Housing Satisfaction and Willingness to Move to Low-cost Rental Apartments of Slum Dwellers in Semarang Urban Area

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Abstract. This article examines one of the approaches commonly taken by the government to reduce the number of slums in urban areas, namely the provision of subsidised/affordable rental apartments. This article focuses on the assessment of to what extent the approach is relevant to the perceived problem (needs) of the target group (low income family) and what are the socio-economic characteristics of those living in slums and what are their preferences for moving to affordable rental apartments or remains to stay in the current slums. Since the problems are complex and dynamic, the case study research methods has been utilised and the low-income families living in slums in surrounding areas of Rusunawa Kaligawe (affordable rental apartment) in Semarang have been used as the unit of analysis.

1 Introduction

In recent years, various efforts and approaches have been implemented in helping the poor to fulfil their basic needs, particularly in shelter sectors and its supporting basic infrastructure such as safe water, electricity and sanitation. This article describes a study that examines one of the approaches commonly taken by the government recently to reduce the number of slums in urban areas, namely the provision of subsidised/affordable rental apartments. Certainly, the policies that are being intensively implemented these days need to be reviewed. This article it is designed primarily for policymakers, demonstrating that this housing issue is important to look at as a complex and 'multifaceted' issue. With a proper understanding of the problems at hand, the policies to be taken will be more relevant and effective. This is closely related to the topics that are often discussed lately about sustainable development, especially in the field of Housing and Urban Development.

This article focuses on the assessment of to what extent the approach is relevant to the perceived problem (needs) of the target group (low income family) and identifying their socio-economic characteristics and how this affects their preferences for living in slums (substandard settlements) or moving to adequate affordable rental apartments (Rusunawa).

2 Literature Review

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To limit the scope of the study, this paper will substantively describe several terms associated with the slums areas, housing satisfaction and housing mobility based on several studies of existing literature. [1] defines slums as areas in a city that are usually inhabited by the poor, who do not have security of land tenure, and as areas that have the characteristics of informal settlements with very low quality. In line with this, [2] states that the slum is associated with poor people, so that understanding the various programmes to minimise slums, such as slum upgrading, subsidised/affordable rental apartment programmes, etc., requires an understanding of poverty.

In contrast to the slums (sub-standard areas), [3] describes how adequate housing can provide protection from all threats and provide a safe and comfortable place to live. It can also be culturally acceptable, secure tenure, have availability of basic facilities for health and other basic needs, be affordable, and have easy access to workplaces and public facilities. The cost and time of travel to work and service facilities are not too burdensome on the family budget. The house is considered affordable if the amount of the costs incurred to the house and transport is less than 45% [4]. In general, the difficulty faced by poor families in achieving adequate housing is affordability due to lack of income or inability to pay. In addition, the increasingly high price of land, especially in urban areas will, make it increasingly difficult for poor families to afford the available house in the market place.

To deal with this issue, especially in handling slums in urban areas, there are some concepts that can be applied, which include: Resettlement, Slum Upgrading and Urban Renewal/Urban Redevelopment [5,6]. In Indonesia the government has introduced construction of cheap and affordable rental apartments for low-income people, especially those living in urban areas, where it is increasingly difficult to obtain cheap and affordable land.

Although the schemes that have been introduced have been able to help poor and low-income families, there are still segments of families who could not access the program. There are various issues and challenges of housing development in Indonesia both from the supply side (provider) and from the demand side or the target group of the programme [7,8]. One thing to be studied here is related to the socio-economic characteristics of target groups of the programme that influence how they perceive the problems, expectations and priorities for residence and satisfaction with their existing living conditions.

Residential satisfaction is a complex construct [9]. When analysing the housing problem and housing satisfaction, it is important to understand the term 'housing norm'. 'Housing norms' is a fundamental concept in the theory of housing adjustment in a family and the social rules of individuals and households to live in the house structure is closely linked to the characteristics of groups and communities [10]. The concept of the 'housing norm' explains the motivation of households to adjust or to adapt their housing condition to fulfil the perceived housing deficits normatively or socially [11].

If the condition of the house is judged unable to meet its needs normatively (in terms of culture or family), then it is called the 'Normative Housing Deficit' [12]. If the deficit is very prominent (sharp), then there is a need to respond through three possible behaviours, namely: residential adaptation, family adaptation, and residential mobility [11]. Adaptation appears when the desired living environment could not be selected, so communities adapt to the residential environment and settlements that were initially considered less comfortable [13]. Residential mobility occurs if the resident satisfaction levels are currently low [14], so households will move into new housing that fits their needs.

Associated with the response to the housing condition, it is important to note that a family has different considerations and priorities in determining the way that they respond to meeting the housing needs. [15] explains that the use of residential facilities is closely related to length of stay, reasons for residence, and ownership status. The longer a person lives in a residential environment, then the greater the need for space. Likewise, the lifestyle of each

individual will affect their tendency in the pattern of residence utilisation. This individual tendency can be discerned from how they spend time with family, mobility and consumption type, as well as desire to interact with the social environment.

3 Research Objective and Method

As mentioned above, this article focuses on the assessment of to what extent the approach is relevant to the perceived problem (satisfaction) of the target group (low-income family) and what are their socio-economic characteristics and how this affects their preferences for moving to adequate affordable rental apartments (Rumah Susun Sewa---Rusunawa) or to remain living in slums (substandard settlements). The slum areas located in around a radius 3 km of Rusunawa Kaligawe (affordable rental apartments) in Semarang City, Central Java Province have been selected as the research location. 50 low-income families living in these areas have been selected as the respondents through the random sampling method.

To analyse the level of satisfaction of slum dwellers with their dwellings, the Residential Satisfaction Index (RSI) method has been used. The questionnaire consists of several variables that have been used, and these variables are grouped into five sections of satisfaction, namely satisfaction with physical condition of housing (section 1); satisfaction with location of housing (section 2); satisfaction with ownership (section 3); satisfaction with physical environment (section 4); and satisfaction with social environment (section 5). The level of housing satisfaction has been measured by using a five-point Likert scale, with "1" for very dissatisfied, "2" for dissatisfied, "3" for slightly satisfied, "4" for satisfied, and "5" for very satisfied.

The total score that has been obtained from 50 respondents is then categorised again into the new five-point Likert scale. The new range of interval (which in this case is 40) of the five-point Likert scale is determined by calculating the maximum and minimum scores as follows:

–   Maximum score : The maximum score that can be obtained in this case (5) will be multiplied by the number of respondents
–   Minimum score   : The minimum score that can be obtained in this case (1) will be multiplied by the number of respondents.

$$The\ new\ range\ of\ Interval\ = \frac{Maximum\ score - Minimum\ Score}{Likert\ Scale} \tag{1}$$

$$The\ New\ Range\ of\ Inteval = \frac{(5x50)-(1x50)}{5} \tag{2}$$

$$= \frac{250-50}{5} = 40 \tag{3}$$

Subsequently, RSI will reclassify through the minimum score (50) and maximum score (250) with the interval as follows (very satisfied: 211-250); (satisfied: 171-210); (slightly satisfied: 131-170); (dissatisfied: 91-130) and (very dissatisfied: 50-90).

4 Finding and Discussion

4.1 Socio-Economic and Demographic Characteristics of the Slum Dweller

The following socio-economic and demographic characteristics of the respondent considerations while doing the data analysis:

– 28% of households have widow or widower status, and there are even family heads with unmarried status (2%). This is in line with the age of the head of the family, where many of them are over 50 years old (34%). With the marital status and the age of the household, we can say that they are almost no longer productive.

– The majority (68%) of respondents are native inhabitants, while 32% are identified as migrants. Most of them (68%) rely on their income by working in the informal sector (non-fixed income). They work as entrepreneurs, street vendors, and cheap labourers. This can be explained by their relatively low level of education. The majority of respondents completed only elementary (34%) and junior high school (34%); there are even respondents who never completed education at all (12%).

In general, the level of family income per month is not much different between the respondents; almost all families have income between Rp. 1,000,000-Rp. 2,000,000 per month. This income level is far below the Semarang City Minimum Regional Wage on 2017 (Rp. 2,125,000). With this level of income, the World Bank grouped them into the category of poor families with income in the 1-2 deciles of 10 deciles of income of the Indonesian people classification. Income of decile 1 (less than IDR 1,200,000 per family per month) and decile 2 (less than IDR 1,800,000 per family per month) are the two lowest income groups. Respondents with the income of deciles 1 and 2 will almost certainly not be able to have adequate housing without any support from the government.

4.2 Measurement of Residential Satisfaction

In addition to measuring the priority needs scale, this study also measures the degree of satisfaction of residents with their living quarters and neighbourhoods as follows:
– Satisfaction Level with Physical Condition of Shelter
The variable that gets the highest satisfaction is the number and functions of the rooms in the dwelling, while the size of dwelling is the variable that has the smallest score, as illustrated in Table 1. This indicates that for dwellers, the size of the dwelling is not a very urgent need to be fulfilled. This low level of satisfaction with the size of these dwellings is understandable because of the very limited area of land they have.
– Satisfaction Level with Location of Housing
The location variable that has the highest level of satisfaction is the proximity to health facilities; this can be seen in Table 1. Another thing that can be seen is the satisfaction with the aspect of closeness to the facilities of worship and trade. The high level of satisfaction of access to religious facilities is explained by the fact that the facilities of worship in general become one means of, or place for, social interaction.
– Satisfaction with Physical Environment
The highest level of respondent satisfaction is the satisfaction of the neighbourhood safety regarding crime (Table 1). The physical environment variables that are considered not to be satisfied are 'safe residential environments from floods, traffic jams, etc'.
– Satisfaction with Social Environment
Most respondents were satisfied with all of the variables for social environment (Table 1). Ranking the social environment features by total score of satisfaction level shows that respondents are most satisfied with their relationship with their neighbours, while the same score is achieved by existence of relatives/families. Overall, the satisfaction with the social environment indicates that the respondents are generally satisfied with the social environment within the housing area.

4.3 The Average Value of Satisfaction Level of Aspects of Existing Dwelling

The aspect of 'social environment' has the highest level of satisfaction (197); followed by the physical condition of housing (187); the location of housing (186); the physical environment (152); and lastly, house ownership (143). This can be understood because with all the limitations they have, their daily lives cannot be separated from interactions with neighbours and relatives. Many activities (PKK, Arisan, Karang Taruna, etc.) carried out will also hopefully be able to strengthen the relationship between dwellers. This will certainly

have implications for their responds whether to stay or prefer to move to a better dwelling, in this case is willingness to move to the low-cost rental apartment.

Table 1. Residential Satisfaction

Variables	Score					Total Score	Level of Satisfaction
	1	**2**	**3**	**4**	**5**		
Physical Conditions of Housing							
Adequate size of shelter	2	19	17	9	3	184	Satisfied
Adequate number & function of rooms	3	17	15	14	1	189	Satisfied
Good quality of building materials	1	24	13	11	1	188	Satisfied
Location of Housing							
Ease of access to service centre	7	7	13	26	4	184	Satisfied
Ease to the workplace	15	8	15	22	5	189	Satisfied
Ease of access to public transport	22	11	12	22	4	188	Satisfied
Ease of access to health facilities	5	2	13	30	5	193	Satisfied
Ease of access to place of worship	0	2	12	28	8	192	Satisfied
Proximity to trading facilities	0	3	12	26	9	191	Satisfied
House/Land Ownership							
Secure residential/land ownership	3	19	11	16	1	143	Slightly Satisfied
Physical Environment							
Safe residential environments from floods, traffic jams, etc.	8	25	10	6	1	117	Dissatisfied
Adequate of employment opportunities	2	8	17	21	2	163	Slightly Satisfied
Environmental safety of the crime	1	5	15	26	3	175	Satisfied
Quiet residential neighbourhood	1	6	19	21	3	169	Slightly Satisfied
Clean residential environment	3	19	19	7	2	136	Slightly Satisfied
Social Environment							
Neighbourhood relations	0	1	5	33	11	204	Satisfied
The existence of relatives and family	1	2	8	31	8	193	Satisfied
The existence of social activities and regular meetings in the neighbourhood	0	2	13	25	10	193	Satisfied

The data indicates that the majority (46%) of respondents had already thought of moving, but there is no definite plan of when they will do so. The big answers in this category indicate that they understand there is a deficit in their residence but they can still accept the poor living conditions in which they live today. Even as many as 36% of respondents did not think of moving at all. Only 8% are seriously planning to move and starting to save money to move to other places they want.

From the answers of the respondents we can also see that only 28% are interested in living in affordable rental apartments, while the rest (72%) are not interested. From their point of view, it is comfortable living in their existing dwelling because it is close to relatives Those answers are closely related to the high level of satisfaction with the social environment of the dwelling, the fact that it is uncomfortable to climb stairs in the apartment, the distance to the

workplace becoming greater, a preference to live in landed houses and do not have to pay additional costs if they live in low-cost rental apartment.

5 Conclusion

Based on the findings of this study, this article argues that the issue of housing, particularly for the poor, is a complex and 'multifaceted' problem. On the one hand, the majority of residents understand and feel that their living conditions are still inadequate, but others feel that they still want to stay in their inadequate residential and living environment. In general, slum dwellers are not interested in living in Rusunawa Kaligawe, even though the existence of Rusunawa Kaligawe could be a more viable alternative dwelling.

The slum dwellers have different socio-economic characteristics, and this is related to the housing norms (value and expectation). These have affected the satisfaction, the priority and the approach they choose in fulfilling their housing needs. It has nothing to do with the government's ability to provide cheap or affordable housing, as there are many other factors (variables) that need to be considered. The aspect of 'social environment' has the highest level of satisfaction. It means that the social environmental condition is part of the main priorities considered in their approach to fulfilling their housing needs. With all the limitations they have, they cannot separate their daily lives from interactions with neighbours and relatives.

The satisfaction levels of the substandard settlement and intention to move were not in line. Therefore, the study recommends the reassessment of those features of residential satisfaction for others types of housing and other types of socio-economic characteristics of the target group. Last but least, this study concludes that putting the responsibility for the housing problem for the people only on the supply side will not always match the characteristics of prospective target groups. Therefore, adequate attention is needed to the characteristics of the needs of the target group.

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