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# The Influence of Resident's Income Level on Rusunawa Perceptions of Satisfaction, Convenience, and Management

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# **ABSTRACT**

The increasing population growth rate causes a city to face the problem of limited land for residential development. Housing is a fundamental demand of the community that must be fulfilled, especially for low-income people. Through the construction of flats named Rusunawa, the government tries to fulfill the demand for decent housing and anticipates the emergence of slum settlements. In its development, there are Rusunawa whose management is not optimal in maintenance which results in unkempt conditions and causes residents to not get satisfaction and convenience in occupying housing. This study aims to analyze the level of satisfaction, the convenience of residents, and the management of Rusunawa. It is based on the income level of residents and identifies strategies for service improvement of Rusunawa management. This study uses primary data to obtain the level of satisfaction, comfort, and management of flats based on income levels. The data collected is preliminary data consisting of data from questionnaires to the residents of the apartments and data from interviews with the Rusunawa management agency. The method in this study uses a mixed method based on qualitative methods with interview techniques and quantitative methods with survey techniques (questionnaires). The results show that there is a significant difference in the level of building convenience based on the income level of the residents of the Rusunawa. The management of the Rusunawa has not reached its maximum goals related to implementing the Rusunawa regulation. Runaway development programs are required, such as providing counseling, participating in social activities regarding environmental care, and conducting socialization with residents, especially the priority aspects of unique flats for low-income communities.



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# 1. Introduction

The increasing growth rate causes a city to face the problem of limited land for residential development. Housing is a primary demand of the community that must be fulfilled. Problems that occur during housing development tend to increase demand or needs and land supply, which makes house and land prices higher. Lowincome communities make the need for healthy, livable housing a necessity that is difficult to obtain, so the government has a flat construction program to help these communities' needs (According to the Regulation of the State Minister of Public Housing No. 14/PERMEN/M/2007) [1].

The purpose of building flats is to become a livable, healthy, convenient, and economical housing option. Convenience is needed so that residents of flats can conveniently carry out activities in the home. Over time, with poor management and maintenance, the livability of flats will decrease [2]. The budget constraints that generally underlie the non-implementation of building maintenance will further affect the level of satisfaction with living [3].

In its development, there are still flats named "Rusunawa" whose management is not optimal in maintenance, resulting in conditions becoming slum and unkempt and can cause residents not to get satisfaction and convenience in occupying housing. Many Rusunawa are in poor condition, and the building infrastructure is no longer said

\*Corresponding author. E-mail: arief\_sbn@ugm.ac.id to be suitable for occupancy, such as Rusunawa Putri Cempo in Mojosongo Village, which has a less strategic location because it is close to landfill activities (TPA), near pig farms and locations that tend to be isolated. The poor condition of Rusunawa indicates that the location selection of Rusunawa Putri Cempo is outside the theory or objectives set [4]. In addition, through Rusunawa Semeru, the Probolinggo City Government is expected to provide convenient and decent housing to improve the quality of life of Rusunawa residents. However, the function of the Rusunawa has yet to be achieved because it only looks at the physical form of the Rusunawa without looking at the perceptions and needs of the infrastructure facilities of the residents. The infrastructure facilities are not optimal because they are not maintained, and the management still needs to be optimised [5].

Similar cases also occurred in two Rusunawa in Cilacap Regency. The Central Bureau of Statistics noted that the population of Cilacap in 9 years increased by 188,722 people, from 1,748,705 people in 2010 to 1,937,427 people in 2019 [6]. With the relatively large population growth, the Cilacap Regency government built two Rusunawa. However, due to the condition of the infrastructure, there is damage in several parts, such as roof leaks, some rooms are not maintained until they cannot be occupied, and facilities for the elderly and disabled are. In addition to infrastructure, management aspects experience problems, including financial management, limited flat officers, and maintenance mechanisms that require improvement. These can also affect convenience and satisfaction, thus affecting the quality of life of residents.

Given the condition of the Rusunawa, which is not in line with the purpose of Rusunawa development, this study aims to determine whether there are differences in the level of satisfaction and comfort of residents based on income levels and to analyse the level of satisfaction and convenience of residents and Rusunawa management so that the results of this study can be used as a recommendation for related parties in managing Rusunawa to be in line with the government's goal of meeting housing needs for low-income people.

### 1.1 Rusunawa

Flats named Rumah Susun Sederhana Sewa (Rusunawa) is a building built by the government with a target for Low-Income Communities that do not have fixed income [7]. Rusunawa is a multi-story building built in an environment divided into functionally structured parts (in horizontal and vertical directions) and is a unit of each used separately.

The status of control is rent. It is built using the State Budget (APBN) and or Regional Budget (APBD), with its primary function as housing (Regulation of the State Minister of Public Housing No. 14/PERMEN/M/2007) [1].

Flat construction aims to meet social and economic needs to support the lives of residents by prioritizing the goal of fulfilling housing needs and decent settlements, especially for low-income people (Law No. 20 of 2011) [8].

### 1.2 Income Level

Income is revenue derived from the normal activities of an entity and refers to different terms such as sales, service revenue, interest, dividends, and royalties [9].

Based on its classification, the Central Bureau of Statistics (BPS) in 2021 divided people's income into four categories [10]: (1) People with very high incomes have an average income of more than Rp3,500,000 per month; (2) People with high incomes have an average income between >Rp2,500,000 to Rp3,500,000 per month; (3) People with medium incomes have an average income between >Rp1,500,000 to Rp2,500,000 per month; (4) People with low incomes are those with an average income under Rp1,500,000 per month.

# 1.3 Satisfaction of Flat Residents

Resident satisfaction is a series of the fulfilment of Flat indicators, including rental rates, quality of service by the management agency, building quality, location quality, completeness of facilities and infrastructure, and management [11]. The level of satisfaction of flat residents is directly proportional to the physical and non-physical characteristics of the flat such as good building quality, complete and maintained infrastructure and good communication between residents and managers [12].

Aspects of flat residents' satisfaction are related to fees, management, building quality, completeness of facilities and infrastructure, social capital, and location quality [13]. Resident satisfaction with flat management indicators positively correlates with the quality of service by the management organization and assertiveness in applying the rules [12]. The better the facilities provided, the stronger the positive correlation with the residents' satisfaction level with the flat [14].

# 1.4 Convenience of Flat Residents

According to Law No. 28 of 2002 [15] concerning building buildings, the building convenience requirements consist

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of the convenience of movement space and inter-space relationships, indoor air conditions, views, vibration levels and noise levels.

Living comfort is closely related to the circulation flow between spaces. The relationship between spaces in a building environment is arranged in such a way as to produce aesthetic beauty that can bring pleasure to everyone who sees it [16]. Residential comfort includes circulation, climate and natural forces, noise, scents and odours, form, safety, cleanliness, beauty, and lighting [16].

# 1.5 Rusunawa Management

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According to the Regulation of the State Minister of Public Housing No. 14/PERMEN/M/2007 [1] on the Management of Rusunawa, chapter I article 1, paragraph 3 states that management is an integrated effort carried out by the management body for state or regional property in the form of Rusunawa by preserving the function of Rusunawa which includes planning policies, procurement, use, utilization, security and maintenance, assessment, elimination, transfer, administration, guidance, supervision, and control of Rusunawa.

### 2. Methods

The research was conducted on two Rusunawa in Cilacap Regency. The research used mixed methods, combining qualitative and quantitative approaches [17]. Through mixed methods, it is expected that more comprehensive and objective data will be obtained [18].

Qualitative data was obtained through interview techniques using the McKinsey 7s Framework method [19]. The Rusunawa manager gave the questionnaire to the Head of the Technical Implementation Unit of Rusunawa of the Housing, Settlement, and Land Agency of Cilacap Regency. The questionnaire was given to a sample of 80 respondents.

The quantitative data results were analyzed with the help of the SPSS 16.0 program for:

- a) Descriptive Statistics Test and Frequency Distribution Test
- b) Crosstab
   The income category was crossed at this stage with building comfort, living comfort, and manager performance satisfaction.
- c) One-Way ANOVA Test

This test is conducted to see if there is a difference between income levels on building comfort, living comfort, and manager performance satisfaction. If the analysis results show the Sig level <0.005, then there is a difference between income levels on building comfort, living comfort, and manager performance satisfaction.

- d) Qualitative Descriptive Analysis with McKinsey 7s Framework method [19].
- e) Concurrent analysis of qualitative and quantitative data in a balanced manner referring to the concurrent triangulation model [17].

### 3. Results

#### 3.1. Rusunawa Profile

This study uses data sourced from interviews with the Head of the Rusunawa Technical Implementation Unit and the results of questionnaires to residents of the Rusunawa. The Rusunawa in this study are Rusunawa Tegalkamulyan and Rusunawa Pandanarang Cilacap. The profiles of the two objects of this research, namely Rusunawa Tegalkamulyan and Rusunawa Pandanarang are presented in Table 1.

# 3.2 Rusunawa Management

Based on the results of the manager interview using the Mc. Kinsey 7s framework can be formulated as follows:

### a) Policy strategy

The Head of the Cilacap Rusunawa Task Force Unit said that the management of the Rusunawa is carried out under the (Standard Operating Procedure) written in the Regent's Regulations and Regional Regulations. One of the management development plans is to use the occupant administration payment application in 2022.

# b) Regulation system

Rusunawa management guidelines are based on Cilacap Regency Regional Regulation No. 4 of 2012 [20] concerning the management of Retribution for the Use of Regional Wealth, which is amended by Cilacap Regency Regional Regulation No. 17 of 2018 [21] concerning Changes in Rusunawa Tenant Rental Rates. Provisions for employee management are listed in Government Regulation No. 53 of 2010 [22]. Other provisions in the management of Rusunawa are outlined in the lease agreement and rules that apply bindingly to all residents.

Table 1. Rusunawa profile

Description	Rusunawa I	Rusunawa II	
Fiscal year	2006 and 2009	2012	
Total occupancy	192 units (Block A, B, C, D)	192 units (Block A, B, C, D)	
Room type	Type 21	Type 21	
Number of floors	4 floors	4 floors	
Number of employees	12 employees	12 employees	
Employee salary	Rp. 1,300,000.00	Rp. 1,300,000.00	
Facility	Bedroom, bathroom, kitchen, living	Bedroom, bathroom, kitchen, living	
	room, and drying room	room, and drying room	
Target	Fisherman and low-income people	Low-income people	

Evaluation of Rusunawa governance is carried out in stages from the Head of The Technical Implementation Unit to his staff, the Head of Service to the Head of the Technical Implementation Unit, and the Regent to the Head of Service in a routine period per year.

### c) Organizational structure

Structurally, the Rusunawa is managed by the Cilacap Regency Rusunawa Technical Implementation Unit, which carries out the implementation function under the Cilacap Regency Housing and Settlement Area Office. As for partner institutions or cooperation by the Technical Implementation Unit of Rusunawa with PLN in meeting electricity supply needs. In reality, there are still obstacles in communication and coordination with the structure above or related units in the field.

# d) Budget and financing

Management funds come from the Regional Revenue and Expenditure Budget (APBD). The source of development funds comes from the State Budget (APBN). Electricity and water costs, excluding water, are not included in the rental fee. Rusunawa I uses postpaid electricity. Rusunawa II uses a token pulse. The electricity bill in general for general needs such as corridors, parks, roads, and offices is included in the master budget of around three to five million rupiahs per month.

The manager undertakes revenue reports and reports financial accountability to the Head of the Regional Financial Management Agency (BPKD) every month and the Cilacap Regent every year.

### e) Human Resources

In the flat management, there are 25 officers for both Cilacap Rusunawa. The 25 officers are said to be more sufficient to manage the Rusunawa because 10

of these 25 officers are security officers and only one person per shift (at 07.00-15.00, at 15.00-23.00, and 23.00-07.00). The management officer has received training in Rusunawa management. For service hours every day from 08.00-15.30 WIB.

### f) Culture

Rusunawa has a series of values and norms that have become the vision and mission of the Rusunawa. As a value used as a vision for Rusunawa, namely the realization of a livable, economical, and community-based Rusunawa. While the missions owned by the flat include providing adequate Rusunawa infrastructure and facilities for the needs of Low-Income Communities, creating maximum services at affordable prices, implementing a healthy, safe, and harmonious residential environment arrangement

# 3.3 Residents' Convenience and Satisfaction Level Based on Income

The number of Rusunawa residents is 336 residents. The sampling technique uses nonprobability sampling (quota sampling technique), and the sampling calculation uses the Slovin formula with a total sample of 80 residents of Rusunawa. The respondents who were heads of households were 66 residents (82.5%), and housewife were 14 residents (17.5%). According to the Central Bureau of Statistics theory, research data decision-making was analyzed based on income levels. The number of respondents is shown in Table 2.

Table 2. Respondent Data

Category	Number of	Percentage
	Respondent	(%)
Low-income	29	36.25
Medium-income	45	56.25
High-income	6	7.50

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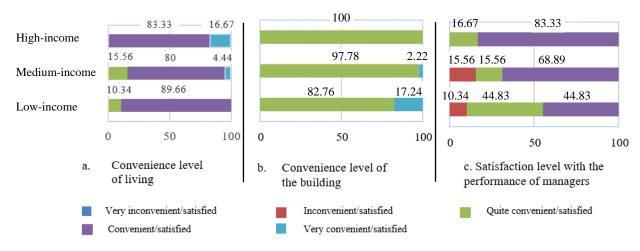


Figure 1. Crosstab analysis results

Based on Table 2, 36.25% of respondents were in the lowincome category, 56.25% were in the medium-income category, and 7.5% were in the high-income category.

### **Crosstab Analysis**

Crosstab analysis was carried out on the level of convenience of living, building, and satisfaction level, namely cross-tabulation by crossing between two groups of category data, namely the category of living comfort level, building convenience level, and satisfaction level with income category. The following analysis results are in Figure 1.

Based on Figure 1 (a), residents have a relatively good level of convenience living in Rusunawa. Based on the data, the higher the income level of residents, the higher the perceived convenience of living. This result is in line with Maslow's opinion that security is part of basic human needs after fulfilling their physical needs [23]. Based on this description, the sense of security and convenience obtained by residents with a high-income category is due to adequate availability. High-income residents have adequate financial availability, so they feel more comfortable living in Rusunawa compared to low-income residents who are relatively financially inadequate.

Based on Figure 1 (b), most respondents at the building convenience level have sufficient comfort, and the higher the residents' income level, the lower the perceived building convenience. In line with the opinion expressed by Maslow that the most basic needs of individuals are physiological needs such as shelter, in this case, Rusunawa, individuals with the fulfilment of the most basic needs are motivated to assess elementary things such as the shape of the building [24].

It shows that low-income residents in assessing convenience, focus on aspects of physiological elements such as buildings.

Figure 1 (c) shows that the higher the income level of residents, the greater the level of residents' satisfaction with the managers' performance. Specifically, based on the analysis, residents are satisfied with the performance of employees. One of the factors of occupant satisfaction is the quality of service or service. Namely, consumers are satisfied if they get service that matches their expectations [25]. The results of this study align with the research findings that socio-economic characteristics affect residential satisfaction, and that the management of a residence is an essential variable for the fulfilment of the satisfaction of its residents [26].

### **Hypothesis Test**

Anova hypothesis test was conducted to determine whether there is a difference in the level of comfort and satisfaction of residents based on income level. The research hypothesis is as follows.

Ho: The level of living convenience, building and satisfaction is the same based on income level.

Ha: There is a difference in living convenience, building and satisfaction based on income level.

With the basis of the decision from the ANOVA test: (1) If the resulting significance value> 0.005, Ho is accepted, and Ha is rejected; (2) If the resulting significance value <0.005, Ho is rejected, and Ha is accepted.

Table 3. ANOVA Test Results

Description	Sig.	Hypothesis
Convenience level of living	0.265	Ho accepted
Convenience level of the	0.043	Ho rejected
building		
Satisfaction level	0.253	Ho accepted

The results of hypothesis tests, as shown in Table 3, show no difference in living comfort and satisfaction level based on income. However, there is a significant difference in building convenience based on income. The primary need that distinguishes each income level is building convenience. Residents with high incomes have needs related to building conditions that are better than the current condition of the Rusunawa building. While residents with low income already feel comfortable with the current condition of the Rusunawa building, considering that residents with low income originally only lived in houses. Low-income residents originally only lived in less permanent houses and currently occupy permanent buildings in Rusunawa. So, there is a difference between high and low-income residents regarding the convenience of the building.

### 3.4 Flat management based on income level

The results of the analysis of Rusunawa management based on the income level of residents were analyzed using frequency and descriptive analysis. The analysis of Rusunawa management is intended to see the extent of residents' perceptions at each income level of the overall management of Rusunawa. The analysis results are divided into three parts, including the regulation of living in Rusunawa, Rusunawa financing, and the condition of the Rusunawa building.

# Regulations of living in Rusunawa

As a collective residence, Rusunawa has regulations or a series of systems that need to be considered to implement the objectives of Rusunawa.

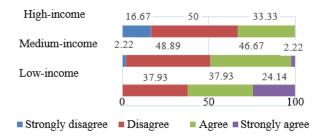
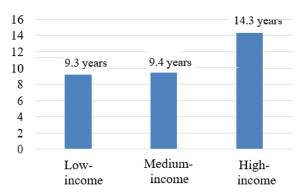


Figure 2. Residents' perceptions of living restrictions

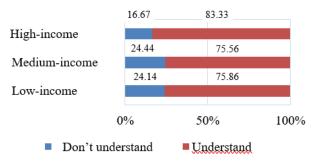
The analysis results in Figure 2 show that low-income residents are relatively compliant with the regulations on residence permit restrictions when compared to highincome residents. The awareness of the residence limit that has been set in the regulation for the realization of the Rusunawa order arises from the group of residents in the low-income category. Thus, high-income residents are more likely to be egocentric in viewing Rusunawa policies related to residence permit restrictions, so it is necessary to develop social care for residents, especially those with high income, to have an awareness of their relationship with other individuals and realize feelings, agreements, and mutual expectations that prioritize individual desires, tolerance is well conveyed to residents who in time fosters economic awareness for residents. With this fact, each resident can identify themself from the aspect of income related to whether or not it is appropriate to live in the Rusunawa [27].



**Figure 3.** Average graph of residents' perceptions related to Rusunawa authorization

Based on Figure 3, the data shows that the higher the income, the longer the perception of staying. The analysis results show that income level does not guarantee awareness of the priorities of Rusunawa residents for low-income communities. Rusunawa residents are in a state of psychosocial, moral development proposed by Kholberg with the characteristics of egocentric views, not considering the wishes of others and not realizing that every low-income person has more right to live in Rusunawa [28]. Based on this, a high effort is needed by the manager in conducting socialization about regulations for high-income levels so that they have the awareness to immediately prepare themselves to look for other decent housing because this Rusunawa is prioritized for people with low-income levels.

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**Figure 4.** Understanding that Rusunawa is for low-income people

Based on Figure 4 shows that residents' awareness is relatively high towards understanding if Rusunawa is only intended for low-income people. Residents' knowledge of the priority of Rusunawa given to low-income people shows that the government's goal of building Rusunawa can be achieved.

Regulations or a series of systems are needed to implement the objectives of Rusunawa, especially prioritizing Rusunawa residents for low-income people. As a decent place to live for low-income people, in reality, Rusunawa has not yet achieved its goals. The analysis results show that residents' understanding of the limitation of stay time and the mechanism for extending the stay permit in Rusunawa is still low, even though awareness of the priority of Rusunawa residents for low-income people is high. Most high-income residents disagree with the residence limit applied by the Rusunawa manager.

# **Financing of Rusunawa**

Financing is an essential aspect of Rusunawa management. Especially the financing aspects that are directly related to Rusunawa residents include rent and employee salaries directly in contact with services to residents. This is the basis for data collection, which is then analyzed based on the occupant's income category group.

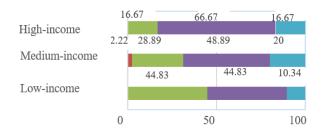


Figure 5. Residents' perception of rental fees

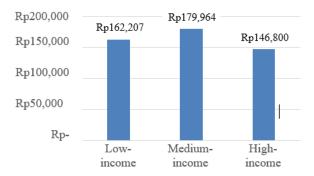


Figure 6. Residents' perception of reasonable rent

Based on Figure 5, residents' perceptions regarding rental fees analyzed based on residents' income show that Rusunawa rental fees are relatively cheap. Furthermore, based on Figure 6, residents with high incomes perceive lower fair rental fees than those with low incomes. Based on this, it shows that the income level cannot guarantee residents' high-low views regarding decent rental fees.

Efforts to guarantee the quality of Rusunawa management must exist both from the aspect of employee performance and building conditions, as well as guarantees for the availability of other facilities and in realizing comfort and satisfaction for residents. The effort that can be made is to increase the Rusunawa rental fee.

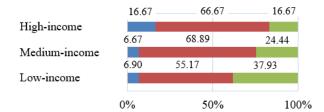
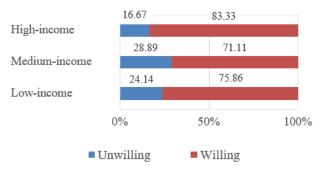


Figure 7. Perception in the increase of rental fees

Based on Figure 7, the condition is worsened by the disapproval of the plan to increase Rusunawa rental fees to employee welfare, Rusunawa improvements, and quality management. Although there are hope residents with low-income residents, 37.93% strongly agree with the increase in Rusunawa rental fees. The next possible effort is to provide options for residents to manage independently. The government has a limited budget to meet the requirements of Rusunawa employee welfare, management, management. In contrast, the requirements for the quality of Rusunawa management are still high, so residents' awareness is needed to manage independently. In other words, the security, cleanliness, water, and electricity management tasks are self-managed by all residents, for example, enforcing a Ronda schedule for security to the withdrawal of electricity-water fees by residents and so on.



**Figure 8.** Respondents' willingness to manage the Rusunawa on a self-help basis

Based on Figure 8, most Rusunawa residents are willing to manage the Rusunawa independently. Residents with high income have high egocentrism because they should be more willing to spend more on the management of the Rusunawa, but instead, they agree most with self-help management.

### **Condition of the Rusunawa Building**

Rusunawa management includes the field of maintenance on Rusunawa buildings. As an essential aspect of the convenience and satisfaction of Rusunawa residents, residents provide an assessment of the condition of the Rusunawa building, which can be seen in Figure 9.

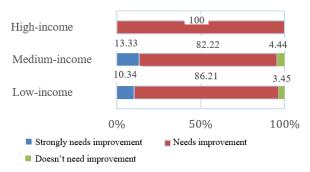


Figure 9. Respondents' perception of the Rusunawa building

Based on Figure 9, residents' assessment of the condition of the building shows that the higher the income level, the higher the expectation of the need for improvements to the building. Residents with higher incomes may have higher expectations of the building. The results of this study align with the findings of the analysis of Rusunawa management in Sleman, which shows that the higher the socio-economic level, the higher the expectations of the building or components of the Rusunawa building, including lighting, roof, floor, hallway, and other components [29].

### 4. Discussions

Based on the data results, a series of problems were obtained at the level of comfort and satisfaction of residents related to the management of Rusunawa. The strategy that can be applied in describing the main problems of Rusunawa management is the McKinsey 7s Framework approach [19]. The approach is used to produce an improvement strategy for Rusunawa management. The strategies for improving the level of convenience, satisfaction, and management of Rusunawa are as follows:

# a) Strategy and policy

Several strategies can be carried out by the Rusunawa manager, including: (1) Conducting socialization on Rusunawa targets and carrying out standard operating procedures under government regulations; (2) Rusunawa management policies, especially maintenance and care, should be a budget priority; (3) Involve the participation of residents in fulfilling security, cleaning, water, and electricity management tasks, as well as implementing a Ronda schedule for security to the withdrawal of water and electricity by residents and so on; (4) Apply penalties in the form of gradual warnings so that residents can be willing to move at a predetermined time.

# b) System and regulation

Rusunawa managers need to develop and implement systems and regulations, including: (1) Stricter regulation of residents is contained in the rental agreement when the initial administration is carried out, and discipline is applied to all residents of the Rusunawa; (2) Standard operating procedures for residents, repair, and maintenance of Rusunawa are needed, so that necessary periodic activity can be carried out as planned; (3) Implement the rules of the residents' living period so that it runs well to meet the needs of low-income people by the target residents of the flat.

### c) Organizational structure

In the structural aspect, the Rusunawa management needs to coordinate with the Cipta Karya Public Works Office regarding maintenance and periodic inspection.

 Budget and Financing (Operating and Maintenance Fees)

Maintaining the Rusunawa is a priority budget that needs to be prepared. In the case of limited maintenance budget availability, prioritization of urgent component repairs must be done.

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### e) Human Resources

The aspect of human resources that needs attention is improving the competence of existing technical personnel or using third parties who are more qualified to repair their fields.

### f) Culture

The values that need to be upheld in the management of Rusunawa are: (1) Emphasize to managers that maintenance and inspection aspects are essential to minimize repair costs and extend the life of the building; (2) Instilling the importance of mutual welfare, both fellow residents and Rusunawa staff; (3) A culture of tidiness and cleanliness needs to be emphasized to all managers and residents of Rusunawa so that Rusunawa management can reduce slums instead of moving horizontal slums to vertical ones; (4) Raising awareness of the importance of prioritizing the target residents of Rusunawa, specifically low-income people.

### 5. Conclusions

The results of this study show that income level strongly influences the perception of the convenience level of the Rusunawa building. However, the living convenience and satisfaction levels are similar.

The implementation of Rusunawa Management in improving services to achieve a better level of convenience and satisfaction is often constrained by the enforcement of rules regarding the length of stay. In addition, the relatively small rental fee for the Rusunawa operation and maintenance budget is another problem that needs to be addressed.

Implementing Rusunawa management based only on the fulfilment of the physical feasibility of the building is not an effective policy. Implementing extension programs, environmental awareness, and socialization for residents aimed at raising awareness for residents about the need to maintain Rusunawa for the common good is the key to its sustainability.

### References

- [1] Menteri Negara Perumahan Rakyat, Peraturan Menteri Negara Perumahan Rakyat Nomor: 14 /Permen/M/2007 tentang Pengelolaan Rumah Susun Sederhana Sewa. Indonesia, 2007, pp. 1–50.
- [2] Y. Supriyatna, "Estimasi Biaya Pemeliharaan Bangunan Gedung," *Maj. Ilm. UNIKOM*, vol. 9, no.

- 2, pp. 199–206, 2011, [Online]. Available: https://gedung.info/wp-content/uploads/2017/11/Panduan-Estimasi-Biaya-Perawatan-Gedung.pdf.
- [3] A. A. Oladapo, "A study of tenants' maintenance awareness, responsibility and satisfaction in institutional housing in Nigeria," *Int. J. Strateg. Prop. Manag.*, vol. 10, no. 4, pp. 217–231, 2006, doi: 10.1080/1648715X.2006.9637554.
- [4] N. A. Rahma, A. Hardiana, and P. Rahayu, "Pemilihan Lokasi Rumah Susun Sederhana Sewa: Studi Kasus Rusunawa Putri Cempo, Surakarta," *Desa-Kota*, vol. 2, no. 2, p. 158, 2020, doi: 10.20961/desa-kota.v2i2.34404.158-174.
- [5] Y. I. Mawardi, R. Wulandari, G. K. W. Istiqomah, R. L. Susila, and A. I. Hendriavi, "Analisis Kualitas Layanan Rumah Susun Sederhana Sewa (Rusunawa) Semeru dengan Menggunakan Metode Importance Performance Analysis (IPA)," *Matrap. J. Perenc. Wil. dan Kota*, vol. 1, no. 1, p. 1, 2020, doi: 10.19184/matrapolis.v1i1.19218.
- [6] Badan Pusat Statistik Kabupaten Cilacap, "Penduduk dan Pertumbuhan," 2019. cilacapkab.bps.go.id.
- [7] W. Prasojo, D. Frida DBPMPd, K. Kunci, K. penghuni, K. Bangunan, and R. Dupak Bangunrejo dan Sombo Surabaya, "Analisis Tingkat Kepuasan Penghuni Pada Hunian Rumah Susun Ditinjau Terhadap Kualitas Bangunan Di Wilayah Surabaya," *Rekayasa Tek. Sipil*, vol. 3, pp. 54–62, 2014.
- [8] Presiden Republik Indonesia and Dewan Perwakilan Rakyat Republik Indonesia, *Undang-Undang Republik Indonesia tentang Rumah Susun*. 2011, pp. 1–48.
- [9] A. R. Belkaoui, *Teori Akuntansi (Accounting Theory) Buku 1*, 5th ed. Jakarta: Salemba Empat, 2011.
- [10] Badan Pusat Statistik Kabupaten Cilacap, BADAN PUSAT STATISTIK KABUPATEN CILACAP BPS-STATISTICS OF CILACAP REGENCY KABUPATEN CILACAP dALAm ANgKA. Cilacap: Badan Pusat Statistik Kabupaten Cilacap, 2021.
- [11] H. A. Setiadi, "Analisis Faktor Berpengaruh terhadap Kepuasan Penghuni Rumah Susun Sewa Studi Kasus Rumah Susun Sewa Kemayoran," *J. Permukim.*, vol. 10, no. 1, pp. 19–36, 2015.
- [12] D. E. Paris and R. Kangari, "Multifamily affordable housing: Residential satisfaction.," *J. Perform. Constr. Facil.*, vol. 19, no. 2, pp. 138–145, 2005.
- [13] M. Greene and J. de D. Ortúzar, "Willingness to pay for social housing attributes: a case study from Chile," *Int. Plan. Stud.*, vol. 7, no. 1, pp. 55–87, 2002
- [14] R. N. James III, "Multifamily housing characteristics and tenant satisfaction," *J. Perform. Constr. Facil.*, vol. 21, no. 6, pp. 472–480, 2007.
- [15] Presiden Republik Indonesia and Dewan Perwakilan Rakyat Republik Indonesia, *Undang-Undang Republik Indonesia Nomor 28 Tahun 2002*

- tentang Bangunan Gedung. Indonesia, 2002, pp. 1–41.
- [16] S. M. Anugerah Septiaman Harefa, Polin Naibaho, ST.MT, Anna Lucy Rahmawati, "Persepsi Penghuni Terhadap Kenyamanan Beraktivitas Di Ruang Terbuka Perumahan," *J. Semin. Arsit.*, no. Kenyamanan Beraktivitas Di Ruang Terbuka, pp. 37–46, 2018.
- [17] J. W. Creswell, Research design pendekatan kualitatif, kuantitatif, dan mixed. Yogyakarta: Pustaka Pelajar, 2010.
- [18] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan Kombinasi*. Bandung: Alfabeta, 2011.
- [19] R. H. Waterman, T. J. Peters, and J. R. Phillips, "Structure is not organization," *Bus. Horiz.*, vol. 23, no. 3, pp. 14–26, 1980, doi: 10.1016/0007-6813(80)90027-0.
- [20] Bupati Cilacap, Retribusi Pemakaian Kekayaan Daerah di Kabupaten Cilacap. Indonesia, 2012.
- [21] Bupati Cilacap, Pembentukan, Kedudukan, Susunan Organisasi, dan Tata Kerja Unit Pelaksana Teknis Daerah Dinas Pekerjaan Umum dan Penataan Ruang Kabupaten Cilacap. 2018.
- [22] Presiden Republik Indonesia, *Disiplin Pegawai Negeri Sipil*. Indonesia, 2010, pp. 1–95.

- [23] S. P. Siagian, *Teori Motivasi dan Aplikasinya*, 4th ed. Jakarta: Rineka Cipta, 2012.
- [24] S. P. Robbins and A. J. Timothy, *Perilaku Organisasi (Organizational Behavior*), 12th ed. Jakarta: Salemba Empat, 2009.
- [25] R. Ernawati, "Faktor yang Mempengaruhi Kepuasan Tinggal pada Rusunawa di Kota Surabaya," *EMARA Indones. J. Archit.*, vol. 5, no. 1, pp. 24–31, 2019, doi: 10.29080/eija.v5i1.527.
- [26] F. -, "Hubungan Karakteristik Sosial Ekonomi dengan Tingkat Kepuasan Bermukim Pemilik Rumah Sederhana di Perumahan Tamansari Bukit Mutiara Kota Balikpapan," *J. Pembang. Wil. Kota*, vol. 10, no. 1, p. 33, 2014, doi: 10.14710/pwk.v10i1.7631.
- [27] J. Reimer and R. H. Paolitto, Diana Pritchard Hersh, *Promoting moral growth: from Piaget to Kohlberg*, 2nd ed. New York: Longman, 1983.
- [28] D. Zuchdi, *Humanisasi Pendidikan*. Jakarta: Bumi Aksara, 2010.
- [29] A. K. Sari, "Evaluasi teknis dan pengelolaan rumah susun sederhana sewa di kabupaten sleman yogyakarta," *Racic Rab Constr. Res.*, vol. 1, no. 1, pp. 55–68, 2016.