



STUDY OF RESETTLEMENT SATISFACTION OF REMOTE INDIGENOUS COMMUNITIES IN SIGIREGENCY, CENTRAL SULAWESI PROVINCE (CASE STUDY OF BANGGA VILLAGE AND KALORA VILLAGE)

Andri Marwan A. Landungi*, Fahira and Tutang Muhtar K.

Post Graduate Program, Civil Engineering, University Tadulako, Palu, Central Sulawesi
Indonesia.

Article Received on 07/06/2023

Article Revised on 27/06/2023

Article Accepted on 17/07/2023

*Corresponding Author

Andri Marwan A.

Landungi

Post Graduate Program,
Civil Engineering,
University Tadulako, Palu,
Central Sulawesi Indonesia.

ABSTRACT

The KAT empowerment of the Kaili Da'a Tribe in Bangga Village and Kalora Village, Kinovaro District, Sigi Regency, Central Sulawesi, began with repairing the residences of 90 heads of families that were not permanent to become permanent and insulation of rooms, such as bedrooms, living rooms or kitchens. The government, in this case the Social Service as the implementer of the program, needs to measure

the level of occupant satisfaction so that it can be known what the level of occupant satisfaction is and what strategies the developer should take to increase occupant satisfaction if the occupants feel dissatisfied with the housing. The purpose of this study was to determine the level of satisfaction of resettlement residents of Remote Indigenous Communities (KAT) in Bangga Village and Kalora Village, Sigi District, Central Sulawesi Province and to determine the influence of location factors, building quality factors, housing facilities and design on settlement occupant satisfaction. back Remote Indigenous Communities (KAT) in Bangga Village and Kalora Village, Sigi District, Central Sulawesi Province. This research uses the type of explanatory research or explanation. In this study, the sampling technique used was *random sampling* with the number of respondents as many as 90 respondents. For data collection using questionnaires and documentation techniques. Data analysis using the *Importance Performance Analysis (IPA)* method and multiple linear regression. Based on the results of the study, it was shown that based on the calculation of the level of conformity

between perception and the level of importance, the result was that the average value of conformity was 86.91%, which means that the level of satisfaction of residents of Remote Indigenous Communities (KAT) in Bangga Village and Kalora Village, Sigi Regency Central Sulawesi province is very high. Location factors, building quality factors, building facilities factors, and building design factors simultaneously and partially have a significant effect on the satisfaction of residents of KAT settlements in Bangga Village and Kalora Village, Sigi Regency.

KEYWORDS: Factors, Satisfaction, Residents, Resettlement of Remote Indigenous Communities.

1. INTRODUCTION

One of the KAT empowerment programs by the government through the Ministry of Social Affairs is housing assistance for KAT in Bangga Village and Kalora Village, this house assistance is a form of government concern for the condition of KAT people who live in remote areas without adequate housing support, is expected to reduce poverty and provide facilities or services for KAT in the social, educational and economic fields.

Before being empowered, the condition of the KAT house of the Kaili Topo Da'a tribe in the village was very unfit for habitation. They live in mountainous areas in the form of hills or misty mountain peaks. Their house is not permanent, with a length of four meters and a width of two meters, the house has no partitions or rooms, and is the place for all daily activities. In the back corner of the building there is a kitchen (stove) which is used for cooking and at the same time as heating at night. Some of them also built houses on trees called tree houses with a size of two square meters. Residents' houses that are not permanent are made of bamboo or wood for floors and walls, and roofs with woven thatch leaves. The KAT empowerment of the Kaili Da'a Tribe in Bangga Village and Kalora Village, Kinovaro District, Sigi Regency, Central Sulawesi, began with repairing the residences of 90 heads of families that were not permanent to become permanent and insulation of rooms, such as bedrooms, living rooms or kitchens. Apart from that, it is also a better replacement for building materials for houses, namely in the form of wood, red stone, zinc/asbestos. The location for the construction of the house was not moved to another village, but only moved near the former house, the aim was not to experience too many changes in the social environment (Results of initial observations, 2022).

The condition of the houses of KAT residents of the Kaili Da'a tribe in Bangga Village and Kalora Village after being empowered received house assistance with a length of five meters and a width of four meters, made of bricks for walls, cement plaster floors, and roofs of zinc and or asbestos. The aid house is equipped with a living room, bedroom and kitchen. The existence of assistance in the form of livable houses certainly has an impact on the lives of the people who are in the KAT, with the construction of better and decent houses it is hoped that they will be satisfied, where they no longer need to routinely make repairs to parts of the house that are damaged. often suffer damage due to construction which is still non-permanent or traditional typical of rural communities (Results of initial observations, 2022).

The government, in this case the Social Service as the implementer of the program, needs to measure the level of occupant satisfaction so that it can be known how the level of occupant satisfaction is and what strategies the developer must take to increase occupant satisfaction if residents are dissatisfied with the housing, therefore it is necessary to conduct a study research with the title "Study of Satisfaction of Resettlement of Remote Indigenous Communities (KAT) in Sigi Regency, Central Sulawesi Province (Case Study of Bangga Village and Kalora Village)".

2. METHODOLOGY

2.1 Location and Time of research

The research locations chosen were Remote Indigenous Community (KAT) settlements in Bangga Village, Dolo Selatan District and Kalora Village, Kinovaro District, Central Sulawesi Province.

2.2 Types of research

This type of research is explanatory research or explanation. *Explanatory research* is intended to explain the position of the variables studied and the relationship between one variable and another.^[1]

2.3 Data source

Sources of data collected in this study are divided into two, namely:

a. Primary data source

Primary data is research data obtained from sources directly without going through intermediary media. In this study primary data is data that comes directly from respondents where the data is data from filling out questionnaires that have been distributed by

researchers to respondents.

b. Secondary data sources

Secondary Data, this data is needed to support maximum analysis and discussion. Secondary data is also needed regarding the disclosure of phenomena in this study. This secondary data includes, literature (*Library Research*), supporting documents that have relevance to this research, documents that are relevant to this research.

2.4 Population and Sample

2.4.1 Population

In this study, the population consisted of all people living in Remote Indigenous Community (KAT) settlements in Bangga Village, Dolo Selatan District, totaling 75 heads of families and 90 heads of families in the KAT settlement, Kalora Village, Kinovaro District.

2.4.2 Research sample

The results of the calculation above show that the number of samples from the KAT of Bangga Village, Dolo Selatan District, was 43 heads of families, and the samples from KAT of Kalora Village, Konivaro District, were 47 heads of families. So the total sample in this study was 90 samples. In determining these respondents, researchers used a random sampling technique, namely taking samples or respondents based on certain characteristics. *Purposive sampling* is taking sample members from a population that is carried out randomly without regard to the strata in that population.^[1]

2.5 Data collection technique

Techniques for collecting data in this study include:

1. Questionnaire distribution

Questionnaire is a technique or way of collecting data indirectly by distributing a list of questions to respondents in order to provide answers. To measure this scale, a *Likert scale* is used, each statement is given a score of 1 to 5 with the weight of each statement as follows:

The satisfaction variable (Y) uses the answer scale as follows: Strongly Agree (SS) with a value of 5 Agree (S) with a value of 4 Neutral (N) with a value of 3 Disagree (TS) with a value of 2 Strongly Disagree (STS) with a value of 1 *Importance Performance Analysis (IPA)* purposes The following is a description of the alternative answer choices available. That is:

a) Satisfaction level:

Very Satisfied (SP) with a value of 5 Satisfied (P) with a value of 4

Quite Satisfied (CP) with a value of 3 Dissatisfied (TP) with a value of 2

Very Dissatisfied (STP) with a value of 1

b) Importance level:

Very Important (SP) with a value of 5 Important (P) with a value of 4 Important enough (CP) with a value of 3 Not Important (TP) with a value of 2

Very Not Important (STP) with a value of 1

2. Documentation

Data collection is carried out by studying and processing data based on existing records and reports in the company related to the problem under study.

2.6 Variable operational Definition and Indicators**Table 1: Operationalization of research variables.**

Variable	Indicator	Source
Location (X 1)	1 The location is easily accessible by means of transportation	[2]
	2 Able to be reached by telecommunications networks	[3]
	3 Close to work	[4]
	4 Close to public facilities	[5]
Build quality (X 2)	1 The quality of the roof, the ceiling of the house is better	[3]
	2 Better quality of the walls of the house	
	3 Better floor quality	
	4 Better quality of sills, doors, windows	
	1 There is a drainage system	[2]
	2 There are security services	[6]
	3 Provision of clean water network	
	4 Wastewater infrastructure is available	
	5 Wide road	[6]
	6 There is a power grid	[4]
Housing facilities (X 3)	7 Infrastructure for economic activity centers is available, such as markets.	[5]
	8 Worship facilities are available	
	9 Available educational infrastructure	[5]
	10 Health infrastructure is available	
	11 Available telecommunications infrastructure	
12 Available Public Service Office		
13 Parking facilities are available		

	14	Cleaning facilities are available	
	15	Hall facilities are available	
	16	There are sports facilities and a garden	
Design (X 4)	1	Adequate bedrooms are available	[6]
	2	Adequate bathrooms are provided	
	3	Kitchen separate from other rooms	
	4	There is sufficient multi-purpose space	
	5	Residential area	[5]
Satisfaction (Y)	1	Conformity of expectations	[7]
	2	Say positive things to others	
	3	Willingness to recommend to others	

2.7 Data analysis

Data analysis in this study used SPSS software quantitative statistical analysis techniques, with several processes as follows:

a. *Importance Performance Analysis (IPA)*

To find out the level of satisfaction of the people of Remote Indigenous Communities with housing assistance provided by the government, an *Importance Performance Analysis (IPA)* analysis was carried out, with the following analysis process:

- a. Analyze the suitability level of respondents
- b. Make a position map of *importance – performance*
- c. Calculates the average level of importance/expectation and reality for all indicators.
- d. Create a Cartesian diagram

b. **Multiple linear regression**

Multiple linear regression analysis is a linear relationship between two or more independent variables (X_1, X_2, \dots, X_n) and the dependent variable (Y). This analysis is to determine the direction of the relationship between the independent variables and the dependent variable whether each independent variable is positively or negatively related and to predict the value of the dependent variable if the value of the independent variable increases or decreases. The data used is usually an interval or ratio scale.

c. **Simultaneous Test and Partial test**

1) **Simultaneous Test (Test F)**

Sugiyono (2014: 219) states that the f test is a statistical test tool simultaneously to determine the effect of the independent variable on the dependent variable. Together, a comparison is made between f count and f table at the 95% confidence level ($\alpha = 0.05$).

2) Partial Test (t test)

Furthermore, according to Ghozali (2011), the t statistical test basically shows how far the influence of one explanatory/independent variable individually in explaining the dependent variable.

3. RESULTS AND DISCUSSION

3.1 Importance Performance Analysis (IPA) analysis

The IPA method is used to measure the extent to which the quality of producer performance meets consumer expectations in order to satisfy consumers. The various stages of the scientific method include analyzing opinions and expectations, and analyzing implementation. Get the total value of the overall score for each attribute of each consumer.

The overall evaluation of perceptions about the level of satisfaction (X_i) and the evaluation of the level of importance (Y_i) is the average number of consumers participating in the study, which is up to 90 people. Therefore, the average level of perception gets the expectations of each attribute. The average value (X) of the evaluation of the level of perception shows the position of the attribute on the X axis, and the average value (Y) of the evaluation of the level of expectation shows the position of the attribute on the Y axis. Each of the average values of the level of perception and expectation of the next attribute is plotted into a Cartesian diagram using SPSS software to see the position of these attributes in a certain quadrant.

1. Conformity level analysis

The level of conformity is the result of a comparison between the perceived score and the expected score. The level of consistency will determine the order of priority to improve the factors that affect satisfaction. The level of implementation of each of these attributes can be ranked from the highest level (one) to the lowest level (twenty eight). The higher the priority indicates that the units obtained are more in line with expectations and interests, while the lower the priority, the lower the priority, this indicates subjects whose perceptions and expectations of quality are not in line with their expectations and interests. According to Steer (1993) dividing the percentage of satisfaction levels as shown in Table 2 below.

Table 2: Satisfaction level.

No.	Satisfaction Percentage	Satisfaction level
1	20-40	Low Satisfaction
2	41-79	Moderate Satisfaction
3	80-100	High Satisfaction

To find out the results of the calculation of the level of conformity between the level of perception and the level of interest of the residents of KAT settlements in Bangga Village can be seen in the following table description.

Table 3: Conformity Level between Perception Level and Interest Level of KAT Settlement Residents in Bangga Village.

No.	Variable	Attribute	Satisfaction Level(Ki)	Importance Level(Hi)	Conformity Level (Tki)
1	Location (X1)	X 1.1	103	179	57.54
		X 1.2	170	187	90.91
		X 1.3	106	183	57.92
		X 1.4	73	198	36.87
2	Build Quality (X2)	X 2.1	163	180	90.56
		X 2.2	186	191	97.38
		X 2.3	148	165	89.70
		X 2.4	156	171	91.23
3	Housing Facilities (X3)	X 3.1	81	111	72.97
		X 3.2	77	109	70.64
		X 3.3	143	168	85.12
		X 3.4	158	167	94.61
		X 3.5	166	170	97.65
		X 3.6	100	133	75.19
		X 3.7	136	155	87.74
		X 3.8	150	180	83.33
		X 3.9	155	198	78.28
		X 3.10	133	175	76.00
		X 3.11	163	176	92.61
		X 3.12	126	174	72.41
		X 3.13	135	159	84.91
		X 3.14	164	166	98.80
X 3.15	156	160	97.50		
X 3.16	91	95	95.79		
4	Design (X4)	X 4.1	120	157	76.43
		X 4.2	119	149	79.87
		X 4.3	133	161	82.61
		X 4.4	150	171	87.72
		X 4.5	152	172	88.37
Average					82.44

Source: Primary data processed with *MS. Excel 2020* (2023)

According to Sukardi and Cholidis in Siska Fitrianti (2015), if the value of the suitability level is close to 100 and is above the average, it can be said that the suitability level is good. Based on the calculation of the level of conformity between the level of perception and the level of importance, the result is that the average value of conformity is 82.44%, which means that the satisfaction level of resettlement residents of Remote Indigenous Communities (KAT) in Bangga Village is very high.

Then the results of calculating the level of conformity between the level of perception and the level of interest of the residents of the KAT settlement in Kalora Village can be seen in the following table.

Table 4: Conformity Level between Perception Level and Interest Level of KAT Settlement Residents in Kalora Village.

No.	Variable	Attribute	Satisfaction Level (Ki)	Importance Level (Hi)	Conformity Level (Tki)
1	Location (X1)	X 1.1	180	203	88.67
		X 1.2	213	207	102.90
		X 1.3	186	204	91.18
		X 1.4	171	194	88.14
2	Build Quality (X2)	X 2.1	191	188	101.60
		X 2.2	206	212	97.17
		X 2.3	192	183	104.92
		X 2.4	191	186	102.69
3	Housing Facilities (X3)	X 3.1	90	112	80.36
		X 3.2	91	107	85.05
		X 3.3	164	175	93.71
		X 3.4	173	179	96.65
		X 3.5	183	185	98.92
		X 3.6	163	211	77.25
		X 3.7	149	165	90.30
		X 3.8	162	208	77.88
		X 3.9	173	219	79.00
		X 3.10	152	181	83.98
		X 3.11	184	186	98.92
		X 3.12	178	178	100.00
		X 3.13	150	177	84.75
		X 3.14	174	174	100.00
		X 3.15	178	178	100.00
		X 3.16	102	105	97.14

4	Design (X4)	X 4.1	136	161	84.47
		X 4.2	137	163	84.05
		X 4.3	149	182	81.87
		X 4.4	156	181	86.19
		X 4.5	153	184	83.15
Average				91.07	

Source: Primary data processed with *MS. Excel 2020* (2023)

Based on the calculation of the level of conformity between the level of perception and the level of importance, the result is that the average value of conformity is 91.07%, which means that the satisfaction level of resettlement residents of Remote Indigenous Communities (KAT) in Kalora Village is very high. Meanwhile, for the results of calculating the level of conformity between the level of perception and the level of interest of the residents of KAT settlements from the combined data of the two villages, the results can be seen in the following table.

Table 5: The Level of Conformity Between the Perception Level and the Interest Level of KAT Settlement Residents from the Data of the Two Villages After Merging.

No.	Variable	Attribute	Satisfaction Level (Ki)	Importance Level (Hi)	Conformity Level (Tki)
1	Location (X 1)	X 1.1	283	382	74.08
		X 1.2	383	394	97.21
		X 1.3	292	387	75.45
		X 1.4	244	392	62.24
2	Build Quality (X 2)	X 2.1	354	368	96.20
		X 2.2	397	403	98.51
		X 2.3	340	348	97.70
		X 2.4	347	357	97.20
3	Housing Facilities (X 3)	X 3.1	171	223	76.68
		X 3.2	168	216	77.78
		X 3.3	307	343	89.50
		X 3.4	331	346	95.66
		X 3.5	349	355	98.31
		X 3.6	263	344	76.45
		X 3.7	285	320	89.06
		X 3.8	312	388	80.41
		X 3.9	328	417	78.66
		X 3.10	285	356	80.06
		X 3.11	347	362	95.86
		X 3.12	304	352	86.36
3	Housing Facilities (X 3)	X 3.13	285	336	84.82
		X 3.14	338	340	99.41
		X 3.15	334	338	98.82

		X 3.16	193	200	96.50
4	Design (X 4)	X 4.1	256	318	80.50
		X 4.2	256	312	82.05
		X 4.3	282	343	82.22
		X 4.4	306	352	86.93
		X 4.5	305	356	85.67
Average					86.91

From the results of calculating the level of conformity between the level of perception and the level of importance, the result is that the average value of conformity is 86.91%, which means that the level of satisfaction of resettlement residents of Remote Indigenous Communities (KAT) in Bangga Village and Kalora Village, Sigi Regency, Central Sulawesi Province very high.

2. Cartesian diagram analysis

Cartesian analysis on each attribute at the desired level of perception to find out the most important attribute in detail, and sort the various attributes in four variables, namely location, building quality, housing facilities, and design into a Cartesian diagram, so that an overview of the factors can be obtained. attribute factors that are a priority for improvement in order to obtain customer satisfaction.

Information:

- X 1.1 : The location of the housing is easily accessible by public transportation.
- X 1.2 : Residential locations can be reached by telecommunications networks.
- X 1.3 : Residential location close to work.
- X 1.4 : The location of the housing is close to the center of socio-economic activities such as markets, health facilities and the police station.
- X 2.1 : The house assistance provided has better quality roofs, ceilings of houses.
- X 2.2 : Houses provided by the government have better quality walls
- X 2.3 : The house assistance provided has a better quality of the floor of the house.
- X 2.4 : The housing assistance provided had better quality frames, doors and windows.
- X 3.1 : In the residential area there is a drainage system.
- X 3.2 : In the residential area there are security service facilities.
- X 3.3 : The housing is facilitated by a clean water network.
- X 3.4 : Housing has wastewater infrastructure
- X 3.5 : Housing has wide roads.

- X 3.6 : Housing has adequate electricity network.
- X 3.7 : Availability of infrastructure for economic activity centers, such as markets.
- X 3.8 : Availability of worship infrastructure
- X 3.9 : Availability of educational infrastructure
- X 3.10 : Availability of health infrastructure
- X 3.11 : Availability of telecommunications infrastructure
- X 3.12 : Availability of Public Service Offices
- X 3.13 : Availability of parking facilities
- X 3.14 : Availability of cleaning facilities
- X 3.15 : Hall facilities available
- X 3.16 : Availability of sports facilities and parks
- X 4.1 : The housing has adequate bedrooms.
- X 4.2 : The housing has adequate bathrooms.
- X 4.3 : Inside the kitchen housing which is separate from other rooms.
- X 4.4 : Housing has adequate multi-purpose space.
- X 4.5 : Spacious housing.

Table 6: Comparison of the Average Perception Levels and Expectation Levels of KAT Settlement Residents from the Two Villages.

No.	Variable	Attribute	Proud Village		Kalora Village	
			Satisfaction Level	Interest Level	Satisfaction Level	Interest Level
1	Location (X1)	X 1.1	2.4	4.16	3.83	4.32
		X 1.2	3.95	4.35	4.53	4.4
		X 1.3	2.47	4.26	3.96	4.34
		X 1.4	1.7	4.6	3.64	4.13
2	Build Quality (X2)	X 2.1	3.79	4.19	4.06	4
		X 2.2	4.33	4.44	4.48	4.51
		X 2.3	3.44	3.84	4.09	3.89
		X 2.4	3.63	3.98	4.06	3.96
3	Housing Facilities (X3)	X 3.1	1.88	2.58	1.91	2.38
		X 3.2	1.79	2.53	1.94	2.28
		X 3.3	3.33	3.91	3.49	3.72
		X 3.4	3.67	3.88	3.68	3.81
		X 3.5	3.86	3.95	3.89	3.94
		X 3.6	2.33	3.09	3.47	4.49
		X 3.7	3.16	3.6	3.17	3.51
		X 3.8	3.49	4.19	3.45	4.43
		X 3.9	3.6	4.6	3.68	4.66

		X 3.10	3.09	4.07	3.23	3.85
		X 3.11	3.79	4.09	3.91	3.96
		X 3.12	2.93	4.05	3.79	3.79
		X 3.13	3.14	3.7	3.19	3.77
		X 3.14	3.81	3.86	3.7	3.7
		X 3.15	3.63	3.72	3.79	3.79
		X 3.16	2.12	2.21	2.17	2.23
4	Design (X4)	X 4.1	2.79	3.65	2.89	3.43
		X 4.2	2.77	3.47	2.91	3.47
		X 4.3	3.09	3.74	3.17	3.87
		X 4.4	3.49	3.98	3.32	3.85
		X 4.5	3.53	4	3.26	3.91
Total			91	110.7	100.67	110.38
Average Score			3.14	3.82	3.47	3.81

After knowing the average score of the attributes in each village, the results showed that the average score of the level of perception of KAT residents in Kalora Village was greater than the average score of the level of perception of KAT residents in Bangga Village on the x axis. However, the average score on the expectation level of KAT residents in Bangga Village is slightly higher than the average score on the expectation level of KAT residents in Kalora Village with a difference of only 0.01 on the y axis.

For the average value of the level of perception and expectations of the residents of the KAT settlement from the combined data from the two villages, it can be seen in Table 7.

Table 7: The Average Value of the Perception Level and Expectation Level of KAT Settlement Residents from the Combined Data of the Two Villages.

No.	Variable	Attribute	Satisfaction Level (Xi)	Importance Level (Yi)
1	Location (X1)	X 1.1	3.14	4.24
		X 1.2	4.26	4.38
		X 1.3	3.24	4.30
		X 1.4	2.71	4.36
2	Build Quality (X2)	X 2.1	3.93	4.09
		X 2.2	4.41	4.48
		X 2.3	3.78	3.87
		X 2.4	3.86	3.97
	Housing	X 3.1	1.90	2.48
		X 3.2	1.87	2.40
		X 3.3	3.41	3.81
		X 3.4	3.68	3.84
		X 3.5	3.88	3.94
		X 3.6	2.92	3.82

1. Quadrant A (Top Priority)

Quadrant A is a quadrant where the level of satisfaction is still low, so it is a top priority for improvement. Attributes in quadrant A have a very low level of satisfaction so that it is a top priority for improvement. The attributes of Quadrant A are:

- a. The location of the housing is easily accessible by public transportation.
- b. Residential location close to work.
- c. The location of the housing is close to the center of socio-economic activities such as markets, health facilities and the police station.
- d. Housing has adequate electricity network.
- e. Availability of health infrastructure.
- f. Inside the kitchen housing which is separate from other rooms.

2. Quadrant B (Maintain Achievement)

Quadrant B is the quadrant expected by the residents of the Remote Indigenous Community (KAT) housing, and this attribute is in accordance with the feelings of the residents of the Remote Indigenous Community (KAT) housing. Attributes in Quadrant II are:

- a. Residential locations can be reached by telecommunications networks.
- b. The house assistance provided has better quality roofs, ceilings of houses.
- c. Houses provided by the government have better quality walls.
- d. The house assistance provided has a better quality of the floor of the house.
- e. The housing assistance provided had better quality frames, doors and windows.
- f. The housing is facilitated by a clean water network.
- g. Housing has wastewater infrastructure.
- h. Housing has wide roads.
- i. Availability of worship infrastructure.
- j. Availability of educational infrastructure.
- k. Availability of telecommunications infrastructure.
- l. Availability of Public Service Offices.
- m. Housing has adequate multi-purpose space.
- n. Spacious housing.

3. Quadrant C (Low Priority)

Quadrant C is a low priority quadrant, meaning that this quadrant contains several attributes that are considered less important by customers, even though their performance is not too

special. This quadrant does not mean that the attribute does not need to be improved, so this attribute needs to be improved, because the attributes in quadrant C have higher expectations than expected, but are not a top priority for improvement. Attributes that fall into quadrant C are:

- a. In the residential area there is a drainage system.
- b. In the residential area there are security service facilities.
- c. Availability of infrastructure for economic activity centers, such as markets.
- d. Availability of parking facilities.
- e. Availability of sports facilities and parks.
- f. The housing has adequate bedrooms.
- g. The housing has adequate bathrooms.

4. Quadrant D (Excessive)

Attributes in quadrant D have a lower level of importance but higher performance. Attributes in quadrant D are:

- a. Availability of cleaning facilities.
- b. Hall facilities available.

3.2 Multiple linear regression results

Multiple linear regression analysis was used in this study with the aim of testing hypotheses regarding the influence of location variables (X 1), building quality (X 2), housing facilities (X 3), and design (X 4) as independent variables on satisfaction (Y) as the dependent variable. Statistical calculations in the multiple linear regression analysis used in this study were using the SPSS For Windows version 24.0 computer program. The full results of data processing using the SPSS program can be seen in table 10 below:

Table 8: Multiple regression test results.

Coefficients ^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	std. Error	Betas		
1 (Constant)	5,686	1,347		4,222	0.000
Location (X1)	0.051	0.039	0.107	3.133	0.003
Build quality (X2)	0.102	0.080	0.178	3,280	0.004
Housing facilities (X3)	0.177	0.022	0.581	7,964	0.000
Design (X4)	0.287	0.049	0.413	5,916	0.000

- a. Dependent Variable: Satisfaction (Y)

Source: Statistical analysis results (2022)

Based on the results of the analysis above, it can be developed using the multiple linear regression equation model as follows: $Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$

Where in this study, it means:

Y = Occupant Satisfaction

a = constant

X₁ = Location

X₂ = Build quality

X₃ = Residential facilities

X₄ = Design

B_i = Regression coefficient of multiple independent variables (X) on the variable bound (Y), if the other independent variables are considered constant.

e = Confounding factors outside the model

Then based on the equation above, associated with the research results obtained, the following results are obtained.

$$Y = 5,686 + 0.051 X_1 + 0.102 X_2 + 0.177 X_3 + 0.287 X_4 + e$$

The interpretation of the equation is:

- The constant coefficient value obtained is 5, 686, which means that if the variable values for location (X₁), building quality (X₂), housing facilities (X₃), and design (X₄) are equal to zero, then satisfaction (Y) has a value of 5,686.
- The regression coefficient on the location variable (X₁) has a positive value of 0.051, which means that if the location variable coefficient is less than expected, then the satisfaction (Y) of KAT resettlement residents in Bangga Village and Kalora Village, Sigi Regency will increase by 0.051.
- The regression coefficient on the variable quality of buildings (X₂) has a positive value of 0.102, which means that if the coefficient of the variable quality of the buildings is in line with expectations, then the satisfaction (Y) of KAT resettlement residents in Bangga Village and Kalora Village, Sigi Regency will increase by 0.102.
- The regression coefficient on the housing facility variable (X₃) has a positive value of 0.177, so if the housing facility variable coefficient is as expected, then the satisfaction (Y) of KAT resettlement residents in Bangga Village and Kalora Village, Sigi Regency will increase by 0.177.

- e. The regression coefficient on the design (X 4) has a positive value of 0.287, so if the coefficient of the design variable is also satisfactory, then the satisfaction (Y) of KAT resettlement residents in Bangga Village and Kalora Village, Sigi Regency will increase by 0.287.

3.3 Simultaneous Test and Partial Test

3.3.1 Simultaneous Test Results (Test F)

The simultaneous test or often referred to as the F test aims to find out whether the independent variables jointly (simultaneously) affect the dependent variable. The F test was conducted to see the effect of all independent variables (location, building quality, housing facilities, and design) together on the dependent variable. 2.32 is obtained. The decision-making rule to be able to determine the effect simultaneously with the independent variable on the dependent variable, the statistical test f test is used. The provisions of the F test are as follows:

1. If the calculated F value $>$ F table then all independent/free variables have a significant influence on the dependent/dependent variable.
2. If the calculated F value $<$ F table then all independent/free variables have no significant effect on the dependent/dependent variable.

The results of the F test in this study can be seen in table 11 below:

Table 9: Simultaneous Test Results (Test F).

ANOVA ^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	283,646	4	70,911	71,370	.000 ^b
residual	84,454	85	0.994		
Total	368,100	89			

Source: Primary data processed with SPSS 24.0 (2023)

The results of the F test show that the calculated F value is 173,485, which means that this value is greater than F table (2, 32) at the 95% confidence level ($\alpha = 0.05$), and the results above also show that the F value sig of 0.000. So that the significance value is smaller than the *level of significance* (0.05), so the first hypothesis (H 1) in this study is accepted, where all the independent variables in this study simultaneously have a significant effect on the dependent variable.

3.3.2 Partial Influence Test Results (t test)

The t test is known as the partial test, which is to test how each independent variable influences the dependent variable individually. The level used is 0.5 or 5%, if the significant value $t < 0.05$ it means that all independent variables partially affect the dependent variable. Referring to the distribution of the t table value table, the t table value is 1.666. The provisions of the t test are as follows:

- If the value of t count $>$ t table then partially the independent/free variable has a significant influence on the dependent/bound variable.
- If the value of t count $<$ t table, then partially the independent/free variable has no significant effect on the dependent/bound variable.

For the results of the t test in this study can be seen in table 12 below:

Table 10: Partial Test Results (t test)

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	std. Error	Betas		
1 (Constant)	5,686	1,347		4,222	0.000
Location (X1)	0.051	0.039	0.107	3.133	0.003
Build quality (X2)	0.102	0.080	0.178	3,280	0.004
Housing facilities (X3)	0.177	0.022	0.581	7,964	0.000
Design (X4)	0.287	0.049	0.413	5,916	0.000

- Dependent Variable: Satisfaction (Y)

Source: Primary data processed with SPSS 24.0 (2023)

The results of the partial test on the results of this study show that:

- The location variable (X 1), has a significance value of 0.000 which indicates that the value is less than 0.05. While the calculated t value obtained is 3.133 so this value is greater than t table (1.666). So on this basis it is stated that partially the location variable has an effect on the dependent variable which in this case is the satisfaction (Y) of KAT resettlement residents in Bangga Village and Kalora Village, Sigi Regency.
- The building quality variable (X 2), has a significance value of 0.003 which indicates that the value is less than 0.05. While the calculated t value obtained is 3,280 so this value is greater than t table (1,666). So on this basis it is stated that partially the building quality variable is proven to have an effect on the dependent variable which in this case is the satisfaction (Y) of KAT resettlement residents in Bangga Village and Kalora Village, Sigi Regency.

- c. The housing facility variable (X 3), has a significance value of 0.000 which indicates that the value is less than 0.05. While the calculated t value obtained is 7.964 so this value is greater than t table (1.666). So on this basis it is stated that partially the housing facility variable has an effect on the dependent variable which in this case is the satisfaction (Y) of KAT resettlement residents in Bangga Village and Kalora Village, Sigi Regency.
- d. In design (X 4), it has a significance value of 0.000 which indicates that the value is less than 0.05. While the calculated t value obtained is 5.916 so this value is greater than t table (1.666). So on this basis it is stated that partially the design variable has an effect on the dependent variable which in this case is the satisfaction (Y) of KAT resettlement residents in Bangga Village and Kalora Village, Sigi Regency.

3.4 DISCUSSION

3.4.1 Satisfaction Level of Remote Indigenous Communities (KAT) Resettlement in Bangga Village and Kalora Village, Sigi District

The results of the calculation of the level of conformity between the level of perception and the level of importance obtained an average value of conformity of 86.91% which means that the level of satisfaction of resettlement residents of Remote Indigenous Communities (KAT) from the combined data of Bangga Village and Kalora Village, Sigi Regency, Central Sulawesi Province is very high. tall.

Quadrant A

1. The location of the housing is easily accessible by public transportation

The government needs to think about carrying out construction in a location that can be reached by public transportation, or if not, the housing development is also supported by the construction of adequate roads to facilitate the mobility of the residents of the housing.

2. Residential location close to work

Not only roads, the government also needs to think about a construction location that is not the same as the workplace of the residents of the housing, so that they don't have to struggle to reach their work location.

3. The location of the housing is close to the center of socio-economic activities such as markets, health facilities and the police station

It is very important for KAT housing residents if the government also pays attention to aspects of the affordability of socio- economic activity centers for residents of these housing,

the aim is for them to easily socialize, carry out their economic activities such as selling their crops, buying household needs, and so on. .

4. Housing has adequate electricity network

In the construction of housing for the KAT community, another important thing is to pay attention to electricity facilities, especially the KAT community housing in Bangga Village, this is done to improve the standard of living of the community to be better and more prosperous.

5. Availability of health infrastructure

Another important aspect that needs to be considered is the availability of health infrastructure at the housing location, such as Poskesedes, Polindes, Posyandu, and so on.

6. Inside the kitchen housing which is separate from other rooms

Another aspect that needs attention is the problem of design or layout in the house, it is necessary to separate the room from the kitchen, so that cooking activities do not interfere with other activities in the house.

Quadrant B

1. Residential locations can be reached by telecommunications networks.
2. The house assistance provided has better quality roofs, ceilings of houses.
3. Houses provided by the government have better quality walls
4. The house assistance provided has a better quality of the floor of the house.
5. The housing assistance provided had better quality frames, doors and windows.
6. The housing is facilitated by a clean water network.
7. Housing has wastewater infrastructure
8. Housing has wide roads.
9. Availability of worship infrastructure
10. Availability of educational infrastructure
11. Availability of telecommunications infrastructure
12. Availability of Public Service Offices
13. Housing has adequate multi-purpose space.
14. Spacious housing.

3.4.2 Factors Influencing Satisfaction of KAT Residents in Bangga Village and Kalora Village, Sigi Regency

The results of the regression test show that the satisfaction of the residents of KAT settlements in Bangga Village and Kalora Village, Sigi Regency is inseparable from several influencing factors, including location, building quality, building facilities, and building design, this is evidenced by the results of the F test on the regression test which shows that the calculated F value obtained is 71,370 greater than F table (2.32) at the 95% confidence level ($\alpha = 0.05$), and the results above also show that the F sig value is 0.000. So this indicates that all the independent variables in this study simultaneously have a significant effect on the dependent variable.

The results of the analysis also show that partially these four factors also have a significant effect on the satisfaction of the residents of KAT settlements in Bangga Village and Kalora Village, Sigi Regency, this is evidenced from the results of the regression analysis which shows that all of these independent variables produce a calculated t value greater than t table (>1.666).

The results of the research above indicate that the existence of variables such as location, building quality, housing facilities, to housing design are able to provide satisfaction to the residents of KAT settlements in Bangga Village and Kalora Village, Sigi Regency, this is caused by the following:

1. Satisfaction will increase if the housing location variable is easily accessible by public transportation facilities, both four-wheeled and two-wheeled, housing locations can be reached by telecommunications networks, in this case cellular telecommunications, close to their workplaces, close to centers of socio-economic activities such as markets, health facilities, and police stations.
2. Meanwhile the variable quality of the building also gives satisfaction to the residents of the KAT housing if the house assistance provided has good quality roofs and ceilings, the houses provided by the government have good quality walls made of quality wood and concrete, so they are resistant to damage. weather. Not only that, the house assistance provided had good quality floors, sills, doors, windows, made of high quality concrete and wood so that it gave the impression of being satisfied with the residents.
3. Then the housing facility variable also affects the satisfaction of KAT residents, if in the residential area there is a good drainage system, security service facilities, housing is

facilitated by a clean water network, housing has wastewater infrastructure, has wide roads, has adequate electricity networks, central infrastructure economic activities such as markets, worship infrastructure, educational infrastructure, health infrastructure, telecommunications infrastructure, Public Service Offices, parking facilities, cleaning facilities, hall facilities, as well as sports facilities and parks.

4. Not only that, the design variables also greatly influence the satisfaction of KAT residents, such as adequate bedrooms, adequate bathrooms, separate kitchens from other rooms, adequate multi-purpose rooms, and spacious housing.

The influence of the four variables mentioned above shows the need for the government to pay attention to aspects of location, building quality, housing facilities, to housing design to provide satisfaction to the residents of KAT housing in Bangga Village and Kalora Village, Sigi Regency.

5. CONCLUSIONS

Based on the results of the research that has been discussed in the previous chapter, the following conclusions can be drawn:

1. Based on the level of compatibility between perceptions and the level of importance obtained:
 - The level of satisfaction of resettlement residents of Remote Indigenous Communities (KAT) in Bangga Village is very high with an average conformity score of 82.44%.
 - The satisfaction level of resettlement residents of Remote Indigenous Communities (KAT) in Kalora Village is very high with an average conformity score of 91.07%.
 - For the level of satisfaction of resettlement residents of Remote Indigenous Communities (KAT) in Bangga Village and Kalora Village, Sigi Regency, Central Sulawesi Province, the results showed that the average value of conformity was 86.91% which means that the level of satisfaction is very high.
2. From the results of multiple linear regression analysis, the results of the regression coefficient values are positive where the variable location factors, building quality factors, building facilities factors, and building design factors simultaneously and partially have a significant effect on the satisfaction of residents of KAT settlements in Bangga Village and Kalora Village, Sigi Regency.

REFERENCES

1. Sugiyono. *Educational Research Methods Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta, 2014.
2. Harianto Feri and Prasetyo Fendy Aries. 2010. *Analysis of Residents' Satisfaction Levels in Puri Surya Jaya Housing, Gedangan, Sidoarjo*. National Seminar Civil Engineering ITS Surabaya Infrastructure Development in Supporting National Economic Development, 2010.
3. Jocom Joice and Sompie Bonny F. 2015. Analysis of Resident Satisfaction of Residents of Griya Paniki Indah Manado Housing. *Media Engineering Scientific Journal*, 2015; 5: 1.
4. Caroline Jovita, Harsony Nelza Natally, Herry P. Chandra. Analysis of Occupant Satisfaction of Pondok Tjandra Indah Residential Housing. *Journal of Civil Engineering*, 2018; 11: 2.
5. Nata Pandu Dewa. Satisfaction Level of Residents of Housing Products from the One Million Houses Program for the Provision of Physical Components for Housing (Case Study: Permata Asri Jati Agung Housing Complex, South Lampung Regency), 2020. *Itera Journal* (Without Volume and Number).
6. Kwanda Timoticin, Jani Rahardjo, Made Kusuma Wardani. Analysis of Satisfaction of Residents of Simple Housing in Denpasar Based on Location, Infrastructure, Facilities, Building Quality, Design and Price Factors. *Architectural Engineering Dimensions*, 2004; 29: 2.
7. Tjiptono Fandi. *Service, Quality & Satisfaction*. Yogyakarta: Publisher Andi, 2014; 3.