

FACTORS FOR SMALLHOLDERS PERSISTENCE IN RURAL MALAYSIA: EVIDENCE FROM RICE FARMING COMMUNITY IN SELANGOR STATE

Khairul Hisyam KAMARUDIN¹, Mohamad Fadhli RASHID²

¹Universiti Teknologi Malaysia, Faculty of Technology and Informatics Razak, Jalan Sultan Yahya Petra, Kuala Lumpur, 54100, Malaysia, Phone/Fax: +60322031350; E-mail: khisyam.kl@utm.my

²Universiti Teknologi Malaysia, Faculty of Built Environment and Surveying, 81310 Johor Bahru, Johor, Malaysia, Phone/Fax: +60135156005; E-mail: pku.fadhli@gmail.com

Corresponding author: pku.fadhli@gmail.com

Abstract

This paper examines the factors of smallholders' persistence in the rural area of Malaysia based on a case study of rice farming community in Parit 6 (East) village in the state of Selangor, Malaysia. Information for this paper are derived from in-depth interviews with key informants and series of field observation conducted in July and August 2017. The findings from the fieldwork highlights four major factors for smallholders' persistence which are strongly associated with strong and influential internal and external support systems including: (1) strong engagement and supports from various government agencies which include systematic distribution of subsidy and development grants, and development of irrigation infrastructure, (2) legality of land ownership, (3) farmers' ability in utilizing capital to expand local economic and improve quality of life and, (4) diversification of economic activities through farming and non-farming projects. The paper could offer valuable insights particularly in understanding some of the underlying factors for smallholders' persistence and sustainability particularly in the case of rice farming community in rural areas.

Key words: smallholders, rural, persistence, sustainability, rice farming

INTRODUCTION

There is an estimation of 500 million small-scale agriculturalists (also known as smallholders) in the world today and majority of them are found in various Asia countries [4], [10]. The stereotypical image of smallholders in Asia, as stated by Elson [1] might best be described as related to greenery of rice paddy fields, whereby old farmers with their wives working under the heat of the sun while their buffalos were relaxingly under a big shaded tree. In reality however, are far more complex. According to Ngah, Saad & Kamarudin [6], smallholder literally means the small size of land holding, but to quantify the size of land considered small is very subjective (and to some extent, become troublesome). In general terms, smallholder agriculture in Malaysia can be attributed primarily to family farming and/or village-based farming activities. Traditionally, when farmers open or clear land for

occupation and/or farming, the practice was to divide the parcel of landholdings of around one to two hectares [3].

The traditional practices of land division in Malaysian villages provide some ideas on the size of land holding among smallholders. For instance, in Sabak Bernam, Selangor, the standard lot size of a rice field is 3 acres (1.2 hectares) [7]. Meanwhile, in Parit Tengah, Johor, the Indonesian migrants who opened the village have divided the land parcels into 5 acres (approximately 2 hectares) for each person [6]. With continuity of government intervention in developing smallholders since independence, the official definition did emphasise on those owning agriculture land up to anywhere between four to forty hectares [3].

Thompson [12] used different approach in defining smallholders, i.e. denoted smallholders using few Malay terminological terms including *petani* (farmer), *peladang* (one who works the field), *pekebun* (one who

works the orchard), and *peneroka* (pioneer). The second Malay terminological term is the word *kecil* (small). Prior to merging or adding up these two terms (i.e. farmers and small) hence becoming *pekebun kecil* or *petani kecil* (smallholder). Thompson [12] also highlighted another popular term for smallholders and has been widely portrayed in television dramas, up until children storybook, school textbook and novel describing rural landscape in Malaysia – i.e. rural villager or “orang kampung” (village person).

In the 1960s, classic Malay novel by Shahnnon portraying rural scenes in Baling, Kedah describe peasants as poor, with only one or two *relung* (furnases) (1.42 acres) of paddy land and living in places that lack facilities and infrastructure [11]. The *orang kampung* was also portrayed as humble and polite, having strong community ties, and living in harmony with nature. The villages in those days had clean running rivers and abundant forest resources, on which peasants depended for income.

A family-based farming system, in some places, as described by Shahnnon and Thompson, could remain as a dominant economic activity. While in other places where the commercial agriculture projects emerged and spreading, transforming rural landscape into vast plantation areas. Modernization of rural agriculture sector driven by private entities and/or government link companies with aims at attaining massive production of a purely commercial crop has weakening and marginalizing the already disadvantage rural and traditional smallholders [12].

Despite adversity and gloomy future that they might face, there are some cases of rural communities and smallholders which remain persist and able to sustain their function to serve the community development. To some extent, smallholders have transformed their nature of works and business models by not competing with larger corporations, but to explore niche areas as to maintain viability and survivability of small-scale farming activities including in farming and non-farming projects.

It is quite interesting to learn how smallholders persisted particularly in the context of fast-growing economies such as Malaysia. This paper investigates the factors of smallholders’ persistence and transformation in the rural areas of Malaysia based on a case study of rice farming community in Parit 6 (East) village in the state of Selangor. Based on the fieldwork results, the role of various government agencies related to agriculture development is quite prominent in providing a very much needed support and assistance (financial and non-financial) to smallholder, together with other internal factors including the ability of local farmers to diversify their economic base and source of income by having few jobs in agriculture-related projects as well as involvement in non-farming activities.

MATERIALS AND METHODS

Study Area

This study was conducted in Sabak Bernam District, Selangor state. It is worth mentioned that Selangor is the most advanced state in Malaysia and Sabak Bernam is considered as “the least developed district within the most developed state” with large areas predominantly of agriculture land use and having a high percentage of rural population [8]. According to the Department of Statistics, Sabak Bernam District covered an area of 101,700 hectares and inhabited by 108,893 people in 2015 [5] and located 130km from Kuala Lumpur, the capital city of Malaysia. Ngah et al. [7] in their study on rice farming activities in Sabak Bernam elaborated that the district was fast developed and transformed into a major rice cultivation area and among local communities often considered their district as “the rice bowl for the state of Selangor”.

The rice farming community which identified and selected as case study is Parit 6 (East) village in Sabak Bernam, Selangor state (Fig. 1). A fieldwork and data collection process were conducted in Parit 6 (East) village in July 2017 and a follow up interview on September 2018. Researchers have interviewed the head of the village to better

understand the history of the village and development of socio-economic activities in the village with particular focus on smallholders' issues and achievements.



Fig.1. Location of Parit 6 (East) village, Selangor state, Malaysia.

Source: Kamarudin & Ngah [3].

Parit 6 (East) village is headed by *Tok Sidang* (head of village) Mohd Yasin. Based on latest village report, Kampung Parit 6 (East) is inhabit by 80 families with population of 280 people. The village is divided into four sub-blocks (or sub-clusters) labelled as E9, E10, E11 and E12 (refer to Fig. 2) and micro management for each block is carried out by block leader and they will be reporting to the head of village. There will be between 50 to 52 rice plots for each block and each rice plot come is size 3 acre. In total, the head of village will be responsible to monitor and regulate all activities in all four blocks or approximately 200 rice plots.

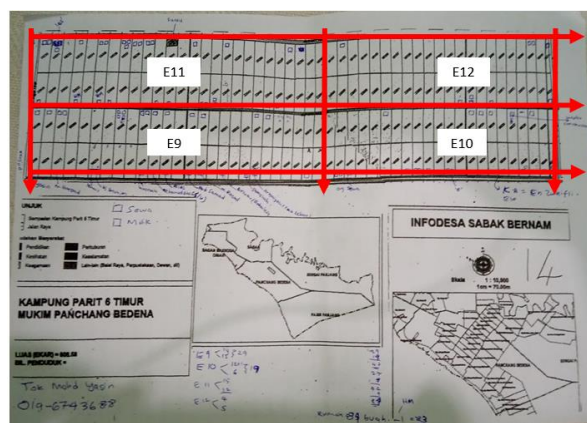


Fig.2. Map showing the four blocks (sub-cluster) of Parit 6 (East) village – labelled as E9, E10, E11 and E12. Each block is led by a block leader.

Source: Research fieldwork [9].

Data Collection and Analysis

This study utilizes qualitative method for data collection and analysis namely; in-depth interview with key informants and field observation. In-depth interviewing is an intensive individual interview process and involves a certain style of social and interpersonal interaction between researcher and respondents [2]. This qualitative research techniques allows for a more detail (in-depth) information and complete picture of situation of smallholders' development and transformation taken place in the study area (site observation) and the underlying factors for their persistence.

Series of random in-depth interviews was conducted with involvement of head of households (HoH) - mainly rice farmers and operators in agriculture-related projects. Researcher refers to the base map initially provided by Tok Sidang and updating the map via field observation (village walkabout) to include the location of each house and public amenities for each sub-block (E9 to E12).

Based on walkabout process, higher concentration of houses located in sub-blocks E9 and E11 because proximity to the main road to Sabak Bernam town centre. In Parit 6 (East) village, a total of 30 smallholders (HoH) were interviewed as respondents and each interview session took about 30 to 45 minutes. As for data analysis, descriptive statistics was used to explain the situations of smallholders in the study area. The qualitative data from field interviews and field observation were integrated into supporting the discussions related to the situations and possible factors which contributed to smallholders' persistence.

RESULTS AND DISCUSSIONS

Profile of Respondents

All respondents (i.e. head of households) interviewed were Malays and consisted of 28 male (93%) and 2 females (7%). As presented in Figure 3, the largest sub-group of respondents is from the age range of 50 to 59 years (43.3%), followed by those of over 60 years (26.4%), and the age range 40 to 49

years at 20%. Younger respondents, aged below 40 years represent 10% of the total respondents. The result indicated a larger percentage of respondents within the age group of 50 years and above with nearly 70% of total respondents.

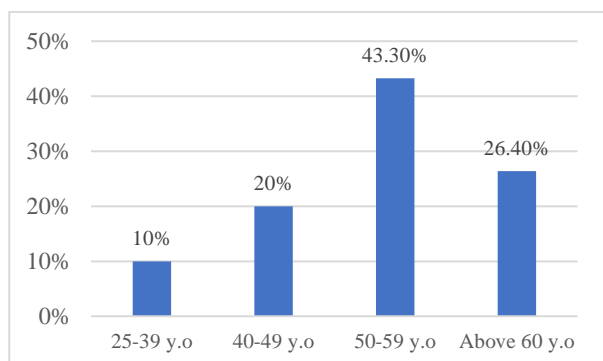


Fig.3. Respondents age categories in Parit 6 (East) village (n=30). Source: Research fieldwork [9].

Survey results regarding respondents' place of birth and/or origin indicated that majority of respondents were born and raised in the village (83.3%), as compared to only 10% who have moved into the village due to marriage and work requirement (Fig. 4). The remaining 6.7% of the respondents were born and raised at the nearby village with close access to the study area.

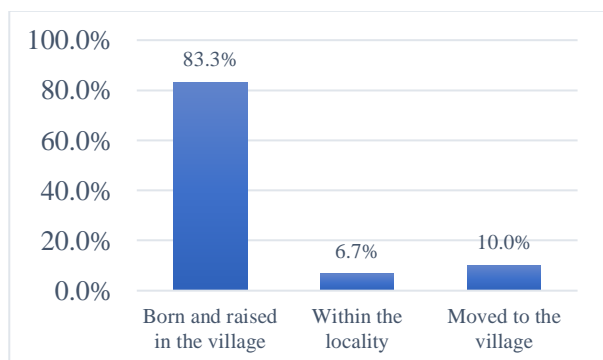


Fig.4. Respondents place of birth (n=30). Source: Research fieldwork [9].

Respondents Occupations

The survey findings (Fig. 5) revealed that there were four main types of jobs in the study area. Approximately 43.3% of the respondents interviewed are involved only in farming activity their main source of income, followed by 26.7% working or having both farming and non-farming activities. There are also two

other types of occupation i.e. "involvement in non-farming job" and "farming and agriculture workers, which shared the same percentage of 6.7%. The remaining 16.6% are currently unemployed or not active working mostly due to health issue and they received financial assistance from their children that working somewhere else [9].

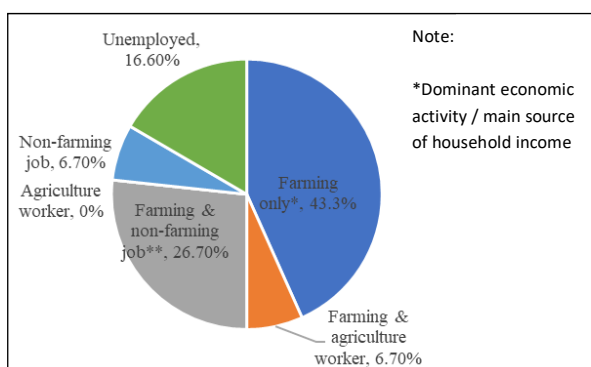


Fig.5. Respondents main occupation (n=30). Source: Research fieldwork [9].

Land Status and Ownership

Analysis of data has indicated that 70.0% of respondents owned equal/similar acreage of agriculture land i.e. of 3.0 to 5.0 acre of rice plot as compared to other members of the community (Table 1). Meanwhile, only 20.0% are owns smaller land acreage when compared to others and the remaining 10.0% of the respondents possess a slightly bigger land acreage in comparison to others. The results can be interpreted as a positive sign that all respondents in Parit 6 (East) village owned an agriculture land which they can work and/or utilise for socioeconomic activities.

Another interesting result is the renting of agriculture land from other people for rice cultivation, which account for 1/3 (or 33.3%) of respondents in the study area. The interview with the head of village also revealed that many local farmers with strong capitals and manpower resources often rented vacant plots from their neighbors, which in most cases, are the elderly farmers with no capability or successor to continue the rice cultivation process. The rental agreement normally covers a long duration between 6 to 10 cultivation periods (or between 3 to 5 years) [9]. Renting out agriculture land is a preferable choice among ageing farmers since

the practice enable them to receive steady annual income from rental regardless the amount of productivity or income generated by its tenant during the agreement period. As for land that legally owned by the respondents, the analysis revealed that majority of respondents (66.7%) owned agriculture land of size between 1.0 to 5.0 acre, while the remaining 33.3% owned more than 5.0 acre of land. A point raised by the head of the village had provided a good reference in clarifying the persistent factor for smallholders in Parit 6 (East) village. In this light, the relation to the previous information i.e. ability to rent agriculture land from others indicated the presence of a group of smallholders that expanding rice cultivation activities into a sizeable land hence will enjoy better income per season because they produce more outputs during rice harvesting season [9].

Table 1. Land status and ownership (n=30)

Matters related to land ownership	Parit 6 (East) village	
	Frequency	Percentage
Bigger land acreage than others	3	10.0%
Equal land acreage with others	21	70.0%
Smaller land acreage than others	6	20.0%
Total	30	100.0%
Having land renting from others	10	33.3%
Land owned under TOL	0	0.0%
Land occupied without legal right	0	0.0%
Land in the process of application for ownership	0	0.0%
Having abandon land	1	3.3
Land as main source of income	29	96.6%
Earning income from land	29	96.6%
Land legally owned		
None	0	0.0%
Less than 1 acre	0	0.0%
1 to 5 acres	20	66.7%
More than 5 acres	10	33.3%
Total	30	100.0%

Source: Research fieldwork [9].

Situations of smallholders and contributing factors to their persistence

Based on the in-depth interview, researchers have identified the first factor which contribute towards smallholders' persistence in Parit 6 (Timur) is pertinent role played by various government agencies to ensure rice farmers will receive proper assistance. This factor had been highlighted in the early section of this paper. As mentioned by Tok Mohd Yasin, these agencies have established strong bond and connection with local

farming communities of Panchang Bedena, Sungai Besar. Among agencies which playing crucial role is Agriculture Department of Sungai Besar. The agency is functioned for monitoring the overall situation of rice cultivation and farming progress, controlling plant diseases, disseminating aids particularly fertilizers and pesticides under government subsidy scheme and introducing new variations of rice seeds.

Another agency is the Integrated Agriculture Development Agency (IADA) which functioned as provider for physical infrastructure to support and foster rice cultivation process in Panchang Bedena. The main infrastructure project is the building of irrigation system and upgrading the system, and organising specific projects related to rice farming communities. The third agency is Drainage and Irrigation Department of Sungai Besar (DID) which functioned to control the canal or irrigation system, conduct monitoring of flood gates and disseminating irrigation schedule to farming communities before new cultivation season begin.

The second factor is related to legality of land ownership. As a result from cross-reference with all block leaders of Parit 6 (East) village, all rice plots were already given an individual land title. Legality of land will allow all smallholders in Parit 6 village to receive systematic assistance from various government agencies as previously mentioned, and enjoyed subsidy schemes for smallholders. Further observation has been carried out to determine the extent to which the legality of land ownership might shape farmers' well-being and contribute towards the third factor i.e. forming wider opportunity for local wealth creation.

Based on interview, there are some characteristics of local people who we considered as "wealthier farmer" in the village particularly those who earn much higher income than the average of households in the village. First characteristic is the wealthier farmers they owned and/or capable to rent bigger number of rice plots. According to respondents, the operating cost for rice cultivation is relatively high. For instance, an

average cost for a plot (3 acre) is approximately RM3,000 for the owner, and the cost will double for those who renting the plot (RM3,000 for rental and RM3,000 for operating cost). On the other hands, the average gross income per plot per season (6 months) could fetch up to RM10,000, or between RM7,000 to RM4,000 of net income per plot per season. Should a person or a family owned/rented more than one plot, for instance, owner of five rice plots, they should have greater capability to develop the plots with rice cultivation, hence generating more income per season.

In some cases, whereby farmers were unable to cultivate their plots, Local Farmers Association (Pertubuhan Peladang Kawasan) and other local cooperation/associations will step in and offer their service to rent these “soon-to-be abandon plots”. In return, the agencies will take some percentages from harvesting to cover wage and other operational costs. This symbiotic relationship between local farmers and agencies is crucial to be maintained for local farmers to address the issue of abandonment of rice plots.

Another characteristic of wealthier farmer is a person with strong capital. Basically, there are three ways a person with strong capital can utilize their financial strength. Firstly, the person himself owned large rice plots and they also a farmer. Having said that, these farmers are capable to invest their money, energy and time in many rice plots. By the end of the season, they will enjoy greater amount of harvest, hence will generate more income per season than those who are farming a smaller number of plots. Secondly, they can rent some of their rice plots to other farmers and keep only few plots for themselves (self-sufficient) and at the same time they also own a company that offer farming services (function similar to farming contractor) to fellow farmers. Their services could include ploughing tractors, harvesting machines, and/or supplying workers.

Thirdly, is through ownership of agriculture land outside the village, particularly a small-scale palm oil plantation. Ownership of palm oil could strengthen farmers' cash flow since

income from plantation (harvesting and selling of palm oil fruits) can be carried out on monthly basis. The fourth factor of smallholders' persistence resulted from the field study is someone with diversification of types of jobs, whereby they shall be able to diversify their source of income. For instance, there are farmers who cultivating their own rice plot (or renting other plots) and at the same time offering farming services to fellow farmers during rice cultivation season. Some of them are also creating extra job and earning stable supplementary income by participating in homestay (agritourism projects) and vegetables farming (planting banana, cucumber and pumpkin) to be supplied to local markets (Fig. 6).

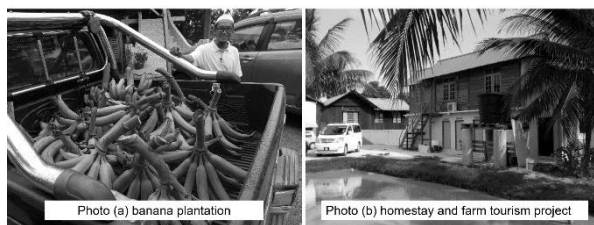


Fig.6. Diversification of source of income has largely contributed towards higher monthly earning among farmers in Parit 6 (East) village. Source: Research fieldwork [9].

On contrary to characteristics of wealthier farmer, for local farmer who living at par or below average income of households in the village, and those with less asset and ownership of rice plot (only one plot, or sharing the plot due to inheritance issue) often be associated with low income and poverty. To sustain their livelihood, some of them make a living by working in their rice plots and at the same time they will engage with local contractor as contract workers for different rice plots. Should they have free time or when work at the rice farm is less, some of them work at local palm oil plantation and/or at construction site. This is because the nature of rice farming that only provide income to farmers after 6 months i.e. after harvesting/selling of rice. Therefore, within that 6 months, many of these “average or poor farmers” utilize their time and energy with various type of jobs. Beside lack of land ownership is a characteristic of poor farmer,

there is another group of household that is currently living at par of below average village income namely the single mothers that not only owned less rice plot but they also worker at rice plots with low wages (because they have to divide time for working and to take care of family).

CONCLUSIONS

From the beginning of this study, author has encountered some difficulties to clarify and define smallholder which across Malaysia, retain the image and perception of small family farms or of small-scale, community-centric village agriculture. Throughout the study of which this paper is a product, smallholder wanted to be addressed as small-scale farming with a vital part to play in rural agricultural sector everywhere across the nation. The rice farming community in Selangor state which selected as the case study in this paper demonstrate that smallholders remain a vital part of agriculture and, even more so, in rejuvenating rural society. Yet beyond this it is also evident that the important role played by many government agencies in assisting the transformation of smallholders in Malaysia in general, and in Parit 6 (East) village in particular. There is no doubt that the government is committed to continue the process of modernizing the agriculture sector, and smallholders.

It is also evident in case of Parit 6 whereby the majority of smallholders remain determined to maintain landholdings, regardless of the challenges they face. Aging farmers might limit some of them from working full-time on the farm. However, there was a great opportunity for farmers to generate income via rental of rice plots, or in other words, they will keep land ownership for future generation rather than sell it to the highest bidders. Smallholders will also benefit from the arrival of enthusiast newcomers that could be along new ideas and innovative approaches in making agriculture sector more profitable and create attractive jobs for youths including in agritourism and small and

medium enterprises, and the government's continuous effort to provide assistance and targeted subsidies.

ACKNOWLEDGMENTS

The author would like to thank Assoc. Prof. Dr. Eric C. Thompson from the National University of Singapore (NUS) for funding this study under research grant titled "Asian Smallholder: Transformation and Persistence" (R-111-E00-147-112). Sincere appreciations to TPr. Dr. Ibrahim Ngah of Universiti Teknologi Malaysia for monitoring and guiding the fieldwork and data collection process in Parit 6 (East) village and for making the publication of this research project possible.

REFERENCES

- [1]Elson, R.E, 1997, *The End of the Peasantry in Southeast Asia: A Social and Economic History of Peasant Livelihood, 1800-1990s*, Palgrave Macmillan, London.
- [2]Johnson, J.M., 2002, In-depth interviewing, in: Gubrium, J.F., Holstein, J.A. (Eds.), *The Sage Handbook of Interview Research*, Sage Publication, London, p. 103-120.
- [3]Kamarudin, K.H., Ngah, I., 2018, *Smallholders Transformation and Persistence in the Fast-Growing Economies of Malaysia*, Association of Asian Studies (AAS) Annual Conference 2018, March 22-25, Washington D.C: Marriot Wardman Park Hotel.
- [4]Lowder, S.K., Jakob, S., Terri, R., 2016, *The Number, Size, and Distribution of Farms, Smallholder Farms, and Family Farms Worldwide*, *World Development*, 2016, 87, 16-29.
- [5]MDSB Sabak Bernam District Council / Sabak Bernam Municipal Council), 2015, *2015/2016 Annual Report*, MDSB Publication, Sabak Bernam (Majlis Daerah Sabak Bernam/ Sabak Bernam Municipal Council), 2015, *Laporan Tahunan 2015/2016*, Penerbitan MDSB, Sabak Bernam).
- [6]Ngah, I., Saad, H., Kamarudin, K.H., 2013, *Socio Economic Transformation of Rice Cultivation Area in Sabak Bernam, Malaysia*, The 4th Rural Research and Planning Group (RRPG) Workshop and Annual Meeting, "Rural Transformation and Institutional Development", 9-10 September 2013, ITB Bandung.
- [7]Ngah, I., Kamarudin, K.H., Thompson, E.C., Rashid, M.F., 2018, *Smallholders Transformation and Persistence in the Fast Growing Economies of Malaysia*. The International Conference Sustainable Rural & Regional Development, December 2018, Magelang City.

[8]PLANMalaysia (Department of Town and Country Planning Malaysia), 2015, Draft Selangor State Structure Plan 2035, (Deraf Rancangan Struktur Negeri Selangor 2035), JPBD Selangor, Shah Alam.

[9]Research Fieldwork in 2017.

[10]Samberg, L.H., James, S.G., Ramankutty, N., Herrero, M., Paul, C.W., 2016, Subnational Distribution of Average Farm Size and Smallholder Contributions to Global Food Production, *Environmental Research Letters*, 11(12):1-12.

[11]Shahnon, A., 2008, *Weltanschauung A Creative Journey* (Weltanschauung Suatu Perjalanan Kreatif), DBP Publications, Kuala Lumpur.

[12]Thompson, E.C., 2007, *Unsettling Absences: Urbanism in Rural Malaysia*, NUS Press, Singapore.