The satisfaction level of indigenous people towards planned housing development. Case study: Orang Asli Kg. Sejagong, Sri Medan, Yong Peng Johor

S M Kamaruddin1, N S Zaini1, A Misni1, P Ahmad1
1Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

*sitim065@salam.uitm.edu.my

Abstract. Orang Asli possesses a unique relationship with their traditional land. Indigenous people have their thoughts on development, life values, visions, needs, and priorities. The government through Department of Orang Asli Development or Jabatan Kebajikan Orang Asli (JAKOA) implemented various development programs such as structured settlement program, physical improvements such as Regrouping Plan (RPS), Village Restructuring project (PSK), New Village Plan (RKB) and Orang Asli settlement customary Land Survey (village) / Land Acquisition. Orang Asli Community. However, their sense of satisfaction towards the development implemented is rarely evaluated. This paper aims to highlight Orang Asli’s thoughts and level of satisfaction towards the planned housing development of their settlement. A mixed methodology was employed using survey and interview to record their thoughts. The findings suggest that the Orang Asli Community’s sense of satisfaction towards housing development has improved. However, their needs to adhere to their social traditions and norms such as living adjacent to relatives, surrounded by nature within a low-density environment must be respected.

1. Introduction
According to [1], there are greater than 370 million indigenous people spread through 70 countries around the world. Indigenous peoples or Orang Asli in Malaysia are the holders of knowledge systems, specific languages, beliefs and own precious information of practices. Orang Asli possesses a unique relationship with their traditional land. Indigenous people have their thoughts on development, life values, visions, needs, and priorities. In Peninsular Malaysia, the Orang Asli comprise of subgroups such as Negrito, Senoi, and Malay-Proto. To protect the rights of Orang Asli and improve their living standards, the Government as early as the 1950's had established the Department of Orang Asli Affairs or Jabatan Hal Ehwal Orang Asli (JHEOA). This department later became the Department of Orang Asli Development or Jabatan Kebajikan Orang Asli (JAKOA) governed under the Ministry of Rural and Regional Development. The government implemented various planned development programs such as structured settlement program, physical improvements such as Regrouping Plan (RPS), Village Restructuring project (PSK), New Village Plan (RKB) and Orang Asli settlement customary Land Survey (village) / Land Acquisition. Orang Asli Community. The government has applied particular development programs for the indigenous, the Orang Asli, to improve their dwelling. Within the Orang Asli community, JAKOA identified the communities settlement hierarchy and divided this according to urban, rural and semi-urban. In 2010, the Census indicated a total of 876 settlements with six settlements were in towns (0.7%), 547 villages lived in rural (62.4%), and 323 villages live at the edge of the wooded area (36.9%). A study by researchers on Weighted Quality Life Index for Orang Asli (IKHOAw) [2] found that in almost all respects the Malaysian aborigines’ quality of life was very...
satisfactory; it is only less so with respect to electricity and water supplies, motorised vehicle ownership and housing quality [2]. This paper aims to highlight Orang Asli's thoughts and level of satisfaction towards the planned housing development of their settlement. The findings would enable policy makers to determine the extent of impact the development has towards the community.

2. The Pattern and Design of Orang Asli Settlement

According to [3], currently there are three Orang Asli planned settlement layouts in Malaysia, i.e., cluster, linear and mixed (Figure 1-3). The pattern of every settlement is unique. However, there are similarities of each settlement, i.e., the community consists of the same ethnic family who is related often geographically located in proximity to the river and surrounded by orchards, farm, and woodland.

2.1 Cluster Layout

The houses are clustered together and located adjacent to the river. The layout maintains an informal setting with good accessibility. An example of this form of settlement can be found in Chinggung Village, Tanjung Malim, Perak.

2.1.1 Linear Settlement

Based on [3] the linear or parallel settlement is usually formed along the river and road. The pattern of settlement was built to facilitate them to water and food supplies and accessibility. An example of a settlement which has this type of pattern is within the Semai race in Ulu Geruntum Village, Gopeng, Perak.

Figure 1. The Illustration Clustered Settlement Pattern In Chinggung Village, Tanjung Malim, Perak [2]

Figure 2. The Illustration Linear Settlement Pattern in Chinggung Village, Tanjung Malim, Perak [2]
2.1.2 A Mixed Development. According to [3], a mixed settlement is a mixture of two forms of agreement parallel and cluster settlement. This settlement will shape when they are many humans inhabit in one vicinity. Typically, it is populated by a few households as a collection. Each house is separated using physical barrier or plants. An example in Bukit Manchong Village, Hulu Selangor.

![Image of mixed settlement pattern]

**Figure 3.** The Illustration Mixed Settlement Pattern in Chinggung Village, Tanjung Malim, Perak [2]

2.1.3 The Design of Traditional Orang Asli Housing. According to [3], the maximum traditional Orang Asli housing design emphasizes natural elements suitable to the climate and ventilation. They use palm leaves, bamboo, rattan, and timber to make a home which is easily available from their natural surroundings. Their traditional house size is 25' x 20'. There are three basic indoor components, i.e., living, bedroom, and kitchen. The homes are typically near the homes of different spouses and children. The strategy would facilitate social interplay and close supervision by the head of the family. According to [3], housing is built taking into consideration proximity to timber and water resources as the Orang Asli will not construct a house at the hill or valley slit region because this may disrupt the natural spirits. Based on their beliefs a person who desires to build a house must select a clean area. The Orang Asli also considers the significance of dreams in choosing a site for residence. The housing design for Orang Asli is similar to the conventional Malay house in which there are three specific regions with specific features. There are six components of a traditional Orang Asli home, i.e., the site, supporting poles, floors, walls, windows, and roofs.

![Illustration of traditional Orang Asli house]

**Figure 4.** Illustration of Design of Traditional Orang Asli House.  
Source: [http://www.starproperty.my/index.php/articles/property-news/new-homes-for-orang-asli-families](http://www.starproperty.my/index.php/articles/property-news/new-homes-for-orang-asli-families)
2.2 Study Area
The Orang Asli settlement of this case study is Kg Sejagong, Mukim Sri Medan, Yong Peng, Johor. The area covers 230.51km². (56,960 acres). It is one of the earliest Orang Asli village under the structured planned development project implemented by JAKOA under the Ministry of Rural and Regional Development. It is under the jurisdiction of the Yong Peng Municipal Council, District of Batu Pahat, Johor. The earliest settlers of Hutan Maokil near Kg. Sejagong were Orang Asli families. According to the Tok Batin, the pioneer Orang Asli family who settled in this village was Jamilah binti Katan and her husband Khamis bin Samin in 1972. Their generations and family still reside in this area. The settlement layout is linear with access from the PLUS Highway via Jalan Kampung Parit Warijo-Jalan Kampung Parit Singgahan. The distance between the main roads to the study area is about 20km, and it takes 30 minutes by car to the study area. The Malay Settlement near Kampung Sejagong is Parit Warijo and Parit Jayus, The land use is also dominated by some commercial consisting of formal and informal business activities. The market area in Sri Medan attracts residents from Kampung Sejagong, Parit Warijo, Parit Baru and Parit Haji Noor.

2.3 Data Collection
A mixed methodology approach was employed. The interview with the Tok Batin considered an expert in Orang Asli matters, forms the qualitative data while questionnaires record the respondent's opinions on the subject matter. The questionnaire lists three aspects designed to record respondents' opinion on their current level of housing development satisfaction and how they felt two years ago. The main questions asked were related to "Home space for family activities," "Sense of Safety," and "Housing layout." This research was conducted on 26th and 27th May 2017. The enumerator distributed 52 questionnaires to all 52 heads of household in Kg. Sejagong and the return rate was 100%. Although there are only 27 houses within the settlement, it is possible for two related families to be living under one roof. The enumerator was of the same ethnicity and speaks Bahasa Orang Asli which expedited the process of data collection.

2.3.1 Inventory of Housing Development. The interview with the Tok Batin revealed that within the study area, the renovation was carried out on 21 out of a total of 27 houses with funding assistance from the government. The aim for renovation works was to improve the living conditions. All of the houses were originally built by the older generations of the Orang Asli while, the younger generation undertook the renovation. The structure of the housing is similar to a typical Malay house (refer to Photo 2.4 and Photo 2.5). The original building material was wood, but some homes were renovated using bricks. The original roof made of Nipah has been replaced with zink roofing while maintaining a pitched roof design.

2.3.2 Interview. The expert interview was conducted directly involving officers from Department of Orang Asli Affairs (JAKOA) responsible for the development of Orang Asli. The data Triangulation of the qualitative data This step would ensure the validity of the information about this group of community.

2.3.3 Survey. A survey was conducted among the Orang Asli heads of household to obtain information regarding the residents' satisfaction towards the physical development. Their response
was recorded using a questionnaire. The researchers used a numerical value for each of the scale designed to indicate the respondents level of satisfaction to a certain aspect of physical development. The questions incorporated psychological aspects which interpreted a place in which the occupants feel safe within a peaceful atmosphere merely than the physical conditions of the house [4]. A home can also be interpreted as a place of shelter from external surroundings and is a place for rest and leisure. The internal home space provision for family activities, an overall sense of safety and external housing layout are the three components that were considered by the respondents to evaluate their level of satisfaction towards the housing development in their settlement. Table 1 indicates the values used for further analysis.

| Value       | Remarks          |
|-------------|------------------|
| 0.00 – 1.00 | Very Unsatisfied |
| 1.01 – 2.00 | Unsatisfied      |
| 2.01 – 3.00 | Moderate         |
| 3.01 – 4.00 | Satisfied        |
| 4.01 – 5.00 | Very Satisfied   |

(Source: Adapted from [5])

2.3.4 The population of Orang Asli. The population of Orang Asli Kg. Sejagong comprises of 249 Orang Asli from 52 families. Based on the age structure, the highest number of population is the age between 15-24 years old (74 people) followed by those in the age group 5-14 years old, (59 people). The two age structures that have the lowest number of people, (age group of fewer than five years old and age group of more than 55 years old). From the interview with the Tok Batin, most are from the third and fourth generation. Kg. Sejagong has a few second generations left.

| Age          | Primary School | Secondary School | Uni/ College | Never Attended School | Still Schooling | Total | %     |
|--------------|----------------|------------------|--------------|-----------------------|-----------------|-------|-------|
| < 5 years    | -              | -                | -            | 6                     | 4               | 10    | 4.02  |
| 5-14 years   | -              | -                | 2            | -                     | 57              | 59    | 23.69 |
| 15- 24 years | 1              | 13               | 29           | -                     | 31              | 74    | 29.32 |
| 25-34 years  | -              | 13               | 3            | -                     | -               | 16    | 5.62  |
| 35-44 years  | -              | 23               | 1            | -                     | 24              | 48    | 8.43  |
| 45-54 years  | 7              | 28               | -            | 11                    | -               | 46    | 10.44 |
| > 55 years   | 3              | 7                | -            | 10                    | -               | 20    | 18.07 |
| Total        | 11             | 72               | 35           | 27                    | 102             | 249   | 100   |

Table 2 shows that the majority, i.e., 40.96% of the population are still schooling. The second highest is the population that finished their secondary education (28.92%), followed by those who obtained university or college education (14.86%). Only 27 people (10.84%) never attended school. Based on the interview with the respondents, they stated that in their day, education was not a necessity. However, some from the age group of 15-24 years old had scholarships from JAKOA to study in the university or college.

2.3.5 Level of Satisfaction – Home Space for Family Activities. Based on Table 3, the total heads of household who were very unsatisfied about home space for family activities in 2015 was 5.8% and this figure decreased to nil. In addition, 9.6% of household heads reported that in 2015 they were unsatisfied about home space. However, in 2017, this figure decreased to 3.8% of the respondents who reported that they were unsatisfied with the level of home space. The reason may be due to the renovation of the majority of the houses for more home space for family activities with better conditions, and some family members had moved out thus creating more space for the remaining family members.
Table 3: Satisfaction Level of Home Space for Family Activities

| Frequency of Satisfaction | Home Space for Family Activities |
|---------------------------|----------------------------------|
|                           | 2015 Total | Percentage (%) | 2017 Total | Percentage (%) |
| Very Unsatisfied          | 3          | 5.8            | -          | -              |
| Unsatisfied               | 5          | 9.6            | 2          | 3.8            |
| Moderate                  | 21         | 40.4           | 16         | 30.8           |
| Satisfied                 | 10         | 19.2           | 14         | 26.9           |
| Very Satisfied            | 13         | 25.0           | 20         | 38.5           |
| Total                     | 52         | 100.0          | 52         | 100.0          |

The table above shows that currently, most of the Orang Asli in the study feel safe living in their settlement. The current layout of the houses within Kg Sejagong is linear. In 2015 however, 53.9% felt moderately satisfied and unsatisfied with this aspect but currently (2017) only 26.9% feels unsatisfied. According to families, they feel safer because they are closer to each other. Although there are some reported cases of theft, the number of cases is decreasing.

Figure 5 highlights the average value of respondents’ opinion of the three aspects related to satisfaction level of housing development within their settlement. Using descriptive analysis, the 52 Respondents were asked to rate the relevant question using the value on the scale. The data were analysed into frequencies and converted to a useful mean value by analysing the responses using the given score to summarise the perceived satisfaction level. This gives indication if respondents were generally satisfied or not, by how high or low the mean is according to the year identified. In general, the mean value of each aspect of satisfaction indicates a value higher than 3.00 interpreted as respondents feel satisfied regarding aspects related to development. The bar chart shows that their level of satisfaction regarding housing development had improved from two years ago. The overall mean value of satisfaction level of housing development improved from a mean value of 3.57 to the average value of 4.03, i.e., 12.8% increase in satisfaction level.
2.4 Conclusion

The overall analysis suggests that the Orang Asli Community's sense of satisfaction towards housing development has improved. However, their needs to adhere to their social traditions and norms such as living adjacent to relatives, surrounded by nature and woodlands within a low-density environment must be respected. It is also important to maintain the "informal" or traditional kampung layout of the housing development while ensuring this community has access to basic amenities and infrastructure such as water, telecommunication, and electrical supply. Further research on these aspects is required to incorporate the projected population and sustainable socio-economic opportunities.

References

[1] Jaura R 2010 Of Indigenous Peoples, Climate Change and Rural Poverty. Retrieved from Development Watch An Alliance for Monitoring International Cooperation:Ministry of Rural and Regional Development

[2] Harun and Idris 2012 Akademika 82 65

[3] Suki Mee Malaysia 2009 Betascript Publishers Dez

[4] Gifford R, Steg L and Reser JP 2011 Environmental Psychology, in IAAP Handbook of Applied Psychology (eds P. R. Martin, F. M. Cheung, M. C. Knowles, M. Kyrios, J. B. Overmier and J. M. Prieto), Wiley-Blackwell, Oxford, UK.

[5] Diener E, Emmons RA, Larsen RJ and Griffin S 1985 Journal of Personality Assessment. The Satisfaction with Life Scale 49 71