

# Post-implementation Review of Low-income Housing Provision Policy: A Qualitative Study with Executives' Perspective

*Case study: West Java Metropolitan Areas, Indonesia*

Anita Vitriana<sup>1\*</sup> 

*1 Regional Agency for Research and Development, West Java Provincial Government*

\* Corresponding Author, Email: [avitriana@yahoo.com](mailto:avitriana@yahoo.com); [avitriana@jabarprov.go.id](mailto:avitriana@jabarprov.go.id)

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**Abstract:** This study aims to analyse Indonesian housing policies and practices at the local level, focusing on the Metropolitan Area of West Java, Indonesia. Secondary data was obtained from current Indonesian basic regulations in Housing Affairs and Regional Administration Laws, while primary data was collected from interviews with bureaucratic actors from central, provincial, and city/regency governments. Data is processed through qualitative content analysis. The discussion of housing provision for low-income communities refers to self-help and public housing modes. The result shows that the local government's role in self-help housing provision is mostly in supporting quality improvement, which is less effective since the quality was not well-maintained. Local government also has limited authority in public housing provision, raising policy debates and polemics on its field implementation. This study recommends a housing delivery system instead of divisions in authorities. The governments can develop various public-private partnership schemes to support public housing provision. In addition, a clear vertical housing career path is essential to encourage low-income people's acceptance of urban vertical living.

## 1. INTRODUCTION

Providing adequate housing for all remains challenging for most countries, particularly those in the developing world. The issues lead to the housing shortage, which indicates a lack of housing stock. The ever-increasing population has placed more pressure on housing affordability in urban areas. This is the prevailing situation and a burgeoning issue across the majority of Asian countries ([UN-Habitat, 2011](#)). More than half of the slum dwellers in the developing world reside in Asia, with 31 percent of them concentrated in South-Eastern Asia ([Mathur, 2014](#); [UN-Habitat and UNESCAP, 2010](#)).

As Southeast Asia's largest and most populous country, Indonesia has over 270 million people. In 2020, approximately 56.7 percent of Indonesia's population resided in urban areas ([Rizaty, 2021](#)), and only 56.51 percent of households lived in adequate houses. It indicates that 38.9 percent of



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households live in inadequate housing ([Nawasis, 2021](#)). The need for adequate-affordable housing in Indonesia, indicated by the housing backlog, continues to grow. Indonesia's housing backlog was recorded at 4.3 million housing units in 2000, which increased to 7.4 million by 2009. In 2010, the Central Bureau of Statistics released that Indonesia's housing backlog counted 13.5 million units in terms of home ownership ([PPDPP, 2020](#)). This number continues to increase, considering approximately 800,000 new couples need houses annually ([Bahril, 2016](#)). The 2015-2019 National Mid-Term Development Plan emphasises the priority of addressing housing needs by focusing on resolving the housing backlog. It was based on the need for 7.6 million new housing units and an additional 3.4 million existing housing units to improve building quality and access to basic infrastructure utilities ([Directorate of Flat, 2018](#)). Although there have been many housing policies, programs, and financing schemes, the housing backlog remained significant, counting for 11.4 million units in 2015 ([Public Communication Bureau PUPR, 2018](#)) and increasing to 12.75 million units in 2020 ([Pujianto, 2022](#)).

The increasing number of inadequate housing doubled with slum issues, indicates that the running policies and programs are still insufficient to overcome the housing backlog problems ([Rosa, Sulasmi, et al., 2018](#)). The low-income housing policy's effectiveness in Indonesia must be systematically evaluated. Therefore, this paper examines current housing policies and practices to improve low-income housing provision in Indonesian urban areas. The research mainly reviews the implementation of housing policy at local levels. It is crucial to conquer some problems that may arise when dealing with housing backlog issues in a developing country like Indonesia, where each government level possesses distinct authorities.

This research employs a case study approach that focuses on the urban areas of West Java, a province with the largest population in Indonesia. West Java records big numbers of housing backlog but also tremendous urban housing development. It has a 1,225,737 units housing backlog or 8.51 percent of the total number of households ([West Java Provincial Government, 2018](#)). West Java Provincial Regulation no. 12/2014 stated that West Java Province has three metropolitan area development plans: Greater Bandung Metropolitan Area, Bodebekkarpur Metropolitan Area, and Cirebon Metropolitan Area. The total number of housing backlogs in these regions reached 895,255 units, contributing to 73 percent of the housing backlog in West Java. In West Java, the most considerable housing backlog occurs in urban areas, and 93 percent of them originate from low-income households earning below 7 million rupiahs per month ([Prabantarikso, Fahmi, et al., 2018](#)).

Many scholars have discussed housing provision for low-income communities (LICs) in Indonesia, including in the form of a juridical review ([Bramantyo, 2012](#); [Maharani, 2017](#); [Muhtar and Rusli, 2020](#); [Setiawan, 2001](#)) or empirical and case studies ([Izzatusholekha, 2019](#); [Soesilowati, 2007](#); [Sudianing, Widnyani, et al., 2019](#)). Only a few studies examined policy implementation reviews with insider perspectives from intergovernmental bodies. Gaining advocacy through a bottom-up approach is one of the essential processes in policy research. This process is used to build an understanding of the direct impact of policy implementation from inside perspectives ([Rogers, 2007](#)). Hence, this study will contribute to developing a practical knowledge framework for policy review studies encompassing intergovernmental roles.

This research presents a comprehensive study analysing the main regulations in housing affairs administration alongside the perspectives of officials directly involved in implementing housing policies. In addition, this article offers recommendations to address typical obstacles in urban housing provision.

## **2. HOUSING PROVISION FOR LOW-INCOME COMMUNITIES**

### **2.1 An Overview of Various Housing Modes in Indonesia**

In line with developing world phenomena, Indonesia regulates housing provision in several modes. According to Law 1/2011 on Housing and Settlement, Indonesian housing provision modes were categorised as follows: state housing, particular housing, public housing, self-help housing, and commercial housing. Of the five types, only state housing and particular housing are directly provided by the government. Commercial housing hints at housing built by private developers and leads to a provision in gaining profits. Only self-help housing is in the domain of the general public, where about 85 percent of housing supply in Indonesia is provided through self-help schemes ([Darmawan, 2014](#); [Suprijanto, 2004](#)).

As the last mode of housing provision, public housing in Indonesia has a different meaning than is widely used in Western countries. According to Indonesian housing law, public housing is more directed to the dwelling object provided for LICs, regardless of the provider. In this case, public housing in Indonesia has a broader definition, not limited to being solely provided by the state, but can also be executed by other parties ([Suhaeni, 2010](#)).

In Indonesia, the term public housing is intended for housing received facilities and assistance from the government to make low-income housing more affordable. In this case, public housing in Indonesia follows the concept of affordability, which not only determines decent housing prices but is also bound only to a certain level of household income ([Han, Kim, et al., 2021](#)). It refers to governments establishing a housing subsidy scheme for eligible households rather than directly providing housing supply ([Bilal, Meera, et al., 2019](#)). Thus, the government no longer plays the provider role but more to facilitate LICs' access to affordable housing. Nevertheless, the Indonesian government has also built rented public housing in some urban areas. However, the number is insignificant compared to the number of houses built by developers under the public housing scheme.

In summary, at least two housing provision modes can facilitate low-income housing provision in Indonesia. Those include self-help housing and public housing. As self-help housing is in the general public's domain, the government mainly acts as the facilitator. While in the public housing domain, the government plays provider and enabler roles. To that end, the discussion on housing provision for LICs in this paper is focused on these two modes of housing provision.

## **2.2 Low-income Housing Provision Issue: A Comprehensive Discussion**

Housing provision refers to the entire process of housing production, both physical and non-physical ([Ubale, Martin, et al., 2010](#)). The delivery process can be defined as housing provision modes containing a conceptual structure and agency model ([Sulaiman, Baldry, et al., 2005](#)). While housing provision can operate under the market, the state needs to be present because everyone has the right to adequate housing. In this context, the state must regulate housing provisions to guarantee affordable-adequate housing for LICs. State intervention in low-income housing provision is executed through direct housing provision, self-help facilitation programs, and settlement improvement. In some cases, the private sector is also involved in low-income housing provision ([Keivani and Werna, 2001](#)).

A substantial body of literature has examined the implementation of housing provision for low-income communities through self-help housing and public housing initiatives, encompassing both global and local contexts. Self-help housing represents a housing mode firmly rooted within the community domain. [Setiawan \(2001\)](#), referencing Burgess (1985), argued that the self-help housing provision is categorised as a 'double expectation' since it could encourage LICs to depend on their efforts in developing housing, thus allowing the government to 'escape' from its responsibility for community welfare. Many LICs choose this provision mode since other delivery options are out of their reach ([Bredenoord and van Lindert, 2010](#)). However, this housing product is considered rapidly deteriorating in rapid urbanisation and potentially results in inadequate houses. In Indonesia, the limitations of LICs in accessing adequate houses have made them build houses independently ([Rukmana, 2018](#); [Winarno, 2018](#)). Numerous self-help housing initiatives encountered severe issues with housing conditions. Some were even situated in unfavourable environmental conditions, lacking adequate basic infrastructure, which resulted in additional social and technical challenges ([Tunas and Peresthu, 2010](#)). In this regard, self-help houses are often built without complying with technical standards and following disorganised processes. This practice is found in many urban kampongs in Indonesia ([Anindito, Indriansyah, et al., 2019](#)), characterised by its informality ([Dewita, Yen, et al., 2018](#)) and has become a typical phenomenon of urban slums ([Wu, 2016](#)).

The discussion on public housing is still under debate. In some countries, public housing has become the main housing provision system in recent decades ([Jones and Murie, 2006](#); [Yip, 2013](#); [Yuen, 2002](#)), while in other countries, the perception of public housing has shifted towards residuals ([Forrest, 2014](#); [Hirayama and Ronald, 2007](#)). The definition of public housing has evolved, with some considering it as housing solely under the authority of the state, while others include housing provided by parties other than the government, whether rented or owned ([Chiu, 2013](#)). With the increasingly prominent role of the government as a public housing enabler, various models of public housing policy are developed.

In Indonesia, two public housing models are applied: 1) state-owned public rental flats, and 2) self-owned simple houses built by developers, both landed and vertical houses ([Vitriana, 2019](#)). To date, land-based public housing is more prevalent than public flats. In this regard, landed public housing in Indonesia is often viewed more as a commodity than serving its social function ([Ihsan, 2020](#)). This situation may arise because people

perceive landed public housing as having both land asset value and homeownership status ([Rosa, Sulasmi, et al., 2018](#)).

On the other hand, offering public flats poses challenges in comparison to landed houses due to their considerably higher construction costs, resulting in limited interest among developers in engaging in public flats projects. Challenges also arise when the government becomes a public housing provider. The associated costs for supporting public housing continue to escalate, yet the allocated budget for housing is considered significantly below the desired level ([Parmadi, 2018](#)). Comparatively, the Indonesian government allots merely around 0.1 percent of the GDP to the housing sector, which pales compared to other developing countries. For instance, in 2014, neighbouring countries like Thailand and the Philippines allocated 2.21 and 0.31 percent of their GDP to the housing sector, respectively ([Directorate General of Finance, 2015](#)). On the other hand, most governments face difficulties in executing public housing provisions solely with their own funds, mainly due to fiscal constraints ([Mukhija, 2004](#)). Since public housing with full intervention by the state is very costly, this kind of housing supply often has low priority for governments or has shifted towards residuals ([Balchin and Rhoden, 2002](#); [Chen, Man, et al., 2013](#); [Hirayama and Ronald, 2007](#)).

In addition, despite public flats being intended as an alternative housing option for LICs, the majority of low-income Indonesians find vertical housing less appealing ([Indrianingrum, 2016](#); [Mohamad, Yubaidi, et al., 2021](#)). Public flats are often chosen out of necessity due to limited better alternatives ([Setiadi, 2015](#)). They consider rental public flats as 'temporary' homes and do not view public flats as a long-term solution. Frequently, occupants of rental public flats prefer transitioning to owning landed housing once they become financially capable, driven by the clearer concept of ownership and asset status ([Hutapea and Suwandono, 2014](#)).

### 3. METHODS

#### 3.1 Case Study Approach

Following the tradition of case study research, this study utilises mixed qualitative methods. Secondary data collection includes current regulatory documents on housing affairs and regional administration. Primary data was collected through purposive sampling techniques, using personal and group interviews with officials. The three West Java Metropolitan areas are: 1) The Greater Bandung Metropolitan area, comprising Bandung City, Cimahi City, nearly half of Bandung Regency and West Bandung Regency, and small parts of Sumedang Regency; 2) Metropolitan Bodebekkarpur, which includes Bogor City, Depok City, Bekasi City, Bekasi Regency, over half of Bogor Regency, Karawang Regency, and Purwakarta Regency; 3) Metropolitan Cirebon Raya, encompassing Cirebon City, over half of Cirebon Regency, and small parts of Indramayu Regency, Majalengka Regency, and Kuningan Regency. *Figure 1* illustrates the distribution of metropolitan areas in West Java.

Interviews were conducted at various government levels, with emphasis on local authorities, to obtain a comprehensive executive's perspective. The total number of interviews was 31, consisting of 3 with central government agencies, 1 with provincial government agency, 24 with regency/city

government agencies located in the West Java Metropolitan Region, and 3 with other public sectors. The number of interviewees was not predetermined, adhering to the principle of data saturation. The interviewees were coded with pseudonyms (CG = Central Government Agency; PG = Provincial Government Agency; LG = Local Government Agency; OA: Other Agency) and sequential numbers (CG1, CG2, CG3) to preserve their identity. The criteria for selected local government samples are: 1) all city governments in the metropolitan areas, 2) some regency governments, whose areas are characterised by urban activities, 3) ease of access in conducting personal and group interviews. *Table 1* and *Table 2* present the list of interviewees and selected local government representatives in West Java, respectively.

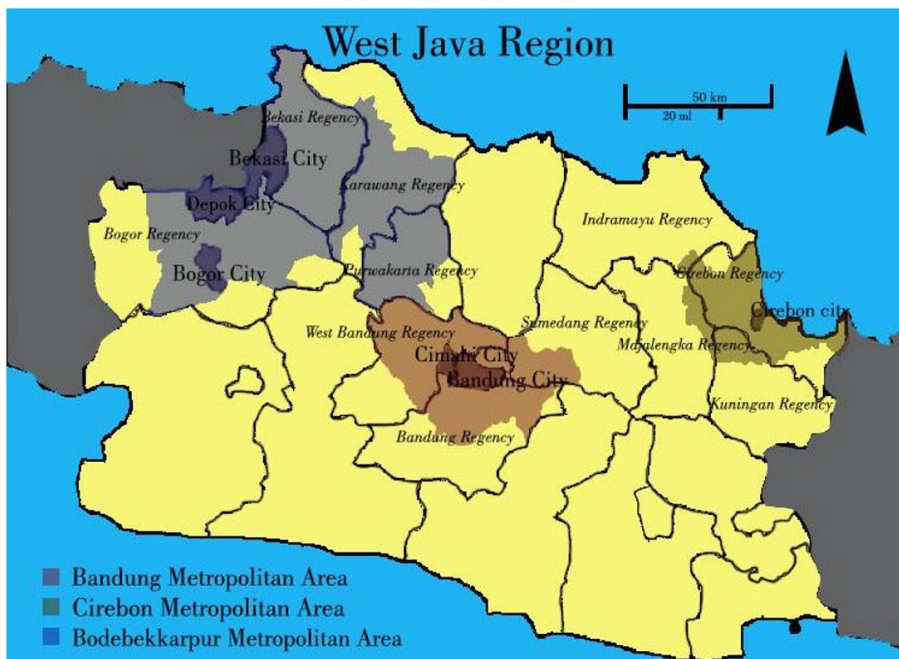


Figure 1. The Metropolitan Areas of West Java

To gain a greater insight into the dynamics of housing provision, the researcher also interviewed representatives from academia and other public sectors with knowledge and experience in managing housing provision in metropolitan areas.

Table 1. List of Interviewees

|   |   |
|---|---|
| <b>Interviewees across Multiple Government Levels (Metropolitan of West Java)</b> | Ministry of Public Works and Housing (3)  |
|   | Housing and Settlement Service - West Java Provincial Government (1)  |
|   | Representative Agencies of Local Governments  |
|   | <ul style="list-style-type: none"> <li>- Regional Planning and Development Agency (7)</li> <li>- Housing and Settlement Service (9)</li> <li>- Spatial Planning Service (6)</li> <li>- One-Stop Integration and Investment Service (2)</li> </ul> |
| <b>Interviewees from Other Institutions</b>                                       | Other Public Sectors and Academia (3)   |

Table 2. List of Cities and Regencies in West Java Metropolitan Areas

| Bandung Metropolitan Area | Cirebon Metropolitan Area | Bodebekkarpur Metropolitan Area |
|---------------------------|---------------------------|---------------------------------|
| Bandung City*             | Cirebon City*             | Bogor City*                     |
| Cimahi City*              | Cirebon Regency           | Depok City*                     |
| West Bandung Regency*     | Indramayu Regency         | Bekasi City*                    |
| Bandung Regency*          | Majalengka Regency*       | Bogor Regency                   |
| Sumedang Regency*         | Kuningan Regency          | Bekasi Regency                  |
|                           |                           | Karawang Regency                |
|                           |                           | Purwakarta Regency              |

Notes: \* Selected local government representatives of West Java Metropolitan Area

### 3.2 Operationalisation of the Research

In this study, the researcher employed an inductive approach by reviewing literature on housing provision issues, encompassing global perspectives and focusing particularly on Indonesia. Subsequently, an in-depth analysis of the two main regulations, Law 1/2011 and Law 23/2014, was conducted. Additional regulations were utilised as supplementary sources to obtain further information derived from the main laws. A list of semi-structured interview questions was formulated based on the literature review and online news sources, focusing on low-income housing provision issues in Indonesia. Data was collected through interviews with representatives of agencies involved in housing affairs. All the conversations are recorded in writing, followed by organising interview transcripts.

In the analysis section, the researcher employed content analysis. The method is valuable for describing the properties of texts/phenomena, providing an integrative view of the text and its related content. This approach offers the advantage of proximity to the data and ensures high reliability through systematic procedures and steps (Renz, Carrington, et al., 2018). One data component method relied on interview notes and coding (Krippendorf, 2004). To analyse the data, I created a coding matrix based on the transcripts, then identified significant meanings through quotations and coding of conversations. The coding process was categorised into government roles, problems, and proposed solutions. To gain insights into the current policy implementation of housing provision mechanisms, I applied the principle of causality in our analysis. Subsequently, the information derived from the coding matrix was interpreted to deepen our understanding of the subject further. Figure 2 and Figure 3 provide an overview of the analysis process.

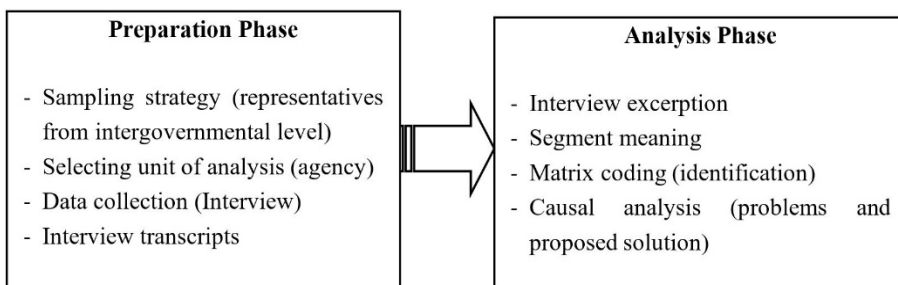


Figure 2. Steps of Qualitative Content Analysis Approach: An Adaptation Scheme (Creswell, 2014; Elo, Kääriäinen, et al., 2014)

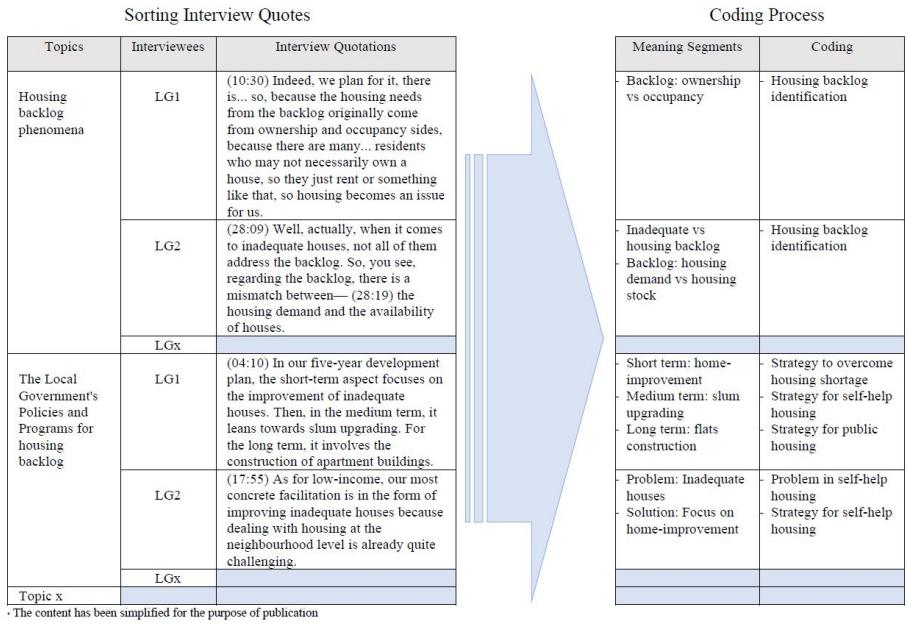


Figure 3. Steps of Coding Process

## 4. RESULT

### 4.1 Regulatory Review: Government Roles in Low-income Housing Provisions in Indonesia

There are at least two primary references in the current Indonesian housing administration, including Law 1/2011 concerning Housing and Settlement and Law 23/2014 concerning Regional Administration. Law 1/2011 explains that the government (central, provincial, and regency/city) is tasked with (i) allocating funds and/or development costs to support low-income housing and (ii) facilitating housing and settlement provision for the communities, especially for low-income households. In addition, regional governments (provincial and regencies/cities) are given the authority to (i) reserve or provide land for low-income housing and (ii) provide infrastructure and facilities for low-income housing.

Table 3. Governments' Tasks and Authorities in Low-Income Housing Provision

| Central Government    | Indonesian Law 1/2011  | Indonesian Law 23/2014   |
|-----------------------|--|--|
|                       | Allocating funds/or budgeting to support housing for LICs                                    | Manage and develop housing finance systems for LICs  |
|                       | Facilitate housing and basic infrastructure provision for the community, especially for LICs | Provide housing for LICs<br>Facilitate housing provision for communities affected by the Central Government relocation program |
|                       |  | Housing provision and rehabilitation for national disaster victims   |
| Provincial Government | Allocating funds/or budgeting to support housing for LICs                                    | -  |



|                         |  |   |
|-------------------------|--|---|
|                         | Facilitate housing and basic infrastructure provision for the community, especially for LICs at the provincial level | Facilitate housing provision for communities affected by the Provincial Government relocation program   |
|                         |  | Housing provision and rehabilitation for provincial disaster victims                                    |
| City/Regency Government | Allocating funds/or budgeting to support housing for LICs  | -   |
|                         | Facilitate housing and basic infrastructure provision for the community, especially for LICs at city/regency level   | Facilitate housing provision for communities affected by the regency/city government relocation program |
|                         |  | Housing provision and rehabilitation for regency/city disaster victims                                  |
|                         |  | Issuance of housing development permits   |
|                         |  | Issuance of home-ownership certificates   |
|                         | Provide assistance to individuals/communities who build self-help housing  | -   |

On the other hand, Law 23/2014 explicitly states that housing provision for LICs is in the domain of the central government. According to Law 23/2014, the central government executes public housing policies, such as providing low-income housing and developing financial support systems that allow LICs to access adequate housing. In contrast, regional governments have no authority in low-income housing provision. The division of roles between the central government and regional governments, as written in Law 23/2014 and Law 1/2011, seems to be contradictory, especially in low-income housing provision. *Table 3* displays the tasks and authorities of the government in providing housing for LICs.

#### 4.1.1 The Governance of Self-help Housing Provision

Referring to Law 1/2011, self-help housing is built by personal or community initiatives and efforts. In practice, governments are not directly involved in new self-help housing development. However, the government can still provide financial assistance in self-help housing development. The government recently launched the Savings-Based Housing Financing Assistance (BP2BT) program for new self-help housing development. While the most prominent government program to support this housing mode is the Self-Help Housing Stimulant Assistance for Inadequate Housing (BSPS-RTLH) program, which is also replicated by provincial and regency/city governments under the name Inadequate Home Improvement Program (Rutilahu). In addition, Regency/City Governments also have tasks in giving advice and technical assistance to the household who want to build self-help housing. The summary of governance in self-help housing provision can be seen in *Table 4*.

Table 4 The Implementation of Government Roles in Self-help Housing Provision

| Government Level        | Built new (first house)  | Home improvement   |
|-------------------------|--|--|
| Central Government      | Direct financial assistance through home saving facilities (Tapera) and Savings-Based Housing Financing Assistance (BP2BT) | Direct stimulant (fund) and technical assistance (BSPS RTLH Program)                         |
| Provincial Government   |  | Direct stimulant (fund) and technical assistance (Provincial Rutilahu Improvement Program)   |
| City/Regency Government | Technical consultations and housing permit   | Direct stimulant (fund) and technical assistance (City/Regency Rutilahu Improvement Program) |

#### 4.1.2 The Governance of Public Housing Provision

According to Law 1/2011, public housing addresses housing provisions dedicated to LICs. Law 23/2014 has strictly limited the authority of public housing provision only to the central government. According to the regulation, the Provincial Government only has the authority to provide houses for people affected by relocation or disasters at the provincial level. Meanwhile, Regency/city governments have a broader role than the provincial governments, considering they hold the authority to issue housing permits.

Table 5. The Implementation of Government Roles in Public Housing Provision

| Government Level        | Government as Enabler  | Government as Provider  |
|-------------------------|--|---|
| Central Government      | Financial Assistance<br>Individual of LIC<br>Direct housing subsidies (SBUM, SSB) and Savings-Based Housing Financing Assistance (FLPP)<br>Home saving facilities (Tapera) and Savings-Based Housing Financing Assistance (BP2BT)<br>Developer<br>Financial assistance on residential infrastructure development | Build rental public flats   |
| Provincial Government   |  | Land provision for provincial rented public flat<br>Management and maintenance of provincial rented public flat         |
| City/Regency Government | Technical consultations, monitoring, and housing permit  | Land provision for city/regency's rented public flat<br>Management and maintenance of city/regency's rented public flat |

The role of the government in public housing provision is performed in two functions: enabler and provider. As a housing provider, the government's task is manifested in renting public flats (Rusunawa).

Although regional governments do not have the authority to provide public housing, they can assist the central government's program. Likewise, the central and regional governments can share authority in constructing public flats. The regional government can acquire land, while the central government does the physical construction.

As public housing enablers, the central government runs several programs. They provide financing assistance for housing units directly to low-income households who purchase adequate-affordable housing built by developers, e.g. Housing Financing Liquidity Facility (FLPP), Down Payment Assistance Subsidy (SBUM), Interest Difference Subsidy (SSB), and Savings-Based Housing Financing Assistance (BP2BT). All housing subsidies are channelled through banks targeting eligible low-income households. In addition, the central government also provides financial assistance to developers who are willing to build public housing. In this program, the city/regency governments support the central government through licensing facilitation, monitoring, and supervision of housing development. In detail, the governance of public housing provision can be seen in *Table 5*.

## **4.2 Executives' Perspective on Low-income Housing Provision: Problems, Regulatory Implementation and Proposed Solutions**

### **4.2.1 Self-help Housing**

As a form of community domain housing, the Indonesian government plays a more passive role in its provision. Although the self-help housing mode accounts for the largest housing supply in Indonesia, it has brought about certain problems. As revealed by LG7, this housing mode was often built without complying with technical standards and in an unorganized manner. Consequently, over time, it potentially grew into inadequate housing. Until now, the Indonesian government has supported self-help housing through home-improvement programs. Interviewee LG16 said that this approach is not enough since the root of the problem starts from the early stages of construction. Another issue stems from the lack of sustainability in housing quality following home improvement. In this regard, the current government programs seem to prioritise short-term physical projects, with less planning for long-term maintenance quality. As a result, the housing quality tends to deteriorate rapidly. Interviewee OA3 stated that home improvement is often considered a "project" since it is not conceptualised within a context of continuity and comprehensive programs. However, interviewee LG16 countered that the declining housing quality is primarily due to poverty, as residents lack the financial means for proper housing.

To improve self-help housing governance, the government should reform the structural concept of self-help housing development by introducing participatory planning, design, and development. Interviewee LG3 suggested community empowerment and the placement of local-based technical assistance facilitators (within sub-districts or urban villages) to address self-help housing issues. Facilitators can establish direct connections with the community, ensuring that self-help housing development is closely monitored and guided to manifest the production of adequate housing. As stated by interviewee LG7, this practice has been implemented by the

Bandung Regency Government, which has implemented a mobile, healthy housing clinic program that offers on-site technical assistance and services for adequate house planning, construction, and maintenance.

Table 6. Self-Help Housing Delivery Issues, Problems and Solutions

| Self-help Housing Issue   | Problems of Implementation   | Solutions for urban self-help housing problems   |
|---|--|--|
| Self-help houses are the forerunners of inadequate housing, and slums | There are no directives and regulatory instruments yet for self-help housing development | There needs to be a change in the structural concept of self-help housing development through participatory planning, design (empowerment), and technical assistance (facilitators) in the regions |
|   | Unsustainable physical quality improvement (the root of the problem is poverty)          | Regulatory support for poor people to access new houses through community empowerment  |
|   |  | The government needs to increase regional investment   |
|   |  | Implementation of a holistic sustainable improvement (socio-economic-physical) program   |
|   |  | There is a need to maintain the quality of housing and settlements with intensified socialisation and community assistance   |

One of the crucial elements in self-help housing reinforcement is the government's assistance program to improve the socio-economic condition of LICs. As explained by LG15, governments can stimulate investment opportunities in regions, thereby contributing to the enhancement of economic conditions for local communities. Housing quality maintenance requires a comprehensive program encompassing socio-economic and physical aspects to improve residents' quality of life. EG8 highlighted the implementation of this concept through the previous Tridaya program in the early 1990s. The program empowered social, economic, and physical improvements, serving as a sustainable settlement enhancement initiative at the local level. *Table 6* summarises self-help housing issues, governance implementation, and proposed solutions.

## 4.2.2 Public Housing

### 4.2.2.1 Government as Enabler of Public Housing

As a public housing enabler, the government provides housing subsidies and facilitates private entities to contribute to public housing provision. The central government facilitates developers by issuing regulations for easier licensing in public housing development and reduced requirements. Local governments are responsible for implementing this regulation and managing licensing affairs in their respective regions. In practice, this policy accelerates urban housing expansion to fringe areas due to the challenges of constructing affordable houses amidst skyrocketing urban land prices. However, the conversion of land use in peri-urban regions occurs rapidly, and local governments lack the ability to control it due to the absence of detailed spatial plans specifically designed for fringe areas. Addressing this concern, interviewee LG9 highlighted the importance of initiating discussions with local governments about streamlining the licensing process for public housing development. This proactive approach allows them to

prepare and anticipate the spatial plan's requirements adequately. Furthermore, easy licensing should not be based on alleviating requirements but on accelerating SOPs housing permits. In this case, local governments possess a better understanding of their regional conditions, and if the requirements are relaxed, there is a concern that it could lead to adverse environmental impacts in the future.

Another solution presented by interviewee LG16 was to create detailed spatial and infrastructure development plans for fast-growing areas. Although there is no obligation to create specific spatial plans for housing, interviewee LG16 suggested that local governments can establish reservation areas for low-income housing through local regulations. In addition, interviewee PG1 highlighted the necessity of establishing an ad hoc government body to manage metropolitan housing. In this case, the provincial government could act as a coordinator among local government housing agencies. One of its tasks would be to ensure that any permits issued to investors or developers who want to develop housing areas must be equipped with adequate housing infrastructure, especially for low-income housing.

The next problem is the lack of institutional support in public housing management. Currently, the government focuses more on the supply side but neglects the secondary public housing market. Interviewee OA3 said that although public housing production is given to the private sector, the management of public housing should be organised and led by the public sector. Likewise, regarding utilisation management, interviewee OA2 stated that public agencies should conduct a selection process for public housing ownership to ensure that the product goes to the eligible people. Public bodies are also needed for secondary market management to avoid falling into the wrong hands. This function is of utmost importance for the state's oversight and control in utilising public housing. As explained by OA2, state involvement does not mean that everything should be executed directly by the government. The governments can establish or appoint an agency directly responsible for managing public housing and its land banking, such as a public developer or national/local-owned enterprises. Otherwise, the government can establish a public service agency (BLU) to manage public housing services. The overview of public housing problems, implementation, and alternative solutions can be seen in *Table 7*.

*Table 7. Government as Enabler of Public Housing: Issues, Problems and Solutions*

| <b>Public Housing Issue</b>                     | <b>Problems of Implementation</b>   | <b>Solutions for urban public housing problems</b>   |
|---|---|--|
| Uncontrolled expansion of landed public housing | Limited authority of local governments in administering other stakeholders involved in public housing | Ease of licensing in the scheme of supporting LIC housing provision should focus on accelerating work according to housing permit SOP and not alleviating requirements   |
| Lack of public housing management               | There are no official institutions that directly engage with public housing delivery                  | It is necessary to establish a state/local institution that is responsible for managing public housing delivery (homeownership and secondary market management) as well as land banking affairs<br><br>Comprehensive roles in the management and supervision of public housing management in metropolitan areas (provincial government as coordinator) |

#### 4.2.2.2 Government as Provider of Public Housing

The Indonesian Government constructs state-owned public housing in the form of urban rental flats to address the housing needs of low-income households residing in urban areas. When the government constructs such housing close to workplaces, it attracts LICs due to cost-saving benefits on transportation and rent. However, public flat is primarily viewed as temporary by LICs, given the greater appeal of landed housing and the limited availability of options for low-income individuals to purchase public flats. According to interviewees PG1 and OA3, the government has not yet implemented a clear career scheme for vertical housing, and the existing regulations are less supportive of public flats development. Moreover, landed houses in the suburbs are significantly more affordable when compared to the prices of owned public flats in urban areas.

Table 8. Government as Provider of Public Housing: Issues, Problems and Solutions

| Public Housing Issue   | Problems of Implementation                                       | Solutions for urban public housing problems  |
|--|--|--|
| There are several barriers for local governments to provide public flats | Limited authority of local governments in public housing affairs | Rules on public housing provision should perform housing delivery system-oriented rather than authority-oriented |
|  |  | Local regulations are needed to initiate the land banking program for public flats                               |
|  |  | Optimise usage of land which belongs to local governments  |
|  |  | Variations on housing delivery mechanism, which involve other stakeholders                                       |
| Shifting living culture (landed to vertical housing)                     |  | A clear framework is required on vertical house ladders  |
|  |  | Assertive regulation to support vertical public housing provision  |

Besides public acceptance, the government encounters numerous obstacles in providing public housing on the production side. Until now, there has been limited developer interest in building flats, and for the government itself, undertaking large-scale flat construction is also a challenging task. The land is an absolute prerequisite for residential development, so the governments must 'reserve land' amid the increasingly limited and expensive urban land. The local government is responsible for acquiring and preparing the land for public flats development. Local governments found this particularly challenging since land for public housing is often inferior to other local government priorities. As a solution, Interviewees LG1, LG5, and LG22 stated that since it is difficult for the government to purchase land for public flats, they can optimise government land assets rather than trying to acquire new land.

Another issue comes from the lack of institutional support for public flats provision. According to most local government informants, their roles in public housing provision are predominantly supportive, as they lack the authority to actively engage in the process. Interviewee OA3 stated that the performance of public housing provision would be optimal if the regulation of housing provision is oriented towards the housing delivery system. In his perspective, the local government can strengthen its authority in the public housing sector by stipulating the authority of local regulations derived from Law 1/2011. However, if they do not want to conflict with Law 23/2014,

local governments can start through a relocation scheme, for example, in the context of the slums upgrading. Suppose the local government cannot provide self-financing, they can make a financing collaboration scheme with the other entities (such as PPP or investment collaboration) or handle the management and supervision. Interviewee LG1 shared an example of collaboration between the Bandung city government and the regional-owned enterprise to build public flats. Interviewee OA1 also shared another example of PPP between the Jakarta government and private sector successfully applied in the Kampung Susun Aquarium development with the motto 'build without eviction'. The overview of public flats problems, implementation, and alternative solutions can be seen in *Table 8*.

## 5. DISCUSSION AND CONCLUSION

As the fourth most populous country globally, Indonesia is an exemplary case for analysing housing policy reviews, particularly due to the prevalent issue of housing shortages worldwide, especially in developing countries. The existing housing policy in Indonesia is directed towards the division of multilevel government authority. In this case, the central government of Indonesia holds solid authority as a housing provider or enabler for LICs. In contrast, local governments have limited authority, only supporting central government programs. The LICs housing provision policy in Indonesia is carried out through the modes of public housing and self-help housing, where self-help housing is considered the most significant contributor to the housing supply in Indonesia.

The current government's role in self-help housing provision is more focused on improving physical quality, which often only lasts for a while. Most self-help housing development occurred "organically" with less government attention. However, the approach of "easing the burden on the government" often lacks standardization and leads to rapid declines in its quality. In this regard, poor-quality housing and settlements are closely associated with poverty ([Zulkarnain, 2016](#)); hence, improving LIC homes must be accompanied by strengthening their economy ([Tutuko, Subagjo, et al., 2018](#)). In this context, empowering informal settlements involves several critical factors, including tenure security, informal economies, and social capital ([Tunas and Peresthu, 2010](#)). A transformative shift is necessary to reform the structural concept of self-help housing delivery, not solely focused on improving existing inadequate houses but commencing from the inception of their construction. Self-help housing demands increased monitoring and support from governments and housing institutions to ensure seamless integration into formal housing policies ([Bredenoord and van Lindert, 2010](#)).

This can be achieved through participatory planning and designing (empowerment) and providing direct technical assistance from facilitators to the communities in the regions.

Public housing provision in Indonesia is still dominated by landed houses with less consideration for their long-term effects on the environment. This kind of housing delivery system has made housing development unsystematic and sporadic. Supposedly, the ease of housing licensing focuses on accelerating the issuance of housing permit SOPs rather than alleviating requirements. Furthermore, due to the lack of authority of local governments, they cannot significantly contribute to public housing provision for their citizens. In this regard, the government needs to improve

the affordable housing delivery system to empower all government levels to give their best efforts to support adequate housing provision for LICs in the spirit of housing affair regulation. In this regard, the central government can collaborate with local authorities to design and implement vertical public housing developments aligned with the housing career concept for community acceptance and effective provision.

Public housing provision creates opportunities for legal entities, including private developers, to participate in its provision. Given the high cost of constructing public flats, the government can explore various models of public-private partnerships, a strategy commonly adopted in developed countries. For example, the South Korea Government developed new experiments in Public-Private Cooperation through 1) a public institution borrowing private land and constructing public housing, 2) a private entity borrowing public land and constructing public housing, and 3) the combined development of public and private housing and private offices on public land ([Jang and Kim, 2013](#)). Another alternative is constructing public housing using conversion funds from private developers engaged in commercial housing development as compensation for their obligation to fulfil balanced housing rules. This approach has been successfully implemented in the construction of Kampung Susun Aquarium Jakarta ([Manurung, 2020](#)).

This study also has limitations. It does not involve actors outside the public sector. This research can be used as a first step in conducting more comprehensive research on housing policy review. Future research should explore more perspectives from broader stakeholders, particularly those involved in previous policymaking, to gain contingency from both top-down initiatives and bottom-up inputs.

## **ETHICS DECLARATION**

The authors declare that they have no conflicts of interest regarding the publication of the paper.

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## **REFERENCES**

Anindito, D. B., Indriansyah, et al. (2019). "A Quantitative Perspective on Kampung Kota: Elaborating Definition and Variables of Indonesian Informal Settlements". *International*



- Review for Spatial Planning and Sustainable Development*, 7(2), 53–74. doi: [https://doi.org/10.14246/irspsd.7.2\\_53](https://doi.org/10.14246/irspsd.7.2_53).
- Bahril, D. S. (2016). “Public Housing Development in Masalahah Perspective, Case Study: Perum Perumnas”. *Analytica Islamica*, 5(2), 217–241.
- Balchin, P., and Rhoden, M. (2002). *Housing Policy: An Introduction* (4th ed.). Routledge, London, New York.
- Bilal, M., Meera, A. K. M., et al. (2019). “Issues and Challenges in Contemporary Affordable Public Housing Schemes in Malaysia: Developing an Alternative Model”. *International Journal of Housing Markets and Analysis*, 12(6), 1004–1027. doi: <https://doi.org/10.1108/IJHMA-11-2018-0091>.
- Bramantyo. (2012). “Efektivitas Regulasi Perumahan Di Indonesia Dalam Mendukung Penyediaan Rumah Bagi Masyarakat Berpenghasilan Rendah (Effectivity of Housing Regulations in Indonesia to Support Housing Provision for Low Income Communities)”. *Widyariset*, 1(15), 243–248.
- Bredenoord, J., and van Lindert, P. (2010). “Pro-Poor Housing Policies: Rethinking the Potential of Assisted Self-Help Housing”. *Habitat International*, 34(3), 278–287. doi: <https://doi.org/10.1016/j.habitatint.2009.12.001>.
- Chen, J., Man, Y., et al. (2013). “The Future of Public Housing: Preface”. In: Jie Chen, Yanyun Man, and Mark Stephens (eds.), *The Future of Public Housing: Ongoing Trends in the East and the West*. Springer, V–XIX.
- Chiu, R. L. H. (2013). “The Transferability of Public Housing Policy Within Asia: Reflections from the Hong Kong-Mainland China Case Study”. In: J. Chen, M. Stephens, and Y. Man (eds.), *The Future of Public Housing: Ongoing Trends in the East and the West*. Springer, 3–12.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Sage Publications, California.
- Darmawan, S. A. (2014). “Concept of Housing Policy for the Poor in Dki Jakarta Province”.
- Dewita, Y., Yen, B. T. H., et al. (2018). “The Effect of Transport Cost on Housing Affordability: Experiences from the Bandung Metropolitan Area, Indonesia”. *Land Use Policy*, 79, 507–519. doi: <https://doi.org/10.1016/j.landusepol.2018.08.043>.
- Directorate General of Finance, M. o. F. (2015). “Peranan Apbn Dalam Mengatasi Backlog Perumahan Bagi Masyarakat Berpenghasilan Rendah (The Role of the State Budget in Overcoming the Housing Backlog for Low-Income Communities)”. *Directorate General of Finance, Ministry of Finance, Indonesia*. Retrieved from [http://www.anggaran.depkeu.go.id/content/Publikasi/Kajian\\_dan\\_artikel/Kajian\\_Peranan\\_APBN\\_dalam\\_Mengatasi\\_Backlog\\_Perumahan.pdf](http://www.anggaran.depkeu.go.id/content/Publikasi/Kajian_dan_artikel/Kajian_Peranan_APBN_dalam_Mengatasi_Backlog_Perumahan.pdf).
- Directorate of Flat, M. o. P. W. a. H. I. (2018). *Performance Report of the Directorate of Vertical Housing*. Jakarta, Indonesia.
- Elo, S., Kääriäinen, M., et al. (2014). “Qualitative Content Analysis”. *SAGE Open*, 4(1), 215824401452263. doi: <https://doi.org/10.1177/2158244014522633>.
- Forrest, R. (2014). “Public Housing Futures”. *Housing Studies*, 29(4), 463–466. doi: <https://doi.org/10.1080/02673037.2014.912867>.
- Han, H., Kim, S., Jin, M. Y., et al. (2021). “Providing Affordable Housing through Urban Renewal Projects in Australia”. *International Review for Spatial Planning and Sustainable Development*, 9(2), 41–61. doi: [https://doi.org/10.14246/irspsd.9.2\\_41](https://doi.org/10.14246/irspsd.9.2_41).
- Hirayama, Y., and Ronald, R. (2007). “Introduction: Does the Housing System Matter?”. In: Hirayama and Ronald (eds.), *Housing and Social Transition in Japan*. Routledge, Abingdon, Oxon, 1–14.
- Hutapea, H., and Suwandono, D. (2014). “New Housing Development Planning and Land Acquisition Strategy for Low-Income”. *Jurnal Ruang*, 2(4), 371–380.
- Ihsan, D. N. (2020). “Menanti Public Housing Di Tanah Negara (Waiting for Public Housing on State Land)”. Retrieved from <https://jeda.id/real/menanti-public-housing-di-tanah-negara-4121> on May 20, 2020.
- Indrianingrum, L. (2016). “Home Ownership Plans for Low-Income Communities (Case Study of Kelurahan Tanjungmas, Semarang City)”. *Jurnal Teknik Sipil Dan Perencanaan*, 18(1), 15–20. doi: <https://doi.org/10.15294/jtsp.v18i1.6690>.
- Izzatsholekha. (2019). “Implementasi Kebijakan Kawasan Pemukiman Dalam Mendukung Pembangunan Berkelanjutan Di Kota Tangerang Selatan (Implementation of Housing and Settlement Policy in Supporting Sustainable Development of South Tangerang City)”. *Kajian Ilmu Sosial*, 30(1), 85–106.
- Jang, Y.-H., and Kim, S.-H. (2013). “New Experiments in Public Housing Supply in Seoul, South Korea: The Possibilities and Limits”. *The Future of Public Housing: Ongoing Trends in the East and the West*. Springer, 123–142.

- Jones, C., and Murie, A. (2006). *The Right to Buy: Analysis & Evaluation of a Housing Policy* (1st ed.). Blackwell Publishing Ltd, Oxford, England.
- Keivani, R., and Werna, E. (2001). "Modes of Housing Provision in Developing Countries". *Progress in Planning*, 55(2), 65–118. doi: [https://doi.org/10.1016/S0305-9006\(00\)00022-2](https://doi.org/10.1016/S0305-9006(00)00022-2).
- Krippendorff, K. (2004). *Content Analysis: An Introduction to Its Methodology* (Fourth Edition). Sage Publications, California.
- Maharani, S. (2017). "Pembangunan Perumahan Dengan Hunian Berimbang Bagi Pemenuhan Kebutuhan Rumah Untuk Masyarakat Berpenghasilan Rendah (Development of Balanced Residential Housing to Meet Housing Needs for Low-Income Communities)". *Jurnal Penelitian Hukum Legalitas*, 9(1).
- Manurung, M. Y. (2020). "Biaya Kampung Susun Akuarium Rp 62 Miliar, Ini Sumber Dananya (Aquarium Flats Cost Rp 62 Billion, This Is the Source of Funding)". *Tempo.Co*. Retrieved from <https://metro.tempo.co/read/1376840/biaya-kampung-susun-akuarium-rp-62-miliar-ini-sumber-dananya> on July 26, 2023.
- Mathur, O. P. (2014). *Urban Poverty in Asia*. Asian Development Bank, Mandaluyong City.
- Mohamad, M., Yubaidi, R. S., et al. (2021). "Measuring the Low-Income Earner on Housing Access in Urban Areas of Indonesia and Malaysia". *Hasanuddin Law Review*, 7(2). doi: <https://doi.org/10.20956/halrev.v7i2.2876>.
- Muhtar, E. A., and Rusli, B. (2020). "Housing and Settlement Development in Indonesia." *International Journal of Engineering Research and Technology*, 13(12), 5400–5407.
- Mukhija, V. (2004). "The Contradictions in Enabling Private Developers of Affordable Housing: A Cautionary Case from Ahmedabad, India". *Urban Studies*, 41(11), 2231–2244. doi: <https://doi.org/10.1080/0042098042000268438>.
- Nawasis. (2021). "Rejuvenation of Slums in Indonesia (Peremajaan Permukiman Kumuh Di Indonesia)". *National Water & Sanitation Information Services*.
- Parmadi, A. A. N. A. G. (2018). "Implementasi Kebijakan Program Rumah Bersubsidi Di Kecamatan Banjar Kabupaten Buleleng (Policy Implementation of the Subsidized House Program in Banjar Sub-District, Buleleng Regency)". *Public Inspiration: Jurnal Administrasi Publik*, 3(1), 34–45.
- PPDPP. (2020). "Backlog Concept." *Minister For Public Works and Housing*. Retrieved from <https://ppdpp.id/konsep-backlog/> on August 11, 2020.
- Prabantarkiso, M., Fahmi, I., et al. (2018). "Strategic Collaborative Model of BGAC+ for Sustainable Housing Development in Indonesia". *IOP Conference Series: Earth and Environmental Science*, 145(1). doi: <https://doi.org/10.1088/1755-1315/145/1/012128>.
- Public Communication Bureau PUPR, I. (2018). "The Need of Stakeholder Contributions to Guard the Achievement of the One Million Housing Program (Kontribusi Pemangku Kepentingan Diperlukan Untuk Kawal Tercapainya Program Satu Juta Rumah)." *Bpkp.Go.Id*. Retrieved from <https://www.bpkp.go.id/berita/read/19421/0/Kontribusi-Pemangku-Kepentingan-Diperlukan-Untuk-Kawal-Tercapainya-Program-Satu-Juta-Rumah.bpkp> on August 10, 2022.
- Pujianto, E. (2022). "Overcoming the Housing Backlog, the Government Needs to Provide Solutions from up to Downstream (Atasi Backlog Perumahan, Pemerintah Perlu Berikan Solusi Dari Hulu Sampai Hilir)". *Indonesianside.Id*. Retrieved from <https://indonesianside.id/ekonomi/2022/07/15/atasi-backlog-perumahan-pemerintah-perlu-berikan-solusi-dari-hulu-ke-hilir> on August 7, 2022.
- Renz, S. M., Carrington, J. M., et al. (2018). "Two Strategies for Qualitative Content Analysis: An Intramethod Approach to Triangulation". *Qualitative Health Research*, 28(5), 824–831. doi: <https://doi.org/10.1177/1049732317753586>.
- Rizaty, M. A. (2021). "Sebanyak 56,7% Penduduk Indonesia Tinggal Di Perkotaan Pada 2020 (56.7% of Indonesia's Population Live in Urban Areas in 2020)". *Katadata.Co.Id*. Retrieved from <https://databoks.katadata.co.id/datapublish/2021/08/18/sebanyak-567-penduduk-indonesia-tinggal-di-perkotaan-pada-2020> on October 3, 2021.
- Rogers, P. J. (2007). "Theory-Based Evaluation: Reflections Ten Years On". *New Direction for Evaluation*, (114), 63–81.
- Rosa, Y., Sulamsi, S., et al. (2018). "Development of a Housing Provision and Financing Model for Low-Income Communities (Mbr). Sub-Activity Ii: Housing Career System Model."
- Rukmana, D. (2018). "Upgrading Housing Settlement for the Urban Poor in Indonesia: An Analysis of the Kampung Deret Program". In: Grant, Liu, et al. (eds.) , *Metropolitan Governance in Asia and the Pacific Rim: Borders, Challenges, Futures*. Springer Singapore, Singapore, 75–94.
- Setiadi, H. A. (2015). "Analisis Faktor Berpengaruh Terhadap Kepuasan Penghuni Rumah Susun Sewa Studi Kasus Rumah Susun Sewa Kemayoran (Analysis of Influential Factors

- on Occupant Satisfaction of Rental Public Housing, Case Study of Kemayoran Flats)". *Jurnal Permukiman*, 10(1), 19–36.
- Setiawan, B. (2001). "Housing Policy for Indonesia: Market Enabling or Community Enabling?". *Journal of Regional and City Planning*, 12(4), 210–222.
- Soesilowati, E. (2007). "Kebijakan Perumahan Dan Permukiman Bagi Masyarakat Urban (Housing and Settlement Policy for Urban Communities)". *Ekonomi Dan Manajemen*, 16, 1–17.
- Sudianing, N. K., Widnyani, I. A. P. S., et al. (2019). "Implementasi Kebijakan Rumah Bersubsidi Bagi Masyarakat Berpenghasilan Rendah Di Kabupaten Buleleng (Policy Implementation on Subsidized Houses for Low-Income Communities in Buleleng Regency)". *Locus Majalah Ilmiah FISIP*, 11(1), 116–132.
- Suhaeni, H. (2010). "Tipologi Kawasan Perumahan Dengan Kepadatan Penduduk Tinggi Dan Penanganannya (Typology and Management of High Density Residential Areas)". *Jurnal Permukiman*, 5(3).
- Sulaiman, N., Baldry, D., et al. (2005). "Modes of Formal Housing Provision in Malaysia," Proceeding of the European Real Estate Society. ERES: Conference, 1–22.
- Suprijanto, I. (2004). "Policy Reform and Strategy of Housing Settlement Management". *DIMENSI (Jurnal Teknik Arsitektur)*, 32(2), 161–170.
- Tunas, D., and Peresthu, A. (2010). "The Self-Help Housing in Indonesia: The Only Option for the Poor?". *Habitat International*, 34(3), 315–322. doi: <https://doi.org/10.1016/j.habitatint.2009.11.007>.
- Tutuko, P., Subagijo, E., et al. (2018). "The Planning and Design of Residential Facilities in Poor Areas with Limited Land". *International Review for Spatial Planning and Sustainable Development*, 6(3), 22–36. doi: <https://doi.org/10.14246/irspsd.6.3.22>.
- Ubale, M. Y., Martin, D., et al. (2010). "The Current Practices of the Malaysian Formal Low Cost Housing Provision System". Proceedings International Conference of Technology Management, Business and Entrepreneurship 2012, 211–237.
- UN-Habitat. (2011). *Affordable Land and Housing in Asia*, Vol. 2. UN-Habitat, Nairobi, Kenya.
- UN-Habitat, and UNESCAP. (2010). *The State of Asian Cities*. Fukuoka, Japan.
- Vitriana, A. (2019). *Sistem Penyediaan Perumahan Dan Infrastruktur Permukiman Di Kawasan Metropolitan Jawa Barat (Housing and Settlement Infrastructure Delivery System in West Java Metropolitan Area)*. Bandung, Indonesia.
- West Java Provincial Government, I. (2018). *Theoretical Studies and Empirical Practice*, Bandung.
- Winarno, B. (2018). "Evaluasi Program Penyediaan Rumah Layak Huni Bagi Masyarakat Miskin Di Kabupaten Belitung (Evaluation of Provision of Adequate Housing Program for the Poor in Belitung Regency)". *Jurnal Pengembangan Kota*, 6(1), 66–74. doi: <https://doi.org/10.14710/jpk.6.1.66-74>.
- Wu, F. (2016). "Housing in Chinese Urban Villages: The Dwellers, Conditions and Tenancy Informality". *Housing Studies*, 31(7), 852–870. doi: <https://doi.org/10.1080/02673037.2016.1150429>.
- Yip, N. M. (2013). "Challenges to Public Housing in Post-Colonial Hong Kong". In: J. Chen, Stephens, and Man (eds.), *The Future of Public Housing: Ongoing Trends in the East and the West*. Springer, 65–83.
- Yuen, B. (2002). "Singapore". In: Agus, Doling, et al. (eds.), *Housing Policy Systems in South and East Asia*. Palgrave Macmillan, Hampshire, 38–59.
- Zulkarnain. (2016). "Implementation of Self-Help Housing Stimulant Assistance Policy in South Parigi District". *Katalogis*, 4(10), 52–63.