

Study on the satisfaction level of Indonesian-Tiongkok Friendship Residence

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ABSTRACT

Tsunami on December 26, 2004 has attacked Aceh Province, and made many people lost their family, houses, and properties. During rehabilitation and reconstruction period, many Non Government Organization (NGO) come to Aceh Province to help Aceh citizen to rebuilt their city as well as their houses. Many NGO build the new houses for Tsunami victims with different size, shape, and quality. The main reason was due to the limitation of the budget for each NGO was different. Indonesian-Tiongkok Friendship Residence is one of new area which was build for Tsunami Victims. This new complex residence was build by Indonesian-Tiongkok Friendship NGO. This residence is located in the hill of Neuheun village, Masjid Raya sub district, Aceh Besar District, about 17 Km from Banda Aceh City. There are 606 houses of 42 types in 22, 4 Hectare with infrastructure facilities like mosque, school; market, public health center, sanitation, and road. Objectives of this research are to study the satisfaction level of people who live in Indonesian-Tiongkok Friendship Residence, and to get information about which infrastructure facilities is needed to be more prepared. The research conducted to 78 houses, by using questionnaire, and deep interview. Satisfaction level analyzed using mean value. Satisfaction level checked on five factors; design quality and land area, houses quality, location of residence, infrastructure facilities, and participation of the residence. It has been found that the most unsatisfied result were for the factor location of residence, and factor participation of the residence. For the location factor, the unsatisfaction is mostly due to there is no public transportation, so the residence has difficulties to travel to the city. For the participation of the residence factor, the unsatisfaction is due to the residence never involved during design and construction period. It has been found- from this research that the donor country should have taken into account those five factors, and should involve the candidate residence during design and construction period.

Keywords: *Satisfaction level, Indonesian-Tiongkok Friendship Residence, design quality, house quality, infrastructure facilities, participation.*

INTRODUCTION

Tsunami on December 26, 2004 has attacked Aceh Province, and made many people lost their family, houses, and properties. During rehabilitation and reconstruction period, many Non Government Organization (NGO) come to Aceh Province to help Aceh citizen people to rebuilt their city as well as their houses. Many NGO build the new houses for Tsunami victims with different size, shape, and quality. The main reason was due to the limitation of the budget for each NGO was different.

Indonesian-Tiongkok Friendship Residence is one of new area which was build for Tsunami Victims. This new area known as Jacky Chan Village is located in the hills of Neuheun Village, Masjid Raya subdistrict, Aceh Besar, about 17 km from Banda Aceh City. Location was selected by the donor community and Aceh Besar district. Housing sites are located at an altitude of 300 meters, a distance of 1.5 kilometers from the coast. The position is safe from Tsunami and has beautiful scenery.

Objectives of this research are to study the satisfaction level of people who live in Indonesian-Tiongkok Friendship Residence, and to obtain information about the infrastructure facilities which is needed to be prepared more.

Indonesian-Tiongkok Friendship Residence was funded by China Charity Federation and Red Cross Society of China and the construction was done by the contractor from China, namely China Synohydro Corporation, which was inaugurated July 19, 2007. Development of this residence need cost USD7 million (approximately 65 billion rupiah), is the largest grant from China. There are 606 houses of 42 types in 22.4 Hectare with infrastructure facilities like mosque, school; market, public health center, sanitation, and road.

The research conducted to 78 houses, using questionnaire, and deep interview. Satisfaction level analyzed using mean value. Satisfaction level checked on five factors; design quality and land area, houses quality, location of residence, infrastructure facilities, and participation of the residence. It has been found that the most unsatisfied result were for the factor residence location, and residence participation factor. For the location factor, it is mostly due to there is no public transportation, so the residence has difficulties to travel to the city. For participation of the residence factor, it is due to the residence never involve during design and construction period. It has been found from this research that the donor country should taking into account those five factors, and should involve the candidate residence during design and construction period.

RESEARCH METHODOLOGY

The research will be conducted to 78 houses, using questionnaire and deep interview. Satisfaction level checked on five factors; design quality and land area, houses quality, location of residence, infrastructure facilities, and participation of the resident. Design quality and land area with 6 variables, house quality with 6 variables, location of residence with 10 variables, infrastructure facilities with 10 variables, and in participation of the resident with 2 variables, were used in this research. There are 3 measurement scale: 1 (satisfied), 2 (less satisfied), and 3 (not satisfied) were used in assessments of Satisfaction level. Satisfaction level will be analyzed using mean value with criteria shown on Table 1 below:

Tabel 1: Score Interpretation Criteria

Score Mean Range	Qualification
$2,33 < x \leq 3,00$	Satisfied
$1,67 < x \leq 2,33$	Less Satisfied
$1 < x \leq 1,67$	Not Satisfied

Reference: Riduwan (2003)

RESULTS AND DISCUSSION

Characteristics of Respondents

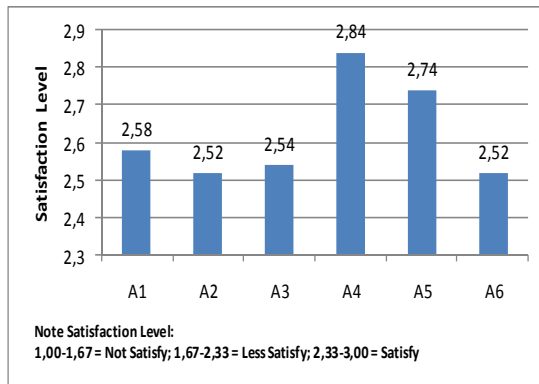
Characteristics of respondents who live in the Indonesian-Tiongkok Friendship Residence are majority from small family, married; with 3-4 people each house, and age around 31-40 years. Most of them graduated from senior high school, work as fisherman, trader, and driver with income around Rp.500,000 - Rp.1,000,000. Characteristic of these respondents is illustrated in Table 2.

Table 2: Characteristics of Respondents

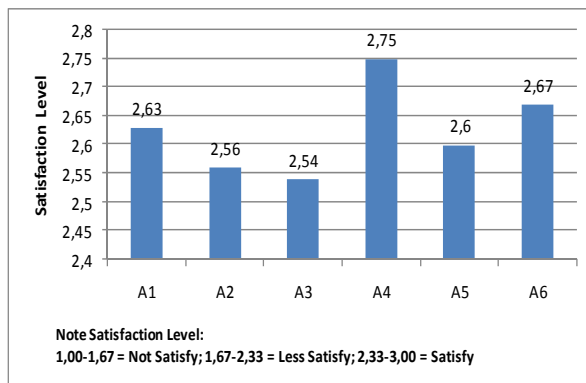
No.	Description	Account	Frequency (%)
1.	Sex		
	Male	38	48.72
	Female	40	51.28
2.	Age (years)		
	a. 21 – 30	29	37.18
	b. 31 – 40	30	38.46
	c. 41 – 50	13	16.67
	d. > 50	6	7.69
3.	Graduated		
	a. Elementary School	9	11.54
	b. Junior High School	15	19.23
	c. Senior High School	36	46.15
	d. University	15	19.23
	e. Others	3	3.85
4.	Status		
	a. Married	74	94.87
	b. Single	4	5.13
5.	People live in the house:		
	a. 1 - 2 people	7	8.97
	b. 3 - 4 people	50	64.10
	c. 5 - 6 people	15	19.23
	d. > 6 people	6	7.69
6.	Income in month		
	a. < Rp500,000	11	14.10
	b. Rp500,000 – Rp1,000,000	25	32.05
	c. Rp1,000,000 – Rp1,500,000	20	25.64
	d. Rp1,500,000- Rp2,000,000	12	15.38
	e. > Rp2,000,000	10	12.82
7.	Occupation:		
	a. Public Service	14	17.95
	b. Private	13	16.67
	c. Businessmen	30	38.46
	d. Others	21	26.92
8.	Duration lived in the house:		
	a. 5 - 6 years	0	0
	b. 4 - 5 years	4	5.13
	c. 3 - 4 years	41	52.56
	d. 2 - 3 years	22	28.21
	e. < 2 years	11	14.10

Design Quality and Land Area Factor

Design quality and land area was one of the factors which used as an object of this research. One of the objectives of this research was to get information from the people about design quality and land area that they acquired from the government. There were 6 variables used to find the answer for design quality and land area. Satisfaction level for design quality and land area factor was shown in Figure 1 below, in which the variables were shown in Table 3.



(a) New House



(b) Old House

Figure 1: Satisfaction Level for Design Quality and Land Area

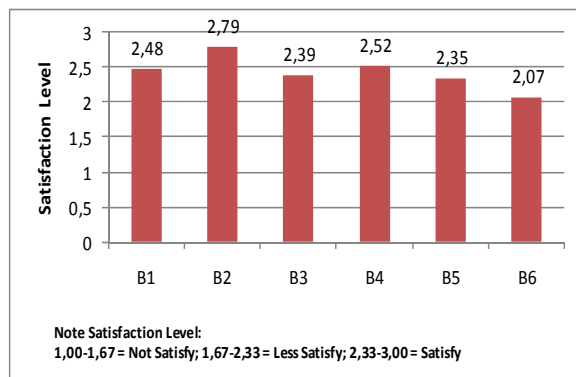
Table 3: Variables in Design Quality and Land Area

Code	Variables
A1	House Size
A2	Room Size
A3	Number of Rooms
A4	House Performance
A5	Lighting and Air Circulation
A6	Land area size

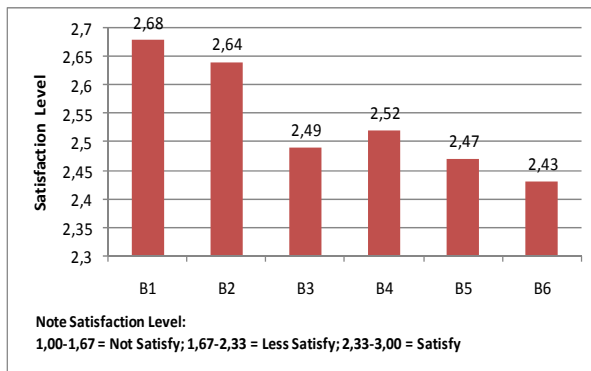
The figures displays that all variables in design quality and land area factor were satisfied. Compared with their old house, the respondent more satisfied in house performance and lighting and air circulation at new house. On the other hand, for the factor of house size and land area size, the residents feel more satisfied in their old house.

House Quality Factor

House quality was one of the factors which used as an object of this research. One of the objectives of this research was to obtain information from the people about house quality that the residents acquired from the government. There were 6 variables used to find the answer for house quality. Satisfaction level for house quality factor was shown in Figure 2 below, in which the variables were shown in Table 4.



(a) New House



(b) Old House

Figure 2: House Quality Factor

Table 4: Variables in House Quality

Code	Variables
B1	Door/window condition
B2	Floor condition and quality
B3	Wall condition and quality
B4	Paint condition and quality
B5	Ceiling condition and quality
B6	Roof condition and quality

It can be seen from Figure 2 that satisfaction level for the house quality for variable B1 to B5 were satisfied. On the other hand for variable B6 less satisfied due to almost all the houses have leaking roof.

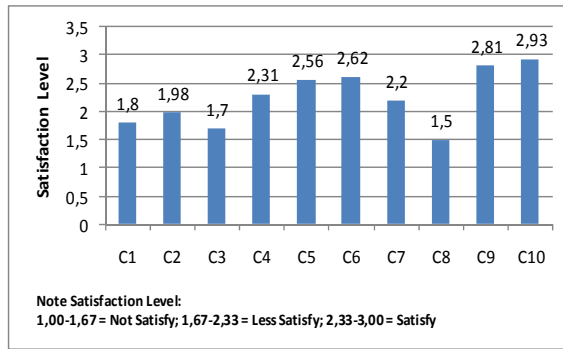
Location Residence Factor

One of the very importance factors was to choose the location of the new house. Objective of this factor was to learn from the respondent about their satisfaction level for the location of their new house. There were 10 variables in this factor. Detail of variable was shown in Table 5.

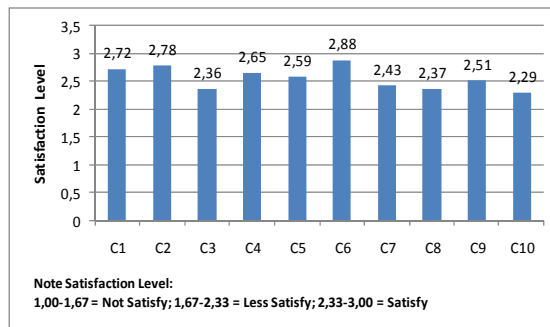
Table 5: Variables in Location Factor

Code	Variables
C1	Distance from the road
C2	Public transportation to the house
C3	Distance to the working place
C4	Distance to the education facilities
C5	Distance to the public health facilities
C6	Distance to the place of mosque
C7	Distance to security office
C8	Distance to markets
C9	Safe from Flood
C10	Safe from Noise

Satisfaction levels were chosen for variable distance to public health center (C5), distance to the places of mosque (C6), and safe to flood (C9) and noise (C10) are satisfied. It's caused by the residence have facilities of public health center, mosque and the location in high place and far from the road so that safe from flood and noise. Variable distance to the road (C1), access to public transportation (C2), the distance to the workplace (C3) and distance to education facilities (C4) included in the category of less satisfied, while the distance to the market was not satisfied. The reason for this condition was there is no public transportation to the house and location of the houses were on the hill. Education facilities provided in residential location just a kindergarten and elementary school, while others are not available. The market facility in Indonesian-Tiongkok Friendship Residence was available, but it was not operated without any reason. Compare to their old house, satisfaction level were chosen for variable distance from C1 to C9. Only for C10 (safe from Noise) was chosen in not satisfy level. Satisfactory level for location factor was shown in Figure 3 below.



(a) New House



(b) Old House

Figure 3: Satisfaction Level for Location factor

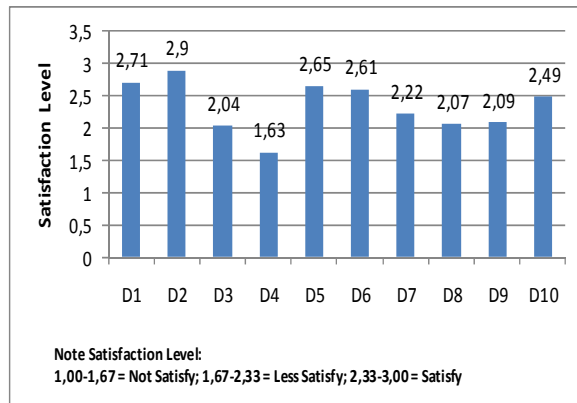
Infrastructure Facilities Factor

Infrastructure facilities were very important factors for the new house. Objective of these factors was to learn from the respondent about their satisfaction level for infrastructure facilities. There were 10 variables in this factor. Detail of variables was shown in Table 6.

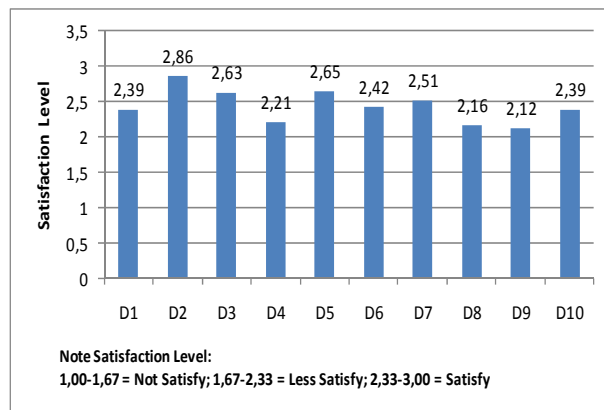
Table 6: Variables in Infrastructure Facilities Factor

Code	Variables
D1	<i>Water Supply</i>
D2	Electricity
D3	Telephone line
D4	Garbage
D5	Access road
D6	Drainage system
D7	Green area
D8	Fire prevention systems
D9	Sport facilities
D10	Street Lighting

Satisfaction levels in infrastructure facilities for the water supply facilities variable (D1), electricity (D2), access road (D5), drainage systems (D6) and street lighting (D10) are "satisfied". Electricity, access road, drainage systems and street lighting are also provided. On the other hand, telephone line facility (D3), Green area in housing (D7), fire prevention systems (D8), and sports facilities (D9) are "less satisfied". The reason was no telephone line available, and for cellular phones the signal very weak. Condition of housing sites still looks not so green, fire-fighting system was not available, and sports facilities was very limited. There was only a basket ball court available in elementary school area. Satisfaction level for garbage facility (D4) is low. The reason was the garbage facilities were not available. To solve this problem, the resident managed their garbage by burning it or throwing the garbage into the nearest location. Satisfaction level for infrastructure facilities factor was shown in Figure 4.



(a) New House



(b) Old House

Figure 4: Satisfaction Level for Infrastructure Facilities factor

Participation of Residence Factor

The last factor which was used in this research was the participation of residence factor. There were 2 variables for this factor; participation during design, and participation during construction. During design process, and construction period, the resident never involve in the program. As the result, satisfaction levels for this factor were less satisfaction as shown in Table 7 below.

Table 7: Satisfaction Level in Participation Factor

Code	Participation Variables	Mean Score	Satisfaction Level
E1	Participation during designing	1,84	Less Satisfied
E2	Participation during construction	1,68	Less Satisfied
Mean		1,76	Less Satisfied

Cross-Sector Issues

1. Economy Issues; the Indonesian-Tiongkok Friendship Residence need additional transportation cost due to the distance to the workplace, schools, and markets were very far from the house. Problem for the market facilities, the housing area was quite feasible to develop the business/shop that provides all the needs of households or by the functioning of existing market facilities. It will increase the residence income and reduce the extra cost for transportation to the market.
2. Health Issues; health facilities are available in the Indonesian-Tiongkok Friendship Residence, even though with less facilities. The location was far from air pollution, and the houses have very good ventilation for circulation of air from outside into the house and vice versa.
3. Education Issues; education facilities such as kindergarten and elementary school were available, but only the kindergarten were operated although with less demand. The residents prefer to take their children study outside the residence.
4. Environment Issues; land area around the house can be used to plant the trees. It will provide good impact for environment in the future.
5. Gender Issues; beneficiaries are not only the man but the women can also become as beneficiaries.

CONCLUSIONS

1. Selection location of Indonesia-Tiongkok Friendship Village for Tsunami victims on the hill Neuheun Village is very safe from the Tsunami and also has beautiful scenery. In the future, donor country should consider the distance from the workplace of the residents in order to reduce additional transportation cost.
2. Satisfaction level in design quality and land area, house quality and infrastructure facilities factors are satisfied.
3. The most unsatisfied factors were for the factor location of residence and factor participation of the residents .

To increase the satisfaction level, the facilities such as access road, public transportation, schools, security facilities, market, telephone line, garbage disposal system, fire prevention facilities, sport facilities should be available, and during design and construction period should involve the candidate residents.

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