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"Entrepreneurship on Global Economics Development in the Era of Society 5.0"

Collaboration Between Triple Helix Stakeholders In Sustainable Housing Development In Medan**Lasma Melinda Siahaan^{1*}, Erlina², Badaruddin², Rujiman²**¹Program Studi Doktor Perencanaan Wilayah, Sekolah Pascasarjana Universitas Sumatera Utara
Jl. Prof. Maas kampus USU Medan 20155, Indonesia.²Universitas Sumatera Utara*Email: melinshn@students.usu.ac.id**ABSTRACT**

Housing doesn't only have to meet the economical aspect but also needs to meet the social and environmental aspects. Diversity of socio-cultural, socio-economic and their changes become an important basis in the development of residential houses for the community so that housing development isn't meant to divide communities but can become cohesive in social and cultural diversity to respectful quality of life. This is the concept of sustainable housing development in the future. Based on the results of primary data analysis, it was found that there are still differences in perceptions among these stakeholders. Of the four perception factors, all stakeholders, in general, view the role of the government as the most important factor in the effort to realize sustainable housing for Low-Income Communities In Medan. The importance of the government's role in the development of sustainable housing development is still not in line with the performance of the government.

Keywords : Collaboration, sustainable, development

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INTRODUCTION

The housing sector is a pillar of regional economic growth as well as a fundamental picture of people's livelihoods and quality of life. Furthermore, human resources have a mutually influential relationship with regional economic development as the main determinant. Thus, the housing sector has an important impact on improving the quality of human resources (Zhenshan Yang & Pan, 2020).

Furthermore, housing development can still be carried out if the land for housing is still large. However, the reality shows that the availability of land for housing development is very limited. Increasing land-use value for housing development requires good urban planning through policies and housing development programs carried out by stakeholders to ensure the availability of affordable housing for all people, especially low-income people (Koetter et al., 2021).

The use of the sustainable concept in housing has become increasingly popular after the United Nations (UN) launched the Sustainable Development Goals (SDGs) at the end of 2015, replacing the Millennium Development Goals (MDGs) which ended that year after 15 years of working to achieve development targets with the country. Countries around the world, including Indonesia. As one of the cities with the largest population in Indonesia, Medan is also experiencing serious problems in providing housing for its people. The housing sector is one of the crucial issues concerning public health and welfare. One of the factors causing the concept of sustainability (sustainability) in housing development is not so popular is the housing backlog is still high.

The government and the private sector, in the end, prioritize the economic aspect more than other aspects in the concept of sustainable development. The provision of affordable housing for the community, especially low-income communities, is a consideration for local governments in formulating policies and housing development programs. The following is presented the Percentage of Households by Home Ownership Status in North Sumatra Province in 2017 and 2021.

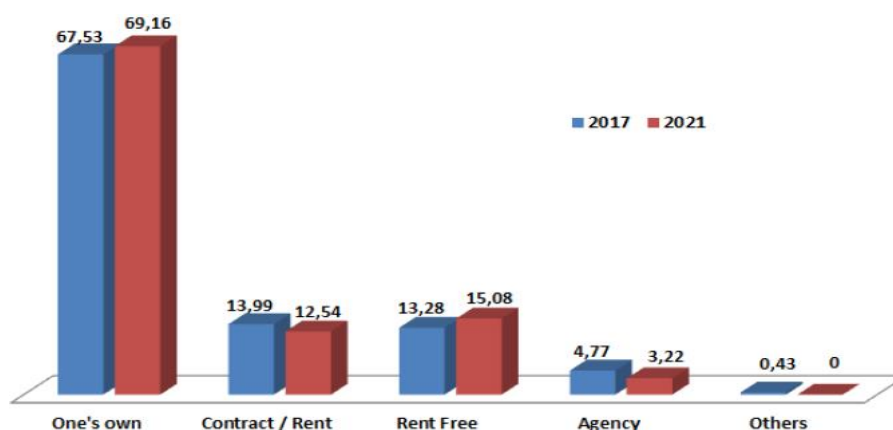


Figure 1 Percentage of Households By Home Ownership Status in North Sumatra Province in 2017, 2021

Source: BPS, Susenas 2017 and 2021

Proceeding Medan International Conference Economics and Business

Volume 1, Year 2023

"Entrepreneurship on Global Economics Development in the Era of Society 5.0"

Housing does not only have to meet the economical aspect (affordable) but also needs to meet the social and environmental aspects. Diversity of socio-cultural, socio-economic conditions and their changes become an important basis in the development of residential houses for the community so that housing development is not meant to divide communities but can become cohesive in social and cultural diversity to create a more prosperous, respectful, and respectful quality of life.

This is the concept of sustainable housing development in the future. If indeed, the focus of housing development must apply the concept of sustainability, the question is why is the realization of sustainable housing development hampered?

One of the inhibiting factors was the perception, especially from Developers. They stated that sustainable housing development has an understanding of high costs because there are additional social and environmental costs that must be incurred so that the sustainable housing —project becomes a challenge in itself for the Developers. In addition, sustainable housing development will be realized with the involvement of various related parties such as the public sector and the private sector so that collaboration is needed regarding the provision of innovative homes in the concept of sustainable housing, especially for low-income communities.

METHOD

Data collection is a very important activity in research. The use of appropriate and accurate data collection techniques will greatly determine the quality of the data obtained. To collect data in this study, researchers used methods that can measure perception gaps and perception mapping. In measuring the perception gap, the researcher uses the Gap Ratio, which is a measurement model that compares the scores of one variable with other variables. In this study, the researcher compared the score of the informant's perception, regarding the item that was assessed as performance or reality/achievement with the perception score which was assessed as importance or expectation/interest.

To calculate the gap score, the formula $\text{Gap} = 1 - P/I$ or $\text{Gap} = 1 - K/H$ is used, where P is performance, I is importance, K is reality, and H is hope. The gap score is between 0 and 1, if the score is close to 1, then the gap is close to the highest score. Conversely, if the score is close to 0, then the gap is close to the lowest score.

The comparison of perceptions relates to the comparison of perceptions between the government, academia, developers, the community, and non-governmental organizations. Quantitative methods are used to compare the perceptions of research subjects (BGAC) under study regarding the concept of sustainable housing for low-income communities and various factors related to the provision of housing in the community, both by the government and by developers and financial institutions.

The expected output obtained from the identification of stakeholders' perceptions of sustainable housing with a quantitative approach using a survey is a score on the perceptions of each stakeholder element regarding sustainable housing based on their respective criteria, as described in the research instrument. The score can provide a descriptive picture of the differences in perceptions between stakeholders.

To determine the significance of the perception scores between stakeholders as well as the gaps, statistical testing of the research hypotheses will be carried out as part of the quantitative approach taken. The research hypotheses put forward in this study mainly by using quantitative data obtained through surveys are:

Proceeding Medan International Conference Economics and Business

Volume 1, Year 2023

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H_0 : There is no overall difference in perception between the developer (developer), government, academics, community, and non-governmental organizations, concerning sustainable housing development programs.

H_1 : There are overall differences in perceptions between developers, government, academics, communities and non-governmental organizations, concerning sustainable housing development programs.

Hypothesis testing between stakeholders as a whole will be used Multivariate Analysis of Variance (Manova). Manova is a statistical test used to measure the effect of independent variables on a categorical scale on several dependent variables at the same time on a quantitative data scale. This analysis is also known as multivariate ANOVA.

Multivariate Anova itself stands for multivariate analysis of variance, meaning it is a form of multivariate analysis of variance (Manova). The multivariate form in question is that there is more than one dependent variable, so the Manova test is used to measure the effect of the independent variable on several dependent variables simultaneously or at once. In testing the hypothesis, the following criteria are used:

H_0 not rejected if $p\text{-value} > 0.05$ with $\alpha = 5\%$

H_1 rejected if $p\text{-value} < 0.05$ with $\alpha = 5\%$

The results of this hypothesis testing then provide a score of differences in perceptions of sustainable housing among the stakeholders studied, but also identify which stakeholder elements have gaps.

RESULT AND DISCUSSION

1.1. Community Stakeholders

In general, the community views that sustainable housing still does not meet expectations, especially in terms of social and environmental aspects. Of the four criteria analyzed, Table 3.1. describes the public's perception of what is expected or considered important by them (importance), it is still below the reality or performance they face and value (performance). The value of 'Performance' of sustainable housing criteria according to the community is at a score of 2.88 compared to the value of 'Hope (Importance)' which is at a score of 4.76.

Table 1. Public Perception Of Sustainable Housing
For Low-Income Communities

Sustainable housing development factors	<i>Importance</i>	<i>Performance</i>	<i>Gap</i>
Sustainable housing criteria	4.76	2.88	0.39
Legal and procedural aspects	4.72	3.78	0.22
Government role	4.75	1.42	0.70
The role of the private sector/entrepreneur	4.13	1.40	0.66

Other public perceptions show that in terms of expectations (importance), the community places the government's role as a top priority compared to others (4.75), followed by the role of the private sector/entrepreneur (4.13). More specifically, it can be seen in the gap column where the best performance according to public perception is from the legal and procedural aspects which according to the community can best meet their expectations, with the smallest gap between importance and performance (0.22). Furthermore, the community assessed that the existing housing had met their expectations and met the criteria for sustainable housing even though it was not yet 100%, namely with a gap score of 0.39.

Proceeding Medan International Conference Economics and Business

Volume 1, Year 2023

“Entrepreneurship on Global Economics Development in the Era of Society 5.0”

1.2. Government Stakeholders

The following is the government's perception of sustainable housing for Low-Income Communities, as shown in Table 3.2.

Table 2. Government Perception of Sustainable Housing for Low-Income Communities

Sustainable housing development factors	Importance	Performance	Gap
Sustainable housing criteria	4.53	2.02	0.55
Legal and procedural aspects	4.47	2.68	0.40
Government role	4.54	3.01	0.33
The role of the private sector/entrepreneur	4.78	2.87	0.40

Table 3.2. shows that in terms of expectations (importance), the government places the role of the private sector/entrepreneurs at the first level, regarding how to implement sustainable housing development for low-income communities (score 4.78). The same thing can be seen from the side of the gap, where the government perceives that the government's role has been optimized so that the achievement of its performance is considered the most successful compared to other factors. The gap between the importance and performance of the government occupies the lowest score with a gap score of 0.33.

1.3. Stakeholders Entrepreneur/ Developer/ Developer

Next is the entrepreneur's perception regarding sustainable housing development for Low-Income Communities. Table 3.3. describes research results that have been processed from primary data collected through surveys.

Table 3. Entrepreneur's Perceptions of Sustainable Housing for Low-Income Communities

Sustainable housing development factors	Importance	Performance	Gap
Sustainable housing criteria	4.40	2.81	0.36
Legal and procedural aspects	4.65	3.66	0.21
Government role	4.65	3.66	0.21
The role of the private sector/entrepreneur	4.62	3.73	0.19

The results of the study are presented in Table 3.3. not too surprising. In terms of expectations (Importance), entrepreneurs view that the role of the government occupies the most important factor in carrying out sustainable development programs for Low-Income Communities (4.65) followed by legal and procedural aspects (4.65), the role of entrepreneurs themselves (4.62), and achievement of the Criteria for sustainable housing (4.40). As for the achievement of expectations/ reality or performance, Entrepreneurs also assess themselves as having made optimal efforts in reality. This can be seen from the highest score on the role of entrepreneurs (3.73) followed by legal and procedural aspects (3.66), then the role of the government (3.66), and the achievement of the criteria for sustainable housing (2.81).

Proceeding Medan International Conference Economics and Business

Volume 1, Year 2023

“Entrepreneurship on Global Economics Development in the Era of Society 5.0”

DISCUSSION

Performance Achievement of Sustainable Housing Development Based on Stakeholders Perceptions Between Expectations and Realities based on Stakeholders Perceptions

Comparison of stakeholder perceptions between expectations/interests (Importance) and reality/performance (Performance) for sustainable housing development gives different results from one stakeholder to another. Table 3.4. provide a comparison of perceptions of the gap in question. For the record, the gap in question is the comparison between the achievement of expectations or performance with expectations (Importance). If the gap ratio between reality (Performance) to expectations (Importance) is close to 0 then the performance is considered good or the gap is low, in other words, the expectations of stakeholders related to sustainable housing development have been fulfilled in reality. And vice versa if the score is close to 1, then the gap is at the highest stage where the reality that is faced, obtained, and assessed is still far from their expectations and the gap between what is perceived in reality/performance is very high compared to what is expected/perceived important (Importance) by stakeholders.

Table 4. The Gap In The Perception of Stakeholders (Overall) on The Performance Of Sustainable Housing Development for Low-Income Communities

Sustainable housing development factors	Stakeholders		
	Developer	Government	Communities
Sustainable housing criteria	0.36	0.55	0.39
Legal and procedural aspects	0.21	0.40	0.22
Government role	0.21	0.33	0.70
The role of the private sector/entrepreneur	0.19	0.40	0.66

IMPLICATIONS

Based on the data, it appears that each stakeholder gives a different assessment in terms of the dimensions of sustainable housing (red shaded). The private sector/entrepreneur, for example, assesses the lowest performance is the role of the government. Likewise, the government assesses the role of the private sector/entrepreneur with the lowest performance. Meanwhile, according to public perception, it is the government's role that performs the lowest compared to the role of the private sector/entrepreneur in the sustainable housing development (the gap is 0.70).

CONCLUSION

There are still differences in perception among these stakeholders. Of the four perception factors, all stakeholders generally view the role of the government as the most important factor in efforts to realize sustainable housing for Low-Income Communities in Medan. The importance of the government's role in the development of sustainable housing development is still not in line with the performance of the government itself.

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Proceeding Medan International Conference Economics and Business

Volume 1, Year 2023

"Entrepreneurship on Global Economics Development in the Era of Society 5.0"

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Proceeding Medan International Conference Economics and Business

Volume 1, Year 2023

“Entrepreneurship on Global Economics Development in the Era of Society 5.0”

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Proceeding Medan International Conference Economics and Business

Volume 1, Year 2023

“Entrepreneurship on Global Economics Development in the Era of Society 5.0”

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