.

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These findings indicate that consensus cannot be evaluated solely based on the number of approvals or the existence of a participatory forum; rather, it must also be assessed through the lens of information transparency, security of tenure, representativeness, and the extent to which residents' aspirations are taken into account. The available evidence is insufficient to conclude that one model is more effective than the other, as they operate within different contexts and focus on distinct objectives, making them not entirely comparable. Strengthening the implementation of KTV in Indonesia should focus on engaging residents and community organizations from the initial planning stage; ensuring transparent communication regarding the program's implications for land and housing rights; developing technical guidelines and financing schemes that do not rely exclusively on Corporate Social Responsibility (CSR) funds; and incorporating a formal mechanism to address residents' objections throughout the implementation process. While the machizukuri experience offers valuable lessons, its application must be adapted to local legal, institutional, and social conditions. Further research using comparable field data is required to assess the relationship between agreement mechanisms, the division of roles among implementers, the various stages, and the outcomes of land consolidation implementation.

5. REFERENCES

Aberta, M., N. K. Amrullah dan E. Suharto. 2024. "Konsolidasi Tanah Kasultanan dalam Program Peremajaan Permukiman Kumuh di Kampung Jlagran, Kota Yogyakarta". *Jurnal Pertanahan* 14 (2): 109–130.

Adnan, A. 2021. "Metode Pemilihan Lokasi Penataan Kembali Permukiman Kumuh dengan Konsolidasi Tanah Vertikal di Perkotaan". *Jurnal Pertanahan* 10 (2): 200–220.

Arnstein, Sherry R. 1969. "A Ladder of Citizen Participation". *Journal of the American Institute of Planners* 35 (4): 216–224.

Az-zahrah, Nadia dan Asirin. 2026. "Implementasi Program Konsolidasi Tanah Vertikal untuk Peremajaan Kota yang Adil di Indonesia: Pengalaman dari Palmerah dan Tanah Tinggi di Jakarta". *Technology, Health, and Agriculture Nexus: Conference Series* 2 (3): 249–259.

Cabinet Office, Government of Japan. Tanpa tahun. *Great Hanshin-Awaji Earthquake: Kobe City, Hyogo Prefecture; Earthquake Disaster Reconstruction & Land Readjustment Project of Takatori Higashi Daiichi District*. Nomura Research Institute. Accessed November 3, 2026. https://www.bousai.go.jp/kyoiku/fukko/shisai/pdf/takatori-en.pdf.

Hein, Carola. 2001. "Toshikeikaku and Machizukuri in Japanese Urban Planning: The Reconstruction of Inner City Neighborhoods in Kōbe". *Japanstudien* 13: 221–251.

Keputusan Gubernur Daerah Khusus Ibukota Jakarta Nomor 1333 Tahun 2021 tentang Tim Koordinasi Konsolidasi Tanah.

Kubo, Mitushiro dan Kohei Doi. 2001. "An Evaluation of the Planning Process and Effects in the Reconstruction Land Readjustment Project with Cooperatively Work Approach". *Journal of the City Planning Institute of Japan* 36: 391–396.

Marzuki, Peter Mahmud. 2005. *Penelitian Hukum*. Jakarta: Kencana.

Nakai, Kouji, Osamu Koide, Takaaki Kato, dkk. 2003. "An Actual Conditions of Machizukuri for Restoration in a Land Readjustment Project District in Kobe City: Based on the Analysis of the Activity Reports in the Process to Machizukuri Proposals". *Journal of Architecture and Planning (Transactions of AIJ)* 68: 117–124.

Perangin Angin, E. U. S. dan L. Yola. 2025. *Vertical Land Consolidation Policy for Handling Urban Slum Issue: Case of Jakarta and Pontianak, Indonesia*. U-Bility, Universitas Indonesia. Accessed November 3, 2026. https://dara.ui.ac.id/research-output/8971e3a6-9b79-49e2-9485-fc4aa0becdb8.

Peraturan Menteri Agraria dan Tata Ruang/Kepala Badan Pertanahan Nasional Nomor 12 Tahun 2019 tentang Konsolidasi Tanah.

Multidisciplinary Indonesian Center Journal (MICJO)
Journal page is available to
https://e-jurnal.jurnalcenter.com/index.php/micjo
Email: admin@jurnalcenter.com

Putraningtyas, M. E. L., S. Martini dan T. Rohayati. 2024. "Konsolidasi Tanah untuk Penyelesaian Konflik di Tutupan Jepang dalam Kerangka Reforma Agraria: Studi Kasus Kalurahan Parangtritis, Bantul". *Tunas Agraria* 7 (3): 343–367.

Rachmasari, R., S. Herlambang dan S. Santoso. 2022. "Penataan Kampung Guji Baru dengan Konsep Konsolidasi Tanah Vertikal". *Jurnal Sains, Teknologi, Urban, Perancangan, Arsitektur (Stupa)* 3 (2): 3187–3202.

Rahimah Yusa, Chairunnisa dan Hardi Warsono. 2026. "Implementasi Kebijakan Peningkatan Kualitas Permukiman melalui Konsolidasi Tanah Vertikal di Tanah Tinggi Jakarta Pusat". *Journal of Management and Public Policy* 15 (2): 359–369.

Shimizu, Noboru. 2018. *Recovery from the Great Hanshin-Awaji Earthquake and the Development of Safe Cities*. Presentasi, Kobe City Government, January 24. Accessed November 3, 2026. https://recovery.preventionweb.net/sites/default/files/inline-files/Noboru%20Shimizu%27s%20PPT%20slides%20for%20Panel%20Discussion%202_0.pdf.

Siawsh, N. M. G., K. Peszynski, H. Vo-Tran dan L. Young. 2023. "Toward the Creation of Disaster-Resilient Communities: The Machizukuri Initiative". *International Journal of Disaster Risk Reduction* 96: 103961.

Soekanto, Soerjono dan Sri Mamudji. 2001. *Penelitian Hukum Normatif: Suatu Tinjauan Singkat*. Jakarta: Rajawali Pers.

Sorensen, André. 2000. "Conflict, Consensus or Consent: Implications of Japanese Land Readjustment Practice for Developing Countries". *Habitat International* 24 (1): 51–73.

Tanaka, Yasuzou dan Akiko Kimura. Tanpa tahun. *Housing Problems after the Great Hanshin Awaji Earthquake: Co-Housing and Rebuilding the Community*. Waseda University. Accessed November 3, 2026. https://prj-sustain.w.waseda.jp/kaken2000-01/kaken01-ax4.pdf.

Tatsuki, S. dan F. Kawami. 2023. "Longitudinal Impacts of Pre-Existing Inequalities and Social Environmental Changes on Life Recovery: Results of the 1995 Kobe Earthquake and the 2011 Great East Japan Earthquake Recovery Studies". *International Journal of Mass Emergencies & Disasters* 41 (1): 94–120.

Yustiningrum, Nurlina dan Joko Adianto. 2024. "Study of Various Obstacles to Vertical Land Consolidation for Kampung Improvement Program (Case Study: Pilot Project of Vertical Land Consolidation in Cipinang Besar Selatan, East Jakarta, 2022)". *Smart City* 4 (1): Article 6.

Zweigert, Konrad, Hein Kötz dan Tony Weir. 1998. *An Introduction to Comparative Law*. Edisi ke-3. Oxford: Oxford University Press.