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15 November 2018

Mercu Alam Bina, University of Malaya, Kuala Lumpur, Malaysia

Inclusive Built Environment Towards Realising New Urban Agenda

Organised by

**Centre For Sustainable Urban Planning & Real Estate (SUPRE)
Faculty of Built Environment, University of Malaya**



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ASEAN Post Graduate Conference (APGC) 2018

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Preface

This event was previously known as APGS (ASEAN Postgraduate Seminar) for the past 11 years. This year, we are proud to announce that we have upgraded this event to APGC (ASEAN Postgraduate Conference).

The aims and objectives of the APGC are to bring together researchers to discuss their research, exchange ideas and share their experiences between multidisciplinary and interdisciplinary studies that will bring potential break-through researches. It also offers networking and opportunities to learn, improve skills and knowledge. This conference will create a learning and discussion platform for knowledge exchange and collaboration among universities around ASEAN Countries.

The main theme for APGC 2018 is “**Inclusive Built Environment Towards Realising New Urban Agenda**”. It has the following sub-themes related to the Built Environment: -

- Sustainable Design and Building Performance
- Sustainable Development in Construction Industry
- Project and Construction Management
- Real Estate Investment and Development
- Facilities and Asset Management
- Landscape and Urban Design
- Heritage and Conservation
- Information Technology in the Built Environment
- Human Behaviour Management

Programme Schedule

ASEAN Post Graduate Conference 15 November 2018 (Thursday) Mercu Alam Bina, Faculty of Built Environment, University of Malaya, Kuala Lumpur	
8.00am	Registration and Refreshment (Banquet Hall, Level 1)
9.00am	Opening Ceremony ♦ Recitation of Prayer ♦ National and University Anthem ♦ Welcoming Address by Associate Professor Dr. Rosilawati binti Zainol Head of Centre for Sustainable Urban Planning and Real Estate, FBE, UM ♦ Opening Address by Professor Dr. Yahaya Ahmad Dean of FBE, UM ♦ Keynote Address by Madam TPr Khairiah Talha ♦ Photo session (Banquet Hall, Level 1)
10.00am	Parallel session A: Oral Presentation ♦ A1: Subtheme 1 ♦ A2: Subtheme 2 ♦ A3: Subtheme 3 ♦ A4: Subtheme 4 ♦ A5: Subtheme 5 Room 1 to Room 5: Banquet Hall (Level 1) & Lecture Rooms (Level 3 & Level 4)
1.00pm	Lunch and Networking (Banquet Hall, Level 1)
2.00pm	Parallel session B: Oral Presentation ♦ B1: Subtheme 6 ♦ B2: Subtheme 7 ♦ B3: Subtheme 8 ♦ B4: Subtheme 9 ♦ B5: Subtheme 10 Room 1 to Room 5: Banquet Hall (Level 1) & Lecture Rooms (Level 3 & Level 4)
4.30pm	Closing Ceremony ♦ Presentation of Awards for Best Presenter, Best Paper and Special Mentioned. ♦ Closing Speech by Ms Noorame Binti Mohd Foudzy APGC 2018 Committee (Banquet Hall, Level 1)

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Analysis of the Composition of Malay Traditional House Compound: A Case Study of Kg Seri Tanjung, Melaka

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Abstract: The study of Malay settlement that focus on the individual house compound is important in developing the future city that carries the Malay identity. The original Malay traditional house usually have an open space at outside of their house which is called as house compound and has its own functions. However, as a household increase, the house in a lot is extended and has decrease the sizes of house compound. The modernization also has changed the functions and positions of some elements of the house compound like the hard landscape. Thus, the objectives of this paper are to; 1) analyses the current elements of traditional house compound in Kg Seri Tanjung and 2) prepare a preliminary framework of Malay traditional house compound. The method of this study is by using thematic analysis that results in the formation of the framework of traditional Malay house compound. GIS data analysis is used in mapping the traditional houses in the study area. The percentage of the elements of Malay traditional house compound is analyses by using frequency analysis gathered in SPSS data. The main findings of this study show that the Malay traditional houses in Kg Seri Tanjung are still preserving the design of Malay house compound through the preservation and the position of hard landscape element in their house compound. The framework for Malay traditional house compound in Kg Seri Tanjung shows that the composition of Malay house compound has planting at in front of the house as their decoration or fences to mark the house boundary and the position of suspension, pen, coop, shed and external toilet are at the side or backyard of the house. Thus, this shows that the installation of Malay traditional house features in house compound are still relevant in current development. Further study will focus on the density study of Malay traditional village in Kg Seri Tanjung.

Keywords: Malay houses, traditional village, rural settlement, house compound, framework.

1. INTRODUCTION

Traditional village represents the identity of Malay settlement in our country. However, the Malay identity in the housing design for both in the village and town are slowly diminished as most of the development and many of the people are prefer to have a modern and westernized design of houses. Ertan & Eęercioęlu (2016) explained that

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urban development has severely affected the historic buildings and diminishes the historical identity of the city. Thus, to prevent the diminishing of the historical identity of the city, people should learn to appreciate and have some effort to preserve and maintain our heritage and culture especially the traditional village as the traditional village has all the characteristics of Malay culture regarding the physical, social as well as the economics of the community itself.

According to Roslan Talib & Mzailan Sulieman (2012), the designs of the Malay house represent the Malay lifestyle which influences by the religion and culture. They have identified few elements of traditional houses compound that include the house compound with no fences and fruit trees as barriers, the house compound is occupied by flowers and fruits plantation, and house compound that has a Malay hard landscape such as bunk, cement, water tank, pond, hutch and shed. Moreover, according to Azman A. Rahman & Shahrudin Mohamad Ismail (2015), the arrangement of the village houses are usually scattered or clustered and did not have a specific boundary. Malay land usually has few houses in one lot which are occupied by their own family groups. There are also spaces between each house as space can be used for community activities such as gotong-royong, feasts, events, cultural activities, and sports.

This paper will focus on the analysis of the elements of the Malay house compound and will evaluate physical elements such as the ownership, the landscape furniture and the plantation in the house compound. Based on the analysis of the elements of Malay house compound in Kg Seri Tanjung, this paper aims to prepare a framework of the composition of Malay traditional house compound. The methods of this paper include questionnaire distributions and interviews with local people.

1.1 Malay Traditional House Compound

The design of the Malay house compound is planned through the implementation based on the relationship between man, nature, and culture. According to Ismail Hafiz Salleh, Mohd Sabrizaa Abd. Rashid and Siti Rasidah Md Sakip (2016), the Malay garden design is unique as it symbolizes the Malay culture through the composition of plants and landscape furniture in their compound that reflects the relationship with God, environment as well as the human being. They categorized the traditional Malay house compound into three main areas that are front, side, and rear compound that placed the soft landscape and hard landscape elements by depending on the functions of the compound. The design of traditional Malay garden is believed to be influenced by the culture of the ethnicity, for instance, the location and position of the house and the types of plants in the landscape of the compound.

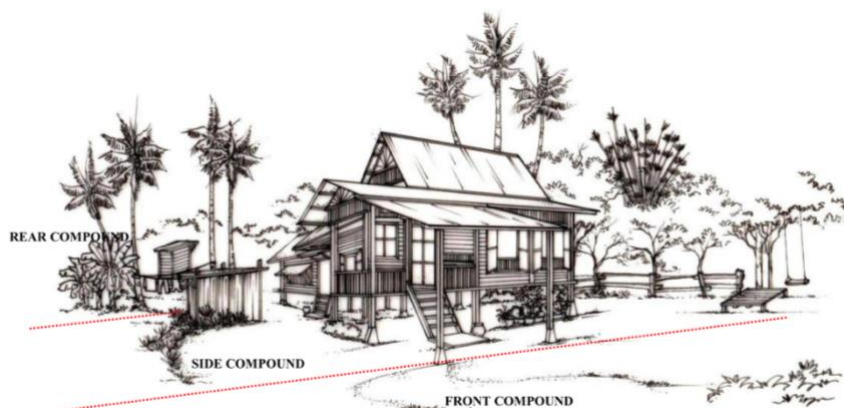


Figure 1: Typical traditional Malay house compound

(Ismail Hafiz Salleh et. Al., 2016)

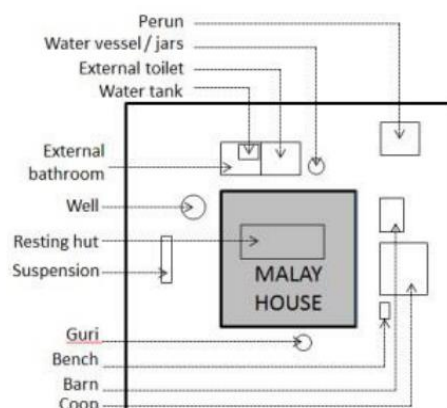


Figure 2: General model of hard

landscape of Malay house compound

(Ahmad Zamil Zakaria et.al., 2016)

Figure 1 shows the typical Malay traditional house compound in peninsular Malaysia (Ismail Hafiz Salleh et. Al., 2016) that shows that an open space at the front compound of the house function as space for children to play, or an area to do a ceremony. The side and the rear compound is usually functioned as a space locating the hard landscape such as external toilet, suspension, livestock, shed (*bangsal*) and space for trash disposal (*perun*). Nor Zarifah Maliki, Aldrin Abdullah and Azizi Bahauddin (2015), explained that the Malay house compound for each house is usually large space and unfenced as they can sharing space for activities like feasts and ceremony. Usually, the communities in village mark their house boundary through invisible boundaries such as a cleanly swept spaces, a fallen tree trunk or any marks using the natural environment. Some of them also arrange hedges; such as linear tree or vegetation as marks of the compound.

Figure 2 shows the general model of a hard landscape of Malay house compound by Ahmad Zamil Zakaria, Syazwani Ahmad and Mohd Sabrizaa Abd Rashid (2016). The composition of the hard landscape in Malay house compound is positioned by according to its function on a different compound. Ismail Hafiz Salleh et. Al., (2016), also has listed out the landscape furniture of Malay traditional house by according to the placement. The front compound locating the suspension (*ampaian*), tree swings (*buai*), arch (*gerbang*), small water vessel (*guri*), torch (*kandil*), fence, resting hut (*pangkin*), flower pot, open timber platform (*pangkin*), water vessel (*tempayan*), log bridge (*titi*) and gazebo. The barn (*bangsal*), external toilet, paddy store, water tank (*kolah*), pond, well, dump site (*perun*) and hen coop are usually positioned at the side or rear compound of the house.

2. STUDY AREA AND METHODOLOGY

Kg Seri Tanjung is selected as a study area as it is listed to be proposed as gazetted Malay heritage village in Melaka State Structure Plan 2035. It is located around 0.5 km distance from Masjid Tanah and about 27 km distance from Melaka city as well as about 13 km distance from Alor Gajah. Kg Seri Tanjung was previously known as Ujung Tanjung as it is surrounded by paddy field and has been formed more than 150 years ago. The total area of Kg Seri

Tanjung is about 2663 hectares comprising residential, public buildings and agriculture. Figure 3 and Figure 4 below shows the site and location plan of Kg Seri Tanjung.

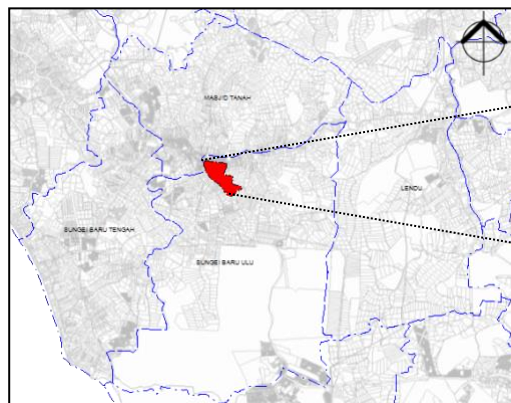


Figure 3: Site plan of Kg Seri Tanjung

Figure 4: Location plan of Kg Seri Tanjung

According to Profil Kg Seri Tanjung by JKK Kg Seri Tanjung, the total houses are 265 houses including both traditional and modern houses. Based on the data collected, 84% of the houses are traditional houses and another 16% are modern houses. The average size of a household is 1.56 person and the average household is 1-4 person per house. This study deals with the houses that still preserves Malay traditional house features that can be identified through their house compound.

This study was conducted through primary data; observation, interviews and questionnaire surveys among the residents, and secondary data through literature. From our observation, only 222 of the traditional houses are still preserved the originality of the house and the rest was renovated to a modern house. Simple random sampling is used as the method of this study and 41 traditional houses were selected as our sample. Most of the houses used as a sample in this study aged over 51 years old (N = 33). After the data collected, the mapping of the traditional houses distribution is prepared. The statistical analysis of Melaka traditional houses compound is analyzed through the method of crosstabulation analysis. Then, the framework of Malay traditional house compound is created through the sketch analysed from the samples. Figure 5 below shows the flowchart of this study.

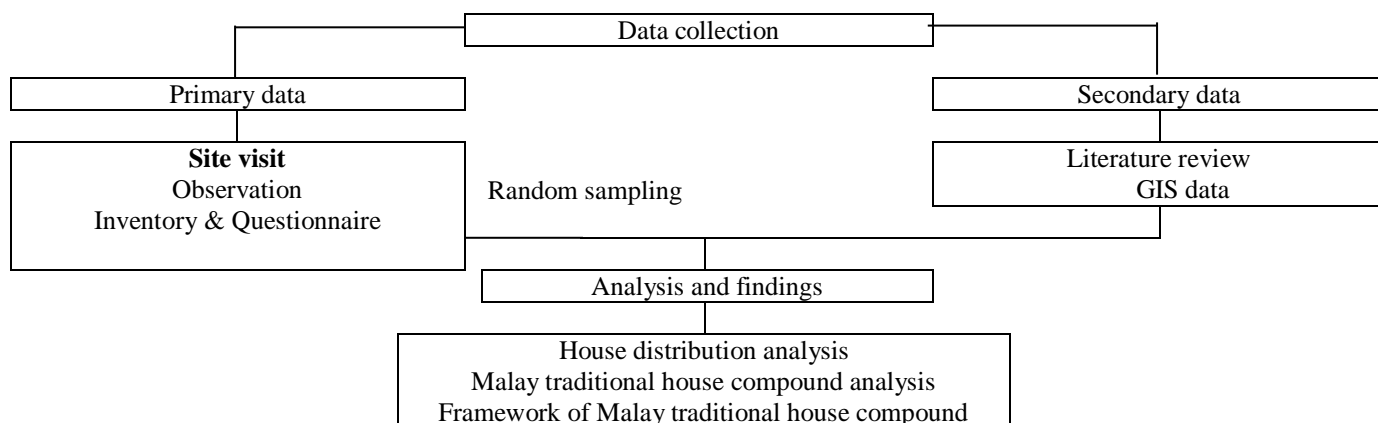


Figure 5: Flowchart of the study

3. ANALYSIS AND FINDINGS

There are three sections of analysis in this study. The first section will analyse the distribution of traditional houses in Kg Seri Tanjung and the second section will analyse the Malay traditional house compound in Kg Seri Tanjung. The third section of the study will interpret the framework of Malay traditional house compound based on the analysis in Kg Seri Tanjung. This is to assess whether the houses in Kg Seri Tanjung have its own identity and preserving Malay traditional house characteristics in the composition of the house compound.

3.1 Distribution of Malay Traditional Houses in Kg Seri Tanjung

Understanding the distribution of Malay traditional houses will contribute to the understanding of the pattern of the settlement and its social engagement among the residents that bring the identity of the settlement. Kg Seri Tanjung previously was known with their homestay programs namely ‘*kampung stay*’ that brings the visitors and guests experiencing the real way of life in kampong (Mohd Yusof Saleh, 2018). Moreover, Kg Seri Tanjung has its own uniqueness of Malay traditional house that still preserved their traditional features such as its home design, the ornaments, landscape arrangement, and others. Figure 6 below shows the traditional house distribution in Kg Seri Tanjung and Figure 7 shows the house distribution in Lot 1567.



Figure 6: Distribution of traditional houses in Kg Seri Tanjung

Figure 7: Distribution of house in Lot 1567

Figure 6 shows the distribution of traditional houses in Kg Seri Tanjung. It shows that the distribution of the traditional houses has formed an organic pattern and the formation of the pattern are influenced by the geographical factors of that the settlement previously was surrounded by paddy field. The surrounding area was developed to a residential area at the northern part of Seri Tanjung, and the western part is the commercial and industrial area. The map also shows that 63% of the total lot in the study area has several houses (more than one house) in one lot. From the interviews with the local, the family ties are the reason for the extension of houses in one lot. For example, Figure 5 shows Lot 1594 that was previously owned by Rukiah binti Jantan since the 1940s, and currently, the house was extended to few houses that are inhabited by her children and their family.

This analysis also indicates that the nearer the location of the houses means that they have a strong relationship between them. The extensions of the house were affected by the changes of the density and this also create issues among the family ties that they tend to ignore the parcel boundaries. The map shows that several houses are built on two lots with a boundary line, or in the middle of a boundary line without understanding that the house arrangement should follow the parcel line. This can affect the future generation that they need to consider themselves to do a subdivision on the lot. Thus, the awareness of building houses inside the lot areas should be solved as this issue usually occurred in the village areas. This analysis has ascertained the hypothesis that Malay people tend to build house next to their families houses and Malay people was attached together that indicate the sense of place in the study area (Noorul Huda Mohd Razali & Anuar Talib, 2013).

3.2 Composition of Malay Traditional House Compound in Kg Seri Tanjung

Other than referring to the façade of the house, Malay identity can be identified through the landscape design of the house compound. Malays tend to synchronize their house compound with the environments through the landscape design concepts, functions, and activities that represent their identity. Thus, this section analyses the elements of house compound in Kg Seri Tanjung by considering the house compound ownership, the landscape furniture and the plantation in the house compound. Figures 8 below shows the examples of the elements in Malay traditional house compound that still well maintained in the selected house and Table 1 shows the statistical data of the elements of Malay traditional house compound in Kg Seri Tanjung.

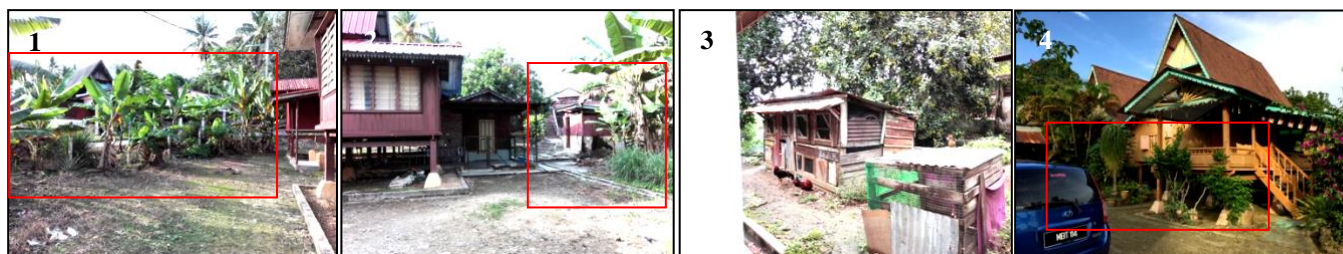


Figure 8: Malay traditional house compound in Kg Seri Tanjung

The study done by Ahmad Zamil Zakaria, Mohd Sabrizaa Abd Rashid, and Syazwani Ahmad (2016) listed out elements of Malay house compound that are water vessel (*tempayan*), *guri* (small water vessel), flower pot, resting hut (*pangkin*), well, dump site (*perun*), hen coop and paddy store. All these elements were placed at side yard or backyard of the house except flower pot was placed and arranged at the front yard of the house. However, in Kg Seri Tanjung, not all of the hard landscape stated by Ahmad Zamil Zakaria et. al (2016) was in the house compound. Figure 8-1 shows the example of a house that used banana tree as fences that marks their house boundary. Figure 8-2 shows the external toilet that is located at the side yard of the house and Figure 8-3 shows that there is a hen coop at the backyard of the house. While Figure 8-4 shows the example of a house that still preserve and maintained the *kolong* under the house. The statistical data of the elements of Malay traditional house compound that consider the house compound ownership, landscape furniture and plantation is showed in Table 1 below.

Table 1: Elements of Malay traditional house compound in Kg Seri Tanjung

Elements	Findings
House compound	76.2% - has their own compound 23.8% - sharing compound with two or more houses with other families
Landscape furniture	Fences 71.5% - no fences or using natural materials like wood and plantation 28.5% - using wire fences or brick Toilet 24.4% - has external toilet and bathroom Pen/ coop 52.4% - has livestock; bird/ cow/ duck/ hen/ goose/ catfish Clothlines/ suspension 62.0% - outside house 23.8% - inside house Pangkin 11.9% - have pangkin under the house
Plantation	66.5% - flowers, fruit and vegetables trees 33.5% - do not owned plantation

Table 1 shows that 76.2% of the houses owned their house compound while another 23.8% was sharing the compound with houses next to them. The average area of the house compound is one to two acres. Based on the observation, the compound was shared by few houses as the houses were located in one lot that basically was owned by one nominee then it is inherent to their next generations, that show that the sharing compound is shared by an extended family in the same lot. Nor Zarifah Maliki, Aldrin Abdullah, & Azizi Bahauddin (2015) clarify that Malay people built their house by taking into account the social ties with the neighbouring unit as well as privacy protection of the family in terms of the functions of each space in the house. It is implemented through the installation of fences as the boundary of their house. Through our observation, there are 28.5% of the houses has built fences by using wire fences or bricks while the other 71.5% of the houses do not have structured fences and only marks their boundaries by using natural resources like woods and plantations (Figure 8-1).

The typical Malay house in the past has built the toilet outside of the house as they did not have a proper piping system inside the house. Currently, both traditional or modern house has made the installation of the toilet inside of the house as it keeps the privacy of the occupant of the house especially the woman occupant. However, in our observation, there are only 24.4% of the traditional house in Kg Seri Tanjung still has external toilet and bathroom for visitors to used and to keep the privacy of the family (Figure 8-2). The position of the external toilet is mostly at the side yard of the house.

Another elements are the barn, pen, hen coop and pond are located at the side yard or backyard of the house. There are 54.4% of the houses have these elements at their compound and have various livestock for instance duck, chicken, bird, cow, and goose (Figure 8-3). There are several houses that still have the well but it is used as other function such as for catfish breeding and a place to store water for use in watering the plants. Resting hut or pangkin is also one of the elements in Malay traditional compound. However, there are only 11.9% of the houses that still have pangkin in their compound and some are under their house (Figure 8-4). There are 66.5% of the houses in Kg Seri Tanjung have a plantation in their house compound that includes bougenvila, cactus, ixora, roses, decoration flowers, and fruit plants such as banana, mango, rambutan, durian, pineapples, mangosteen and sugarcane tree. One of the houses selected as an example, that has almost all of the elements of Malay traditional house compound considered in this study is shown in Figure 9 below.



Figure 9: Front compound of Malay traditional house

The analysis of Malay house compound in Kg Seri Tanjung shows that this village is well preserved in terms of the house design and the village environment. From our observation, the factors of the interaction from the surrounding people with each other have a large contribution in the maintenance of the kampung environment. Thus, the relationship has contributed to the design of their house compound.

3.3 Framework of the Composition of Malay Traditional House Compound

This section shows a framework of the composition of the elements of softscape and hard landscape that is maintained in the selected houses in Kg Seri Tanjung. Figure 10(a) shows the composition of 23.8% of houses in Kg Seri Tanjung that shared their house compound with houses next to them. While the other 76.2% of the traditional Malay house that owned their house compound is shown in Figure 10 (b).



**Figure 10: (a) Malay traditional house for sharing compound
(b) Malay traditional house compound for single-owned house compound**

Figure 10 above shows the layout for the composition of house compound in both sharing compound and single-owned house compound in Kg Seri Tanjung. The statistical data in Table 1 show that 23.4% of the traditional house in Kg Seri Tanjung has shared the compound with two or more houses next to them. Thus, based on the observation, the composition of the house compound is sketched as in Figure 10 (a). Figure 10 (b) shows that the position of the elements are almost the same as explained by previous researchers which the location of the hard landscape such as pen, hen coop, barn and well are at the side compound or rear compound of the house while at the front compound locating the resting hut and suspension. The surrounding of the house compound is full with the variety of plantation including fruits, decoration flowers and also vegetables. Each side of the compound plays a different function for the house. The arrangement of the hard landscape by according to its functions also will emphasize the Islamic context that contributes to living satisfaction, enhancing the quality of life, health, and wellness.

4. CONCLUSIONS

This paper covers an overview of the composition of Malay traditional house compound in Kg Seri Tanjung. This study is the reference in identifying the current composition of Malay traditional house compound that is still preserved in Malay settlement. From this study, it is identified that the house compound was covered by few landscape furniture that is the fences are using wood and plantation (71.5%), still have an external toilet and bathroom (24.4%), have pen or coop with varies of livestock, the position of the suspension at outside of the house and have *kolong* under the house. There are also varies of plantation at the house compound, some with fruit plantation, vegetables, and decorative tree. Further research will prepare a density analysis of Malay traditional house in the rural settlement.

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