

## ANALYSIS OF THE FULFILLMENT OF THE HOUSING BACKLOG LOW-INCOME COMMUNITY (MBR) AND THE AMOUNT OF LAND USED IN THE CITY OF PALEMBANG

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### ABSTRACT

*This study aims to analyze the amount of low-cost housing backlog (MBR) in the city of Palembang in 2025; calculate the number of uninhabitable houses as an addition to the housing backlog figure; calculate the land requirement for MBR housing in meeting the backlog in the city of Palembang; analyze the zoning for the placement of MBR housing with spatial patterns and spatial structures in the city of Palembang. This research uses a descriptive research method with a quantitative approach. The study was conducted in the city of Palembang, which is the seventh city with the highest housing backlog in Indonesia, with a backlog figure reaching 122,932 houses. Data collection was done through face-to-face interviews by asking questions to the chairman of the South Sumatra Real Estate Association, the Palembang City Perkim Department, about housing backlog in Palembang. Data analysis used the Cambridge method, Sustainable Development Goals method, Minister of Public Works and Public Housing Regulation No.995/KPTS/M/2021 method, & Regional Regulation No.05 of 2022 method. The latest backlog figure recorded in 2018 was 122,932 dwellings (Palembang City Perkim Department, 2021). Uninhabitable houses (RTLH) in Palembang in 2019 experienced a decrease and continued to increase in 2020. The effective land requirement for MBR housing and Fasum Fasos with a ratio of 60:40 is calculated, followed by data on built houses according to REI data in Palembang. The zoning for the placement of MBR housing land in Palembang, which reached 4,987.62 ha in 2025, must consider the spatial patterns and spatial structures of Palembang City.*

**KEYWORDS** *Housing Backlog, Low-Income Communities (MBR), Land Requirement*



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## INTRODUCTION

Palembang City is the capital city of South Sumatra Province which has an area of 40,061ha with a population of 1,729,540 people, and population growth in Palembang City reached 2.58% in the last ten years (BPS Palembang City, 2023). Population growth is a current issue where with increasing population growth must be accompanied by the fulfillment of primary needs in the form of clothing, food and shelter (houses).

Home is a place where people find protection from all types of weather, a place of shelter and a place where people interact with their families (Hapsari & Syahbana, 2013). The greater the population growth, the greater the need for housing, resulting in a gap between the number of residents and adequate housing. According to the Ministry of Public Works and Housing (2015), back log is an indicator used to measure housing needs in Indonesia, the housing backlog for the whole of Indonesia is 12 million, 350,655 houses in the South Sumatra region and 122,932 houses in Palembang City. With this figure, South Sumatra is the seventh largest contributor to the backlog in Indonesia (Dinas Perkim Kota Palembang, 2021).

According to the Central Bureau of Statistics of Palembang City (2021), the number of housing shortages continues to increase when the need for housing reaches 122,932 and the average population of Palembang City increases by 6,000 people per year. The government even encourages mass development by creating a housing program for low-income people (MBR) (Indrianingrum, 2016). Based on Law No. 11/2011 on Housing and Settlement Areas, Low-Income Communities, hereinafter abbreviated as MBR, are people who have limited purchasing power so that they need government support to obtain housing. In addition, the Asian Development Bank (ADB) notes that low-income people are people who do not have access to decisions that affect their lives (Hutapea & Suwandono, 2015).

The results of this study show that there is an overlap of authority between the 2011 Housing and Settlement Area Law and Law 23 of 2014, causing delays in the implementation of meeting the housing backlog. The high demand for housing that cannot be facilitated at this time, shows that the provision of housing plays a strategic role in the formation of national character. So that the provision of housing vertically has become the chosen solution in several major cities in the world including Indonesia today (I. A. Pratama & Purwidayanta, 2019).

The impact of residential development on the community around the house in Karuga Sub-district of the City of Palembang is usually positive on the environment, because of the economic growth of the community around the neighborhood (A. Pratama et al., 2020). Based on the results of this research, the author sees the problem from the other side, namely the amount of land needed in fulfilling the backlog in Palembang City. The scheme of cooperation with the private sector in housing development, especially housing for MBR is pursued through a balanced residential development policy (Anwar et al., 2022). Starting

with Government Regulation Number 14 of 2016 concerning the Implementation of Housing and Settlement Areas as an implementing regulation of Law Number 1 of 2011 concerning Housing and Settlement Areas (Indradjati, 2020).

Housing and settlement development efforts that have been carried out so far are very sectoral in nature and are only in the form of projects that are partial and unsustainable. In addition, housing development efforts carried out in the regions are very limited due to the limited ability of human resources, sources of financing as well as the development of technological options and efforts to empower local communities which are not the main program (Mardiansyah & Adisti, 2020).

To overcome the backlog in the implementation of meeting housing needs for low-income people (MBR), which is a priority for the government, there are already policies including Law Number 1 of 2011 concerning housing, government regulation Number 64 of 2016 concerning housing development for low-income people, regulation of the minister of home affairs number 55 of 2017 concerning the implementation of licensing and non-licensing of housing development for low-income people in the regions (Ardiansyah & Rahmawati, 2021).

Based on the problems in the provision of MBR houses to fulfill the backlog of housing, especially in Palembang City, and the target of the central government stated in the National Medium-Term Development Plan (RPJMN) IV in 2020-2025, the Government targets the fulfillment of housing needs equipped with infrastructure and supporting facilities for the entire community supported by a long-term housing financing system that is sustainable, efficient and accountable to realize cities without slums (Febriana et al., 2022). So that the local government, in this case Palembang City, must be in line with the target of the central government, with the fulfillment target, the Palembang City government must know the number of backlog houses and land used to fulfill MBR houses, so that the city government can arrange the location of MBR housing lands according to the development and direction of Palembang City development (Puturuhi, 2015).

## **RESEARCH METHOD**

This research uses descriptive research methods with a quantitative approach that aims to explain a situation to be studied with the support of literature studies so as to further strengthen the researcher's analysis in making a conclusion, where the research results are obtained from the calculation of the research variable indicators (Rosa, 2013).

This research was conducted in Palembang City, which is a city with the number seven housing backlog in Indonesia, with a backlog of 122,932 houses. Palembang City covering an area of 400.61 hectares is an area with a relatively low land surface so that the placement of residential locations must be arranged in this case MBR housing (Acioly Jr & Horwood, 2011).

## RESULT AND DISCUSSION

### Household Growth Projection Analysis

To calculate the number of housing backlogs, the main data required is the previous years' household data used to analyze the projected growth in the number of households in the coming year. Table 1 shows the number of households in Palembang from 2016 to 2020.

**Table 1**  
**Number of households in Palembang City 2018-2020 (BPS, 2023)**

No	Years	Number of Households Palembang City
1	2016	353.676
2	2017	356.843
3	2018	371.050
4	2019	375.431
5	2020	379.435

From the data on the number of households, the projected increase in the number of households is calculated using the arithmetic method with the equation:

$$P_n = P_t [1 + (n \times P_p \%)] \dots\dots\dots(4. 1)$$

$$P_p = 1/t \ln(P_t/P_o) \dots\dots\dots(4. 2)$$

With an example of calculating household projections for the year 2023

$P_n$  = projected households in 2023

$P_t$  = number of households in 2020

$n$  = period of 3 years to come

$$P_p = 1/t \ln(P_t/P_o) \implies t = 2020 - 2016 = 4 \text{ years}$$

$P_t$  = Number of Households in 2020

$P_o$  = Number of Households in 2016

$$P_p = 1/2 \ln (379435 / 353676)$$

$$P_p = 0.035151$$

$$P_n = 379435 \times [1 + (3 \times 0.035151)]$$

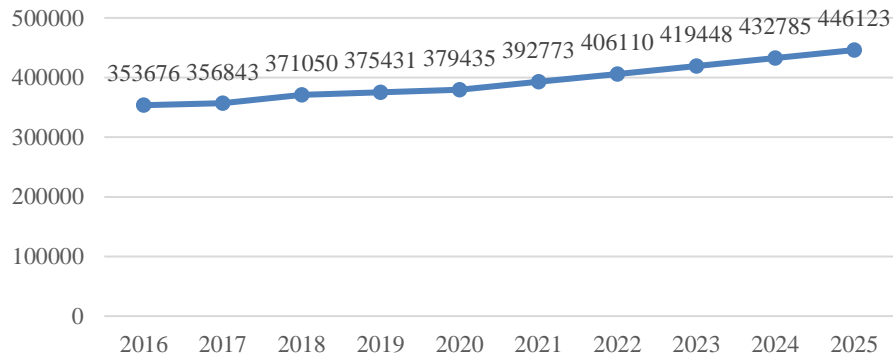
$$= 419,447.55 \approx 419,448 \text{ households}$$

For the calculation of the projection of the number of households in the following years is presented in Table 2 as follows:

**Table 2**  
**Projected Increase in the Number of Households**

No	Years	Household Increase Projection Period				
		1	2	3	4	5
1	2021	392.773				
2	2022	406.110				
3	2023	419.448				
4	2024	432.785				
5	2025	446.123				

From table 2, the projection numbers are obtained from 2021 to 2025, so the number of households in Palembang City continues to increase from 2016 to 2025 according to the projections in figure 2 below.



**Figure 1. Household projection curve**

Based on the results of the projection of the number of households in 2021 to 2025 the projected number of households has increased by an average of 3% per year and in 2025 it is projected that the number of households will reach 446,123 households in Palembang City.

**Analysis of Uninhabitable Homes (RTLH)**

To find out the number of Uninhabitable Houses (RTLH) in Palembang City, using data from BPS Palembang City where data is taken from Palembang data in numbers 2023, in table 4.6.1 to table 4.6.7 in percentage data which will be calculated by the number of households in table 4.2 to get the calculation variable of Uninhabitable Houses (RTLH) as follows:

**Table 3  
RTLH in Palembang City (Palembang in figures, 2023)**

No	Variable	Years						
		2019	2020	2021	2022	2023	2024	2025
1	Floor area ≤19m <sup>2</sup>	23.840	19.996	28.392	30.155	-	-	-
2	Roof type is made of palm fiber	32.738	30.545	31.692	51.417	-	-	-
3	Wall type is made of bamboo	4.543	3.946	4.642	4.693	-	-	-
4	Sanitation is not feasible	46.929	38.702	22.829	28.473	-	-	-

5	Lighting is not PLN	1.352	569	767	0	-	-	-
6	Drinking water is not	7.696	10.890	6.906	2.327	-	-	-

From the table above, there are years that are not recorded so you have to look for data that is not recorded using the arithmetic method except for data number 4 and number 6 looking at previous research and target data from the government.

From the data on the number of RTLH with floor area <19, the calculation of projected increase using the arithmetic method with the equation :

$$P_n = P_t [1 + (n \times P_p \%)] \dots\dots\dots(4. 3)$$

$$P_p = 1/t \ln(P_t/P_o) \dots\dots\dots(4. 4)$$

With example calculation of floor area projection <19 for year 2022

$P_n$  = projected floor area <19 in 2023

$P_t$  = total floor area <19 in 2022

$n$  = period of 1 year to come

$$P_p = 1/t \ln(P_t/P_o) \implies t = 2022 - 2019 = 3 \text{ years}$$

$P_t$  = Total floor area < 19Thn 2022

$P_o$  = Total floor area < 19Thn 2019

$$P_p = 1/3 \ln (30155 / 23840)$$

$$P_p = 0.0783$$

$$P_n = 30155x [ 1 + (1 \times 0.0783)] \\ = 32516.13 \approx 32.516 \text{ floor area } < 19$$

For the calculation of proper sanitation, see the Palembang City RP2KP data in sub chapter 2.3.7. The policy and strategy of the Directorate General of Cipta Karya 2020-2024 in handling slums states that one of the RPJMN 2020-2024 targets is access to proper sanitation from 69.36% to 90%, so that every year there is at least an average decrease of 5.16%.

For unfit drinking water in Palembang City in table 4.3 see the research results from (Kurniawan et al., 2021). According to the results of the calculation in table 8, drinking water coverage in 2023 was 87.86%, in 2024 it was 89.44% and in 2025 it was 91.70%.

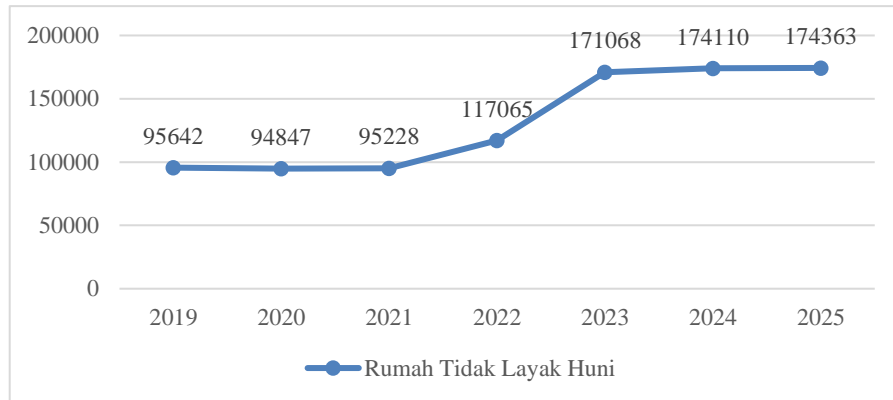
From table 8, it is found that unfit drinking water in 2023, namely 100% - 87.86%, is 12.14% and in the following year, 2024, it is 10.56% and in 2025 it is 8.3%.

**Table 4.**  
**Projection of RTLH in Palembang City**

No	Variable	Years						
		2019	2020	2021	2022	2023	2024	2025
1	Floor area ≤19m2	23.840	19.996	28.392	30.155	32.516	34.877	37.238
2	Roof type is made of palm fiber	32.738	30.545	31.692	51.417	59.150	66.883	74.616

3	Wall type is made of bamboo	4.543	3.946	4.642	4.693	4.745	4.794	4.845
4	Sanitation is not proper	46.929	38.702	22.829	28.473	27.049	25.697	24.412
5	Lighting is not PLN	1.352	569	767	0			
6	Drinking water is not feasible	7.696	10.890	6.906	2.327	47.608	41.859	33.252
		95.642	94.847	95.228	117.065	171.068	174.110	174.363

From table 4. obtained the projected number of uninhabitable houses each year as follows:



**Figure 2. Curve of uninhabitable houses in Palembang City**

The projection of uninhabitable houses experienced relatively no significant increase and decrease from 2019 to 2021, in 2022 to 2023 there was a relatively significant increase of 65,397.

### Rental Household Analysis

To find out the number of rental households in Palembang City, using data from BPS Palembang City where the data is recapitulated from Palembang data in figures 2023, in table 4.6.6 to get the calculation variables of rental households as follows:

**Table 5.**  
**Number of rental households Palembang City 2018-2022 (BPS, 2023)**

No	Years	Number of Rental Households Palembang City
1	2018	60.630
2	2019	61.706
3	2020	47.457
4	2021	62.707

From the table above there are years that are not recorded so you have to look for data that is not recorded using the arithmetic method.

From the data on the number of rental households, the calculation of projected increases using the arithmetic method with the equation:

$$P_n = P_t [1 + (n \times P_p \%)] \dots\dots\dots(4. 5)$$

$$P_p = 1/t \ln(P_t/P_o) \dots\dots\dots(4. 6)$$

With an example of calculating the projected number of rental households for the year 2024

$P_n$  = Projected rental households in 2023

$P_t$  = Number of rental households in 2021

$n$  = Period of 2 years to come

$P_p = 1/t \ln(P_t/P_o) \implies t = 2022 - 2018 = 4$  years

$P_t$  = Number of rental households in 2021

$P_o$  = Number of rental households in 2018

$P_p = 1/4 \ln(62707 / 60630)$

$P_p = 0.03326$

$$P_n = 62707 \times [1 + (2 \times 0.03326)]$$

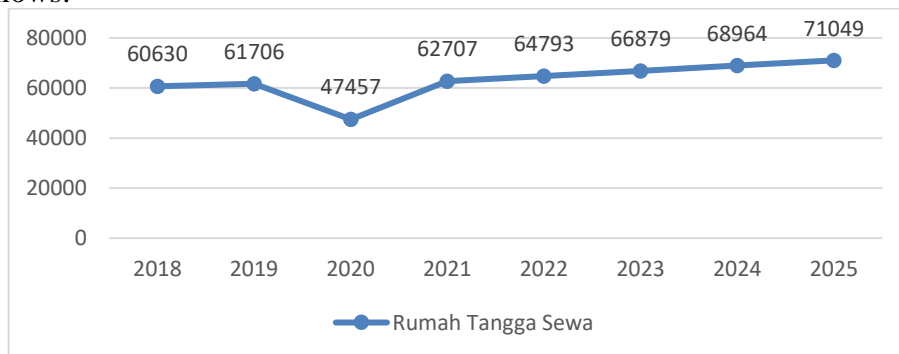
$$= 66,878.2 \approx 66,879 \text{ rental households}$$

For the calculation of the projected number of households for the following years, Table 6 is presented below:

**Table 6.**  
**Projected increase in the number of rental households**

No	Years	Projection Period of Increase in Rental Households			
		1	2	3	4
1	2022	64.793			
2	2023		66.879		
3	2024			68.964	
4	2025				71.049

From table 6, the projected number of rental households per year is obtained as follows:



**Figure 3. Curve of Rental Households in Palembang City**



The projection of rental households continues to increase from 2021 and is projected in 2025 to reach 71,049 rental households, in 2020 there was a decrease in rental housing of 47,457 rental households which is the lowest figure from 2018 to 2021 according to BPS 2023 data.

**Analysis of Households Unable to Buy/Rent (Homeless)**

To find out the number of rental households in Palembang City, using data from BPS Palembang City where the data is recapitulated from Palembang data in figures 2023, in table 4.6.6 to get the calculation variables of households unable to buy / rent as follows:

**Table 7.**  
**Number of households unable to buy/rent 2018-2020 (BPS, 2023)**

No	Years	Number of Households unable to buy/rent (homeless) Palembang City
1	2018	70.166
2	2019	74.915
3	2020	71.242

From the table above there are years that are not recorded so that you have to look for data that is not recorded using the arithmetic method.

From the data on the number of households unable to buy / rent (homeless), the calculation of projected growth is carried out using the arithmetic method with the equation:

$$P_n = P_t [1 + (n \times P_p \%)] \dots\dots\dots(4. 7)$$

$$P_p = 1/t \ln(P_t/P_o) \dots\dots\dots(4. 8)$$

With an example calculation of the projected number of rental households for the year 2024

$P_n$  = Projected households unable to buy/rent (homeless) in 2023

$P_t$  = Number of households unable to buy/rent (homeless) in 2020

$n$  = Period of 3 years to come

$$P_p = 1/t \ln(P_t/P_o) \implies t = 2020 - 2018 = 3 \text{ years}$$

$P_t$  = Number of households unable to buy/rent in 2020

$P_o$  = Number of households unable to buy/rent in 2018

$$P_p = 1/3 \ln (71242 / 70166)$$

$$P_p = 0.01521$$

$$P_n = 71242 \times [1 + (3 \times 0.01521)]$$

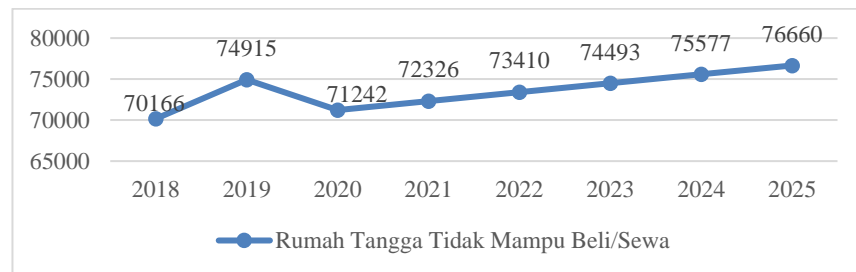
$$= 74,492.7 \approx 74,493 \text{ households unable to afford rent (homeless)}$$

For the calculation of the projection of the number of households for the following year, Table 7 is presented below:

**Table 7.**  
**Projected increase in the number of households unable to buy/rent**

No	Years	Projection Period of Increase in Poor Households				
		1	2	3	4	5
1	2021	72.326				
2	2022		73.410			
3	2023			74.493		
4	2024				75.577	
5	2025					76.660

From table 7, the projected number of households unable to buy/rent (homeless) is as follows:



**Figure 4. Curve of Households Unable to Buy/Rent in Palembang City**

The projection of households unable to afford rent (homeless) continues to increase from 2020 and is projected in 2025 to reach 76,660 households unable to afford rent (homeless). In 2019 there was a spike in the increase to 74,915 from 2018 of 70,166 households that could not afford to rent/buy (homeless) although in 2020 there was a decrease according to BPS Palembang City data.

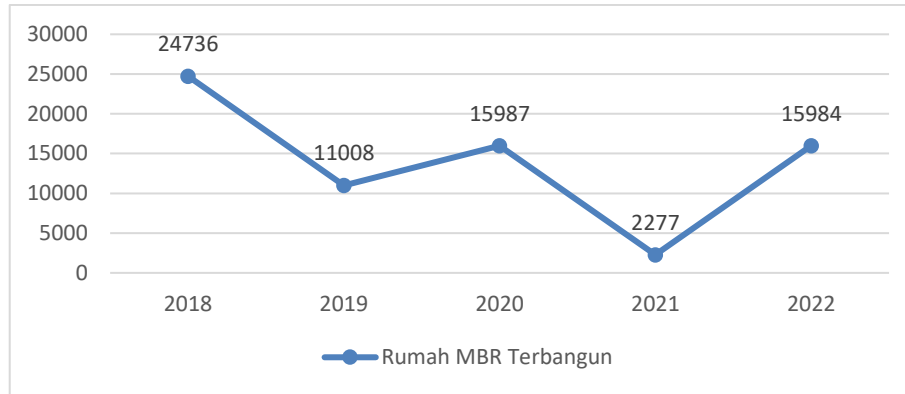
### Low-Income Community (MBR) Houses Built

The realization of MBR housing construction in calculating the backlog is one of the important factors as the data used as a deduction of the backlog figure and comparative data on what percentage of the realization of MBR housing construction is achieved from the required housing backlog figure. MBR housing development data is managed by Realestat Indonesia in this case Realestat Palembang City, with the following data:

**Table 8.**  
**MBR houses built in Palembang City 2018-2022 (REI, 2023)**

No	Years	Number of MBR Houses Built
1	2018	24.736
2	2019	11.008
3	2020	15.987
4	2021	2.277
5	2022	15.984

From table 8. obtained the realization of MBR house construction from Realestat as follows:



**Figure 5. Curve of MBR Houses Built in Palembang City**

In 2018, the construction of MBR houses reached 24,736 units, this is the highest number in the last 5 years, the construction of MBR houses decreased sharply in 2021 due to the influence of covid entering Indonesia in 2019, causing people's purchasing power to decrease for MBR houses, so that the backlog number that year increased. In 2022, development began to experience a sharp increase from 2,277 units in 2021 to 15,984 units in 2022.

### Calculation of Backlog in Palembang City

The backlog is calculated from the last 5 years to see the backlog with the realization of MBR housing construction to get the difference in backlog numbers each year in Palembang City.

The method used is the Cambridge method by examining the Indonesian government's policy on housing backlogs, because the Cambridge method is one of the variables is that rental housing is an increasing number of backlogs.

$$F = ((A+B+D) - (C+E))$$

Description:

A : Number of households living in inadequate housing

B : Number of rental households

C : Number of households receiving in-situ solutions

D : Households who cannot afford to rent or buy homeless housing

E : Number of registered housing + construction processes

F : Backlog

**Table 9.  
 Backlog Variable**

No	Years	RTLH	Rental Households	Household in-situ solution	Unable to Rent	Development Realization MBR
1	2019	95.642	61.706	0	74.915	11.008

2	2020	94.847	47.457	0	71.242	15.987
3	2021	95.228	62.707	0	72.326	2.277
4	2022	117.065	64.793	0	73.410	15.984
5	2023	182.462	66.879	0	74.493	0
6	2024	196.900	68.964	0	75.577	0
7	2025	208.549	71.049	0	76.660	0

The household variable of the in-situ solution is government support in the provision of livable housing, the Indonesian government policy does not provide housing directly but only facilitates housing for low-income people with the FLPP system which is housing financing, such as providing tax breaks for affordable housing prices.

From the backlog variable data, the calculation is carried out using the Cambridge method as follows:

$$F = ((A+B+D) - (C+E))$$

With an example of backlog calculation for 2018.

F = Backlog in 2018

A = 115.323

B = 60.630

C = 0

D = 70.166

E = 24.736

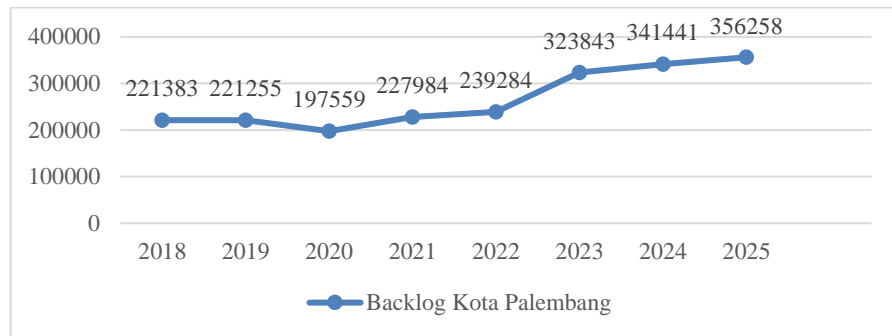
F = ((115323+60630+70166)-(0+24736)) = 221,383 houses

For the next year's housing backlog calculation, Table 10 is presented.

**Table 10.**  
**Palembang City Backlog**

No	Years	Backlog Number Palembang City
1	2018	221.383
2	2019	221.255
3	2020	197.559
4	2021	227.984
5	2022	239.284
6	2023	323.843
7	2024	341.441
8	2025	356.258

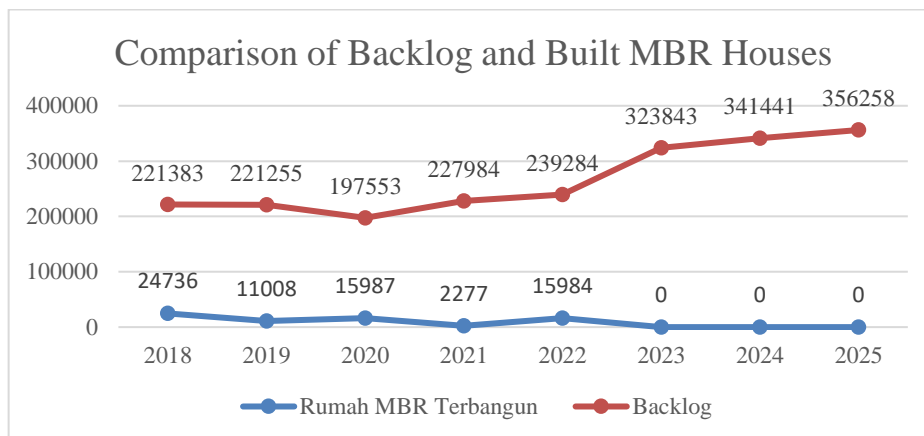
Backlog from 2018 to 2023 the lowest point occurred in 2020 at 197,559 and in 2020 also the highest number of realization of MBR housing construction in the range of 2018 to 2023 (Roufechai et al., 2014). The backlog number in 2025 is expected to reach 356,258 dwellings in Palembang City. From 2018 to 2025, there were ups and downs in the number of backlogs in Palembang City as shown in Figure 4 below:



**Figure 7. Backlog curve in Palembang City**

**Backlog and MBR Houses Built in Palembang City**

The gap between the need for livable houses and the realization of the construction of MBR houses in Palembang City is very far, seen in 2022 the realization of the construction of MBR houses amounted to 15,984 while the backlog figure is 177,664 houses, to meet the backlog should be ten times the realization of existing development as shown in Figure 8 below:



**Figure 8. Curve of Backlog and House Construction in Palembang City**

**Backlog Fulfillment and Land Use**

Calculating the land area required in fulfilling the MBR housing backlog by referring to the decision of the Minister of PUPR No. 995 / KPTS / M / 2021 which explains that 1 MBR housing unit has a minimum land area of 60m<sup>2</sup> and a maximum of 200m<sup>2</sup> while the floor area is at least 21m<sup>2</sup> and a maximum of 36m<sup>2</sup>.

To calculate the total land area of MBR houses in Palembang City and its infrastructure facilities by referring to regional regulation no.05 of 2022 which regulates 60% of built-up land and 40% for facilities and infrastructure. So that the land area used if the fulfillment of the MBR housing backlog in Palembang City is fulfilled (Hermawan & Meutia, 2022).

From the backlog variable data in table 4.12, the calculation of the number of backlogs x the average area of MBR house lots according to REI data is as follows:

Year 2018 = 221,383

Average lot size of REI South Sumatera = 84m<sup>2</sup>

1845

Land area used = 221,383 x 84 = 18,596,172m<sup>2</sup>/1,859.62 ha

For the next year's calculation until 2025, the following table is presented:

**Table 11.**  
**Land Area of MBR Houses Used**

No	Years	Backlog Number Palembang City	Effective Land Area MBR Houses Used (Ha)
1	2018	221.383	1.859,62
2	2019	221.255	1.858,54
3	2020	197.559	1.659,50
4	2021	227.984	1.915,07
5	2022	239.284	2.009,99
6	2023	323.843	2.720,28
7	2024	341.441	2.868,10
8	2025	356.258	2.992,57

To calculate the total used land area of MBR housing in Palembang City including facilities and infrastructure refers to local regulation no.05 of 2022 which regulates 60% effective land and 40% facilities and infrastructure. Percentage Formula = Total Amount / Total Amount x 100%

From the data on the land area of MBR houses used in table 4.11, the following calculations are carried out:

Year 2023 = 2,720.28

Effective land = 60%

How much is the total land if the effective land is 60% is 2,720.28ha

Total amount = Total amount / Percentage

Total amount = 2,720.28 / 60%

Total amount = 4,533.8 ha

So the total land area of MBR housing in Palembang City including facilities and infrastructure in 2023 is 4,533.8 ha.

For the next year's calculation until 2025, the following table is presented:

**Table 12.**  
**Total Land Area of MBR Houses in Palembang City**

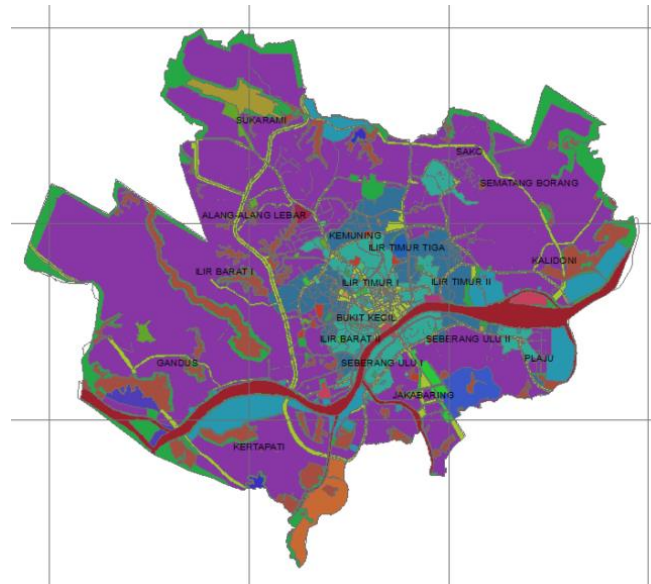
No	Years	Effective Land Area MBR Houses Used (Ha)	Total Land Area MBR Houses Used (Ha)
1	2018	1.859,62	3.099,37
2	2019	1.858,54	3.097,57
3	2020	1.659,50	2.765,83
4	2021	1.915,07	3.191,78
5	2022	2.009,99	3.349,98
6	2023	2.720,28	4.533,80

7	2024	2.868,10	4.780,17
8	2025	2.992,57	4.987,62

The area of land used to fulfill the *backlog* in Palembang City in the next two years, namely in 2024 amounting to 4,780.17ha and in 2025 amounting to 4,987.62ha of land needed or used.

### Palembang City Spatial Pattern

Zoning the placement of low-income housing needs to look at the Palembang City spatial pattern so that the direction of low-income housing development, with the required land area reaching 4,987.62 ha in 2025, can be effective and efficient in zoning the placement.

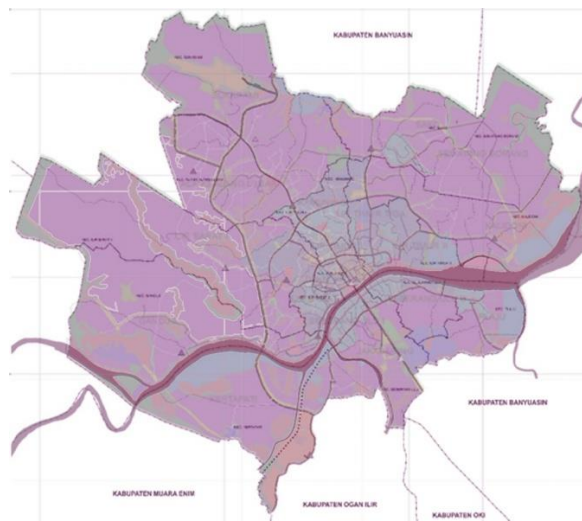


**Figure 9. Palembang City Spatial Pattern Map**  
 Source: RT RW Palembang City (2012-2032)

Looking at the Palembang City spatial pattern map, the distribution of dense housing settlements is focused in several sub-districts such as Kemuning, East Ilir One, East Ilir Two, East Ilir Three, Bukit Kecil, West Ilir II and Seberang Ulu, specifically Seberang Ulu dense housing follows the flow of the Musi River. Sub-districts with dense housing categories are not recommended in the development of MBR housing because it will cause new problems, so sub-districts with low housing zoning should be a priority for the government in this case as a policy maker in determining zoning.

### Palembang City Infrastructure Network System

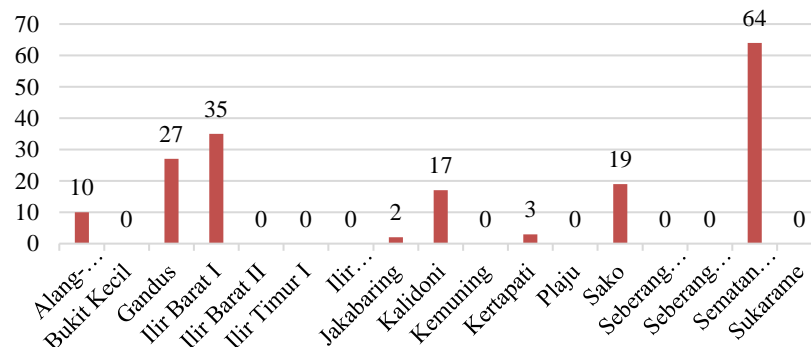
MBR housing zoning recommendations looking at the Palembang City spatial pattern, which has the potential to become MBR housing zoning is located in sub-districts with low housing levels, such as ilir barat I, sematang borang, sako, gandus, alang-alang lebar, sukarami, kertapati, if it is further narrowed down based on the facilities and infrastructure network factor there are several subdistricts that are passed by the primary arterial road that divides Palembang City, namely kertapati, gandus, ilir barat I, alang-alang lebar, sukarami subdistricts as shown in the following figure:



**Figure 10. MBR Housing Zoning Recommendations**

The selection of zoning follows arterial road number 1, because the spatial pattern is more likely to be low density housing while arterial road number 2 is high density housing because it passes through the center of Palembang City.

Looking at the MBR housing distribution data from REI South Sumatra in all sub-districts in Palembang City, there are six sub-districts with the highest level of realization of MBR housing development, namely Sematang Borang, Iilir Barat 1, Gandus, Sako, Kalidoni and Alang-alang Lebar, as shown below:



**Figure 11. Distribution of Realization of MBR Housing Development**

Source: REI South Sumatera



The realization of the most MBR housing construction from Figure 11 in the Sematang Borang sub-district of 64 housing is followed by the ilir barat I sub-district with 35 housing and the Gandus sub-district of 27 housing, if you look at the data the private sector has carried out development in accordance with zoning recommendations but there are deviations in MBR housing development, namely in the sematang borang, sako and kalidoni sub-districts, which are sub-districts that are not traversed by arterial routes but with low housing density have a lot of realization of MBR housing construction so that other factors in determining zoning must be considered to conduct future research

## CONCLUSION

Based on the results of the analysis in the previous chapter on the fulfillment of the low-income housing *backlog* (MBR) and the amount of land used in Palembang City, it can be concluded that the last *backlog* figure recorded in 2018 was 122,932 dwellings (Dinas Perkim Kota Palembang, 2021). According to the calculation of the number of MBR housing *backlogs* in Palembang City in chapter 4 using the Cambridgeshire method continues to increase, even in 2025 it is predicted that the *backlog* number will reach 356,258 dwellings as shown in table 4.10. Uninhabitable houses (RTLH) in Palembang City in 2019 had decreased and continued to increase in 2020 seen from the calculation of chapter 4 in table 4.3, and projected using BPS data by referring to the SDGs concept where a variable must be met if one of the variables is not met then the house is considered uninhabitable.

The amount of MBR housing land requirements in fulfilling the *backlog* in Palembang City, combining the results of the *backlog* calculation with the decision of the Minister of PUPR No. 995/KPTS/M/2021 which regulates the area of MBR houses and local regulation No. 05 of Palembang City which regulates the amount of effective land and fasum fasos with a ratio of 60: 40 and continued with data on houses built according to REI data in Palembang City, so that in 2025 the land requirement is 4,987.62 ha as shown in chapter 4 table 4.10. Zoning for the placement of MBR housing land in Palembang City which reaches 4.9 million hectares.

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