

## Analysis of Success Factors for Multi-Stakeholder Based Residential Projects in Padang Pariaman Regency

Irfan Andika Syofyan<sup>1\*</sup>, Benny Hidayat<sup>2</sup>, Akhmad Suraji<sup>3</sup>

<sup>1,2,3</sup> Civil Engineering Department, Universitas Andalas, 25133, Indonesia

\* Corresponding author, e-mail: Irfanandika66@gmail.com

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### ABSTRACT

*Padang pariaman district is one of potential region to develop being residence and settlement. From 2018 until these days, the subsidized housing is the dominated housing which been realised to be distributed for the low income community. Behind the developments, obstacles will be certainly faced by developers on the project fluidity. The adversity on building permits with stakeholder and developer deficiency of expertise are factors causing the housing project failure. This study purposes on discovering the success factor of housing project from perspectives of each stakeholder. The method of the study is mix methods. The study concludes that there are some successes factors of housing project based on perspective of each stakeholder. There is the commitment factor from the government institution perspective. While from the developer perspective, there are factors such as location, building quality, company management and guaranty. From consumer perspective, it associates with housing location, housing facility, housing quality and guaranty from developer. The dominant factor from the questionnaires's result is the housing quality factor, so this can achive great influence category from the consumers.*

**Keywords:** *The success of the project; Residential project; Stakeholder*

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### INTRODUCTION

A project is said to be successful or successful when the project reaches the expected target, and has sufficient resources to meet the needs [1]. Padang Pariaman is one of the districts in West Sumatra which has an area of 1,328.79 km<sup>2</sup>. This area makes Padang Pariaman Regency with the smallest area in West Sumatra. Padang Pariaman used to have the largest area in West Sumatra before the expansion of Padang City in 1980, the expansion of the Mentawai Islands in 1999, and Pariaman City in 2002 [2]. In 2019 Padang Pariaman Regency mostly has land that can still be developed, the land includes non-field agricultural land with an area of 78,048 Ha, non-agricultural land with an area of 31,975 Ha, and rice fields covering 22,856 Ha [3]. Padang Pariaman Regency borders Agam Regency in the northern position, then borders Padang City in the south, then in the east with Solok Regency and Tanah Datar Regency, and in the west borders Pariaman City and the Indonesian Ocean [4]. Padang Pariaman Regency administratively consists of 17 sub-districts and 103 nagari. The coverage of the sub-district area includes: Lubuk Alung District, Batang Anai District, Nan Sabaris District, 2x11 Enam Lingkung District, VII Koto Sungai Sarik District, V Koto Kampung Dalam District, Sungai Garinggiang District, Sungai Limau District, IV Koto Aur Malintang District, Ulakan Tapakih District, Sintuak Taboh Gadang District, Padang Sago District, Batang Gasan District, V Koto Timur District, 2x11 Kayu Tanam District, Patamuan District, and Enam Lingkung District. Areas that are developing rapidly as housing are Batang Anai and Lubuk Alung sub-districts. Both sub-districts are designated as residential and settlement land. The development of land into residential and settlements is an opportunity for service providers called developers to do business in the property sector. In

general, residential that has been realized from 2018 to date dominates, namely subsidized residence or landed houses intended for low-income community. With the million house program launched by the President since 2015, it was recorded that the realization of the million house program succeeded in building 1,105,707 housing units throughout Indonesia in the 2021 fiscal year. This achievement consists of 826,500 low income community residential units and 279,207 commercial residence units [5]. According to the result obtained from the developer's website, residential in Padang Pariaman Regency, especially Batang Anai District, has built 34 residential with 23 developers. The data is calculated from 2020 to date. Low income community residential development is carried out for a land area of no more than 5 (five) hectares and at least 0.5 (zero point five) hectares and is in 1 (one) location designated for the construction of landed houses. The location of low income community residential development must be in accordance with the regional spatial plan and standards set by the Minister of Public Works and Public Housing[6]. In Indonesia, there are 2 main types of planning, namely development plans and spatial plans. Spatial plans are divided into 2 types, namely national spatial plans and district / city spatial plans [7]. In accordance with Government Regulation No. 64 of 2016, the implementation of residential development is divided into 4 stages, including: preparation stage, pre-construction stage, construction stage, and post-construction stage. In Law number 1 of 2011 in article 56 paragraph 1 explains that the implementation of settlement areas is carried out to realize areas that function as residential environments and places of activity that support planned, comprehensive, integrated, and sustainable livelihoods in accordance with spatial plans which aim to fulfill citizens' rights to a decent place to live in a healthy, safe, harmonious, and orderly environment and ensure certainty of settlement [8].

Factors affecting the success of a development project include 4 factors which include: alternative land use, marketing infrastructure, cooperation between public and private sectors, survival costs and tax consequences [9]. Many projects are also declared a failure when the project does not reach the expected target. In housing projects, the failure of a project is the non-realization of the implemented program. Project failure is a situation where the work results are not in accordance with predetermined specifications. the failure of a project is due to the accumulation of various factors. The factors in question are human factors, design factors, maintenance factors, material factors, and unexpected things [10]. Behind the success of this housing project, there are challenges and obstacles faced by developers in running the project. There are also many factors that influence the failure of a residential project, one of the factors that cause failure is the developer's lack of understanding and experience in undergoing the residential project itself. In addition, the perspectives of the various parties involved also influence the success factors of the project, including government agencies that have a stake in the legality of licensing and requirements for companies that will run housing projects. In addition, factors from consumers also affect the success of the project. Because the success or failure of a residential project depends on the buyer or consumer of the residential project. This study aims to determine the success factors of each stakeholder involved in residential projects in Padang Pariaman Regency. The stakeholders in question include the Padang Pariaman Regency Public Works and Spatial Planning Office, the Padang Pariaman Regency Housing Settlement and Land Environment Office, the Developer. In addition, this study also aims to determine the dominant factors of the success of housing projects from the perspective of consumers or homeowners. The hope is that future housing projects can be more successful from the point of view of developers, government agencies, and consumers or homeowners.

## **MATERIALS AND METHODS**

The method used in this research is a combination of qualitative and quantitative methods. According to [11] qualitative is a research procedure that produces descriptive data in the form of written or spoken words from people and observable behavior. Meanwhile, quantitative research is research in the form of numbers. This type is data on an interval and ratio measurement scale. Quantitative data collection techniques are referred to as questionnaires. The questionnaire is a data collection technique by submitting a list of questions to be filled in by the respondent. Qualitative methods will be

conducted interviews with parties involved in this housing project such as government agencies, developers, and consumers or residents of the house. In this study, population and sample data were obtained from the sikumbang website [12]. The sikumbang website is a system that presents data and information about residential development. The sample taken was carried out probably sampling using the simple random sampling method. This method is done randomly without regard to the strata in the population. For minimum sampling, the Slovin formula is used so that the number of samples obtained is 23 developers, and 97 housing units. Data collection in the form of interviews is carried out in stages, starting with interviews with consumers or residents of the house. Interviews with consumers are conducted at the beginning because the results of the interviews obtained will be continued to the questionnaire survey stage.

Interviews were conducted with sources totaling 5 (five) people with the initials AR, AB, AA, DB, and AD, the interviews took place at each consumer's home. After the interview was completed, the results of the interview were used as research material for the questionnaire survey. questionnaires were given to consumers as much as the predetermined sample. Furthermore, interviews were conducted with developers totaling 6 people with the initials LS, N, RA, RY, R, and AN. Interviews were conducted at the housing marketing office of each of these developers. Interviews to government agencies were conducted last with the initials HR and YB. The interviews took place at the PUPR Spatial Planning office and the Padang Pariaman Regency Housing, Settlement and Land Environment Office. After conducting interviews, quantitative research was continued, namely by determining research variables for questionnaire surveys.

Table 1: Research Questionnaire

No.	Housing Project Success Factor Parameters	Answer				
		1	2	3	4	5
<b>X1</b>	<b>Residential Location</b>					
X1.1	Location near shopping facilities					
X1.2	Location near transportation facilities					
X1.2	Location near health facilities					
X1.4	Location near education facilities					
X1.5	Location near place of work					
X1.6	Flood-free location					
X1.7	Location near public roads					
<b>X2</b>	<b>Public facilities</b>					
X2.1	Housing roads are adequate					
X2.2	Housing drainage is adequate					
X2.3	Playground available					
X2.4	Security facilities available					
X2.5	Places of worship available					
X2.6	Cafes or stalls available					
X2.7	Sports facilities available					
<b>X3</b>	<b>Home quality</b>					
X3.1	Neat house appearance					
X3.2	Good technical specifications					
X3.3	House is safe to live in					
X3.4	Good air circulation system					
X3.5	Good sanitation system					
X3.6	Clean water network system					
<b>X4</b>	<b>Warranty/guarantee</b>					
X4.1	Guarantee of house damage (physical defects)					
X4.2	Warranty of house facilities (water, electricity, etc.)					

Table 2. Likert Scale

Very Influential	5
Influential	4
Moderately Influential	3
Low influential	2
Very Low Influential	1

In analyzing the quiz answers from respondents, a Likert scale is used to determine the weight or score. As both qualitative and quantitative research, the interview data was analyzed through data reduction, data presentation and data summarization. Some of the questions and answers asked during the interview will determine the results of the analysis. The results of the answers from the interviewees will be reduced, which means selecting and summarizing important things and discarding unnecessary things. After the data is reduced, data presentation is carried out in the form of descriptions and tables. After that, conclusions are drawn on the results of the interview data obtained. As for quantitative data analysis using averages and percentages of the results of questionnaire answers filled in by residents of the house as respondents with Microsoft excel software rocks.

## RESULTS AND DISCUSSION

### Interview Result

In the success of a residential project there are factors that influence it. These factors are important points that support the success of the residential project. from the results of interviews with each stakeholder, they have their own perspective regarding the factors of the success of residential projects.

Table 3. Success Factors from the Government Agency Perspective

Government Agencies	Success Factors
Department of Public Works and Spatial Planning (PUPR)	commitment
The Department of Environment (DLHPKPP)	commitment

From the results of interviews with government agencies, the main factor affecting the success of residential projects is the commitment factor. This commitment can be the core problem of the failure of housing projects. This is because with the rules and agreements that have been agreed between Government agencies and developers, one of them must follow the rules according to the agreed agreement. If the developer does not follow or breaks the agreement, it is called a violation and does not meet the criteria for project success from the perspective of government agencies.

Table 4. Success Factors from the Developer's Perspective

Name (Initial)	Success Factors			
	Locatin	Quality of Houses	Corporate Management	Guarantee
Ls	√			√
N		√	√	
Ra	√		√	√
Ry	√		√	√
R	√	√	√	√

An	√	√	√	√
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From the results of interviews with several developers, the main factors for the success of residential projects are the location of residence, the quality of houses, company management and guarantees or guarantees given to consumers. locations that are close or not far from public facilities are very decisive and attract consumers. Company management is also a supporting factor. Company management that is applied such as cooperation. This cooperation is related to work in the field and in the office. So all parties involved in the project must collaborate with each other so that the residential project can succeed. Then providing a guarantee or warranty to consumers is also a supporting factor for the success of a residential project. If consumers complain about the house they bought, The guarantee obtained is in the form of home repairs in the form of minor damage.

Table 5. Success Factors from the Consumer Perspective

Name (Inisial)	Success Factors			
	Location	Facility	Quality	Guarantee
AR	√	√		√
AB	√	√	√	√
AA	√	√		√
DB	√	√		√
AD	√	√		√

Consumers as buyers have their own perspective on the main factors for the success of residential projects. In general, this consumer is someone who buys products for their own interests and needs. Therefore, consumers have their own opinions about the products they buy. From the results of interviews with five residents of the house, the main factors supporting the success of residential projects are location factors, facility factors, and warranty or guarantee factors. location factors affect the success of the project, because in addition to buying a house, consumers also have a desire to facilitate all their activities such as close access from educational facilities and shopping facilities. the facility factors available in residence are also the success of the project. The facilities in question such as the availability of places of worship, adequate residential roads and available parks for children to play. In addition, the guarantee or guarantee of home repair or facilities is also a major factor according to the perspective of consumers or homeowners.

### Questionnaire Result

In addition to conducting interviews with consumers, this research was continued with a questionnaire survey to 97 consumers who bought housing in the Batang Anai sub-district, Padang Pariaman Regency. The survey was conducted by giving a draft questionnaire to each consumer with predetermined factor parameters. These factor parameters are determined according to literature studies and the application of the results of interviews to consumers. For processing questionnaire data, the mean formula is used so that the results obtained are the most dominant factors from the consumer perspective. To determine the average value of consumer answers to each statement indicator, intervals and categories are used for the average calculation results.

Table 6. Class Intervall

Intervall	Category
1 – 1,79	Very Low Influential
1,80 – 2,59	Low influential
2,60 – 3,39	Moderately Influential
3,40 – 4,19	Influential
4,20 – 5,00	Very Influential

Table 7. Average Results from Consumer Respondents

No	Housing Project Success Factor Parameters	Mean	SD	Categori
<b>X1</b>	<b>Residential Location</b>			
X1.1	Location near shopping facilities	3,87	1,07	Influential
X1.2	Location near transportation facilities	4,02	1,07	Influential
X1.3	Location near health facilities	4,33	0,94	Very Influential
X1.4	Location near education facilities	4,20	0,99	Very Influential
X1.5	Location near place of work	3,91	1,18	Influential
X1.6	Flood-free location	4,54	0,83	Very Influential
X1.7	Location near public roads	4,05	0,97	Influential
<b>X2</b>	<b>Public facilities</b>			
X2.1	Housing roads are adequate	4,18	0,78	Influential
X2.2	Housing drainage is adequate	4,42	0,72	Very Influential
X2.3	Playground available	3,42	1,14	Influential
X2.4	Security facilities available	3,98	1,07	Influential
X2.5	Places of worship available	4,64	0,87	Very Influential
X2.6	Cafes or stalls available	3,72	1,11	Influential
X2.7	Sports facilities available	3,46	1,07	Influential
<b>X3</b>	<b>Home quality</b>			
X3.1	Neat house appearance	4,35	0,84	Very Influential
X3.2	Good technical specifications	4,41	0,76	Very Influential
X3.3	House is safe to live in	4,56	0,79	Very Influential
X3.4	Good air circulation system	4,52	0,72	Very Influential
X3.5	Good sanitation system	4,52	0,79	Very Influential
X3.6	Clean water network system	4,65	0,66	Very Influential
<b>X4</b>	<b>Warranty/guarantee</b>			
X4.1	Guarantee of house damage (physical defects)	4,08	0,83	Influential
X4.2	Warranty of house facilities (water, electricity, etc.)	4,28	0,80	Very Influential

The results of the questionnaire survey above show that each indicator has an average value from consumer assessments. these results make the opinion or perspective of consumers on home purchases. From the results of these calculations, the dominant factor according to consumers is the factor that gets a very influential category with a large interval of 4.20 on the indicators of each factor parameter. Factor parameters such as location factors, facility factors, and guarantees get the results of

the influential assessment category. This category is caused by each indicator not getting an average value above 4.20 completely. So that these three factors are not the dominant factors in the success of housing projects from a consumer perspective. Meanwhile, from the results of the interviews, all interviewees stated that these three factors are factors that influence the success of housing projects. However, from the results of the questionnaire survey, not all consumers gave a high assessment of the indicators of the three factors. In addition, the housing quality factor is a factor with a very influential category from the questionnaire survey results. Each statement indicator received an assessment with a very influential category. In contrast to the results of the interview, the home quality factor was not taken into account by several narusember interviewed. But after conducting a questionnaire survey, the home quality factor is a dominant factor in the success of housing projects from the perspective of consumers or homeowners.

Table 8. Dominant Factors from a Consumer Perspective

Home Quality			
Indicator	Mean	SD	Kategori
Neat house appearance	4,35	0,84	Very Influential
Good technical specifications	4,41	0,76	Very Influential
House is safe to live in	4,56	0,79	Very Influential
Good air circulation system	4,52	0,72	Very Influential
Good sanitation system	4,52	0,79	Very Influential
Clean water network system	4,65	0,66	Very Influential

Stakeholders are parties involved in a project. As explained in the research background, stakeholders in this residential project include government agencies, developers, and consumers or homeowners. Government agencies here include the PUPR and Spatial Planning Office and the Environmental Office of Housing, Settlement Areas and Land. The results of the interview explained that government agencies have a perspective on the success factor of housing projects, namely the commitment factor. In general, developers who will carry out housing projects must follow the procedures set by government agencies, both in the pre-construction phase and the construction phase. Government agencies have a role in project legality and supervision when the project is carried out.

Developers as developer company must follow the rules and must not violate the regulations set by government agencies. During the post-construction phase, the developer must maintain the completed building. In addition, developers sell housing units to consumers by marketing or creating advertisements that attract consumers. Consumers who have bought a house will get the facilities provided by the developer. From the results of the questionnaire, the most influencing factor from a consumer perspective is the quality of the house. A quality house must meet criteria including good technical specifications, a good air circulation system, a good sanitation system, and the house is safe to live in. To meet the criteria for the houses desired by consumers, developers must maintain the quality of the houses built. In addition, the developer must also provide a guarantee to consumers as proof of guarantee if the house obtained by consumers is physically damaged or the facilities provided are damaged.

From the stages of a housing project that is carried out starting from the pre-construction stage to the post-construction stage, the most dominant stakeholder is the developer. Because to achieve the success rate of housing projects, developers must run and commit in accordance with the regulations set by the government and provide the best service to consumers so that the houses built have attractiveness by buyers.

## CONCLUSION

Based on the research objectives and the final results of the research in the form of interviews and questionnaire surveys, the following conclusions can be drawn from this research:

1. The success factor of residential projects from the perspective of government agencies is the commitment factor. With the commitment between developers and government agencies, housing projects can be said to be successful.
2. The success factors of residential projects from the developer's perspective are in the form of location factors, building quality factors, company management factors and warranty or guarantee factors.
3. The success factors of residential projects from the perspective of consumers or homeowners include housing location factors, housing facility factors, housing quality factors and warranty or guarantee factors provided.
4. The home quality is a dominant factor from the results of the calculation of the quiz to consumers or residents of the house with indicators such as neat house workmanship, good technical specifications, safe houses to live in, good air circulation systems, good sanitation systems, and clean water network systems.

## REFERENCE

- [1] T. Novianti, *Pengantar evaluasi Proyek (Edisi III)*, vol. 3. 2007.
- [2] wikipedia, "Kabupaten Padang Pariaman," 2021. [https://id.wikipedia.org/wiki/Kabupaten\\_Padang\\_Pariaman](https://id.wikipedia.org/wiki/Kabupaten_Padang_Pariaman) (accessed Dec. 05, 2021).
- [3] Bps Kabupaten Padang Pariaman, *Luas Lahan Menurut Penggunaan Kabupaten Padang Pariaman 2019*. 2020.
- [4] Padang Pariaman, "Letak Geografis," 2016. <https://padangpariamankab.go.id/2016/06/10/letak-geografis/> (accessed Dec. 05, 2021).
- [5] Kementrian Pekerjaan Umum dan Perumahan Rakyat, "Dukung Pemulihan Ekonomi Akibat Pandemi COVID-19, Realisasi Program Sejuta Rumah TA 2021 Capai 1.105.707 Unit," *pu.go.id*, 2022. <https://pu.go.id/berita/dukung-pemulihan-ekonomi-akibat-pandemi-covid-19-realisasi-program-sejuta-rumah-ta-2021-capai-1105707-unit> (accessed May 30, 2022).
- [6] Peraturan Pemerintah RI, "Peraturan Pemerintah Republik Indonesia No. 64 Tahun 2016 tentang Pembangunan Perumahan Masyarakat Berpenghasilan Rendah." pp. 1–20, 2016.
- [7] Portal Tata Ruang, "Mengenal Rencana Detail Tata Ruang (RDTR)," 2021. <http://www.tataruang.id/2021/07/31/mengenal-rencana-detail-tata-ruang-rdtr/>.
- [8] Peraturan Pemerintah RI, "Undang-Undang Republik Indonesia Nomor 1 Tahun 2011 Tentang Perumahan Dan Kawasan Permukiman." 2011.
- [9] W. P. Sancoko, "Faktor-faktor Penyebab Tingkat Keberhasilan Pengembang Hunian Di Kabupaten Malang," Institut Teknologi Nasional, 2014.
- [10] A. Salain, Dharmayanti, "Analisis Risiko Keterlambatan Pelaksanaan Proyek Konstruksi Hotel Di Bali," *J. Spektran*, vol. 7, no. 2, pp. 212–221, 2019.



- [11] Sugiyono, *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Penerbit Alfabeta, 2013.
- [12] PPDP, “Daftar Perumahan Di Kabupaten Padang Pariaman,” 2021.  
<https://sikumbang.pdpp.id>.