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CHARACTERISTICS, TRENDS AND SPATIAL DISTRIBUTION OF URBAN MIGRATION IN MALAYSIA: A CASE STUDY OF THE KLANG VALLEY REGION

Mohd Fadzil Abdul Rashid

Universiti Teknologi MARA (UiTM) Perak Branch, Seri Iskandar Campus, Malaysia

HIGHLIGHTS

- Migration is an inevitable spatial phenomenon of urban that needs to be absorbed with an adequate planning and supports.
- Migration decision-selectivity or destination choices in urban areas have influenced by the factors of spatial-economic such as affordable housing, new residential development and workplace.
- Demographic and socioeconomic characteristics of urban migrants have been characterized by the young ages, i.e. the 34-44 age group which is when they are already stable in their career and household finances.

ABSTRACT

This paper attempts to discuss the characteristics and spatial distribution of urban migrants in the Klang Valley region, Malaysia. The paper will first provide an overall picture about the urban migration scenarios and its influence on urban development. Then, it is followed by a discussion on the findings from a survey of migration behavioural in the Klang Valley region. The paper has found that most of the migrants in the areas of the Klang Valley came from outside the Klang Valley. They are dominated by a group of the 35-44 in age. Most of them are educated with a good job, have higher income and possess their own house. So, this age group influenced the characteristics of demographic and socioeconomic of the population in the Klang Valley. At the early stage of arrival, the Federal Territory of Kuala Lumpur (FTKL) became the concentration of urban migrants in the region, before they slowly phased out to the neighbouring areas such as the MPKj (the Kajang Municipal Council), MBSA (the Shah Alam City Council) and MPSJ (the Subang JayaMunicipal Council). This paper also illustrates the spatial distribution of urban migration in the Klang Valley based on the seven factors of migration decision-selectivity or destination choices. This paper ends with a discussion on how the urban planners should respond to the migration needs and issues for the betterment of urban development in the future.

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1. INTRODUCTION

Migration behaviour in particular urban to urban migration is one of the most important elements of urban development planning (Mohd Fadzil & Ishak, 2014) in spite of it is recently has been overlooked in the global debate on urbanisation and development (Benea et al. 2016). This is because of migration is a generator (driver) of urban development by creating a high demand for jobs, urban infrastructures and services, new affordable housing and other physical developments. The contribution of urban migrants and migration on urban growth and urbanisation have been proven for a long time (Mohd Fadzil, 2010; Tacoli, 2015; Zhang, 2015). Most of the urban migrants are educated, highly motivated, and having entrepreneurial skills and knowledge (Skeldon, 2002; Mohd Fadzil et al. 2016) have directly or indirectly affected the socio-spatial and economic development of urban as well as connecting communities across borders to create new kinds of global cities (Benea et al. 2016). However, uncontrolled in-migration will also cause crucial problems of urban, e.g. urban poverty, squatters and slums, urban sprawl, congestion, etc. (Mohd Fadzil & Ishak, 2012; Tacoli et al. 2015). The poverty is one of the most critical issues of urban areas as a result of an unprecedented increase in the number of urban population (Abdullah, 2009). In the large countries of China and Indonesia, for instance, migration has contributed for more than 70% of urban growth (Hugo, 2014). This scenario puts the urban sectors in a difficult situation to capture and understand what has been going on and can seriously challenge local authorities' capacity to provide migrants with adequate access to services such as health, housing and education.

This shows that the migration phenomena should be absorbed with an adequate planning and support. It is being a part of a social lifestyle or human mobility for gaining a satisfaction in life (Mohd Fadzil, 2012; Clemens et al. 2014) so that urban planning should take into account of what migrants or urban population need. Urban sectors or policy makers are obligated to understand migration behaviours since data on migrants and migration to cities are very limited (Mohd Fadzil, 2010; Caglar, 2014). It includes understanding where places will become the centres of migration streams, a complex scenario of migration distribution, etc. The information is crucial for the purposes of providing services and manages the cities (Caglar, 2014; Sgobbo & Moccia, 2016). Thus, this paper attempts to provide a short picture about urban migration and to enlighten the empirical findings on how to understand migration behaviours in urban areas. This paper will discover the main contributing factors of migration decision-selectivity and conceptualises migration distribution in urban areas. This is based on migration behavioural survey on a case study of the Klang Valley region.

This paper is organised into five topics, namely introduction, an overview of urban migration, methodology and findings of the study and conclusion.

2. URBAN MIGRATION AND THE CONTRIBUTING FACTORS

Plane and Rogerson (1994) defined migration as a part of spatial mobility or movement. The migration behaviour continues to attract much interest of researchers from multi-disciplines, e.g. demographers, geographers, urban planners, economists, etc. Subsequently, it leads to multi-dimensions of migration studies and findings. At present, there are researches focusing on the important linkages between migration and other phenomena of urban, e.g. urban growth, urbanisation (urban transition), environmental change, climate change, urban poverty, urban healthy, etc. However, rural-to-urban and

urban-to-urban migration are getting more attention as compared to others. This paper attempts to provide some pictures about urban migration in the Malaysia context.

Generally, the trends and characteristics of urban migration are the direct outcome of the levels of urban development faced by cities of the countries. This is because rapid urban development will stimulate economic and physical development that lead to encourage urban migration. Rural-to-urban migration becomes a less important contributor to urban development once the national level of urbanisation is relatively high (Abdullah, 2009). This is also explained by the Demographic Transition Theory which seeks to describe the patterns of demographic change that are influenced by society experiences on economic development (Hugo, 2011). It is shown that, there is a direct relationship between demographic change, migration and urban transition (transforming the level of urbanisation) (Tacoli et al., 2015). This relationship is intimately tied up with a range of interrelated and depends on the level of demographic transition experiences by a county (Hugo, 2011; Tacoli et al. 2015). From that, the level of contribution of urban migration on urban transition can also be understood or estimated (Mohd Fadzil, 2010; Mohd Fadzil & Ishak, 2011).

Malaysia, for example, currently undergoes the later stage of demographic transition. So, Malaysia experiences increasing numbers of urban to urban migration rather than other migrations. Data from censuses in the years 1991, 2000 and 2010 show that the percentage of urban to urban migration has increased about 24.3% from 1991 to 2010. This scenario is expected to be influenced by the factor of imbalanced development among the regions of Malaysia which leads people to move from less developed cities to the most developed. They move to look for a better opportunities and places for living (Hugo, 2011). Most of them are at the young age with high education level and motivation, and high rate of mobilisation (Mohd Fadzil et al. 2016). In the year 2010, the states of Malaysia that received higher migration rates of urban to urban migration are Selangor (33.3%), Kedah (8.8%) and Perak (7.5%). The Federal Territory Kuala Lumpur, Penang, and Johor of among the most developed states in Malaysia are recorded to have a similar higher percentage which is 7.0%. It shows that most of the migrants have concentrated in the most developed states and in the states neighbouring to them. Otherwise, the less developed states such as Pahang, Terengganu, Kelantan, etc. only received a lower percentage of urban to urban migration which is less than 5.0%.

In the literature, there are two types of factors that affect migration streams, namely the decision factor and the destination choice factor (Mohd Fadzil et al. 2014). The migration decision often refers to push and constraint factors. The decision factors as suggested in the old migration models include wage differential, a cost of migration (or distance), a job opportunity, and network factors (see the Ravenstein's basic law of migration in 1885; 1889); and in other migration models such as Lee's model, 1966; Todaro's model, 1969; and Alonso's model, 1973; 1978). Meanwhile, the destination choice often refers to pull or attractive factors such as affordable housing, good infrastructures, jobs and educational opportunities, etc. In the terms of functions and roles in a migration decision-making, both factors have relatively the same importance. But differences in migration study affect the factors that should be given more attention (Mohd Fadzil et al. 2014).

Mohd Fadzil et al. (2014) and Mohd Fadzil (2010) have combined the both factors in one terminology which is called migration decision-selectivity factors. The migration decision-selectivity factors are mainly related to location attributes (or pulls factors) that are offered in destinations of migration. In this case, push factors in origin places have been included directly into pull factors as motivation factors for the purposes of getting better houses, job satisfaction, educational opportunities, etc. Cushing & Poot (2004) called this as the joint decision. There are seven factors of migration decision-selectivity that have been suggested by Mohd Fadzil et al. (2014) and Mohd Fadzil (2010). The relative importance of the factors can be ranked as follows:

1. affordable housing areas;
2. new residential areas;

3. areas with suitable or acceptable cost of living;
4. areas which are near to place of work (i.e. near commercial and industrial areas);
5. areas with good physical and environmental features;
6. areas with good social and community living; and
7. areas with appropriate (adequate) planning (i.e. good housing areas, density).

The findings have shown that migration behaviours in particular urban to urban migration are most relatively influenced by the spatial-economic factors such as to possess affordable housing, search for a new residential, areas with the acceptable cost of living, etc. At this case, the distance from home to a place of work is still relevant to the migration destination choice. This paper will work on this factors for conceptualising spatial migration distribution in the Klang Valley.

From the literature, there are some characteristics or demographic profiles of urban migration that can be summarised as follows:

- women migration to urban centres is increasing in numbers;
- women marriage ages is considerably higher in cities rather than in rural areas and fertility levels are also much lower;
- employment opportunities in urban areas are a key driver of gender selective migration so that not all migrants are poor;
- spatial mobility which is known as circular migration has presently become the most important phenomena of urban in China and some other developing countries including Malaysia. This phenomenon increases the pressure on urban areas to provide housing, schooling, infrastructure, health facilities, etc. for their inhabitants; and
- daily commuting has also become the popular lifestyle of urban people which nowadays involves millions of people moving daily for work and they are employed in the urban informal sector.

These kinds of characteristics of urban migration show that planning and managing cities will be the most important challenges in the next few decades. To facilitate the flow of urban migrants and provide their needs, are the important roles for ensuring the prosperity and sustainability of cities. This paper will provide some new inputs on the characteristics and trends of urban migration based on the migration behavioural survey in the Klang Valley.

3. METHODOLOGY

2.1 Data

Data of this study is obtained from the migration behavioural survey on households in the Klang Valley region. The selection of sampling units was based on Multi-stage cluster sampling technique. On that basis, only three areas were selected namely Shah Alam City Council (MBSA), Subang Jaya Municipal Council (MPSJ) and Kajang Municipal Council (MPKJ). Throughout the areas, about 364 samples of households were administrated by using systematic sampling technique.

The respondents of the survey were sampled from migrant and non-migrant households. They occupy the dwellings where the interviews were conducted. In the survey, a migrant is defined as a person who is residing at a place other than where he/she was born or where he/she has changed as the place of residence for at least six months prior to the survey. The boundary of the migration refers to the changes of areas of the Local Authority (LA).

Questions were directed to the heads of the household. This is because decisions to migrate (or destination choice) are always taken by the heads of households. However when the head of the household was unavailable at the time of the interview, the housewife was interviewed instead. Besides that, the households refer to both family and non-family households and the head of the non-family

household refers to the member of the household being interviewed. In addition, the households are limited to those who are staying in urban residential areas. For instance, household occupants of hotel, hostel, squatters or slum areas and others are excluded in the survey.

Fortunately, about 58.8% of the interviewees are the head of the household. Another 31.6% and 9.6% are housewives and non-family households respectively. Also, it is found that most of the households are considered as migrant households which are 325 (89.3%) and only 39 (10.7%) of non-migrant households.

2.2 Introduction to the Klang Valley Region

Klang Valley is one of the most developed regions in Malaysia. This region consists of five areas: the Federal Territory of Kuala Lumpur (the FT Kuala Lumpur); Gombak, Petaling, Klang and Hulu Langat. The Klang Valley covers an area of approximately 2,832 square kilometres and is located roughly at the central part of the West Coast of the Peninsular Malaysia (**Figure 1**).

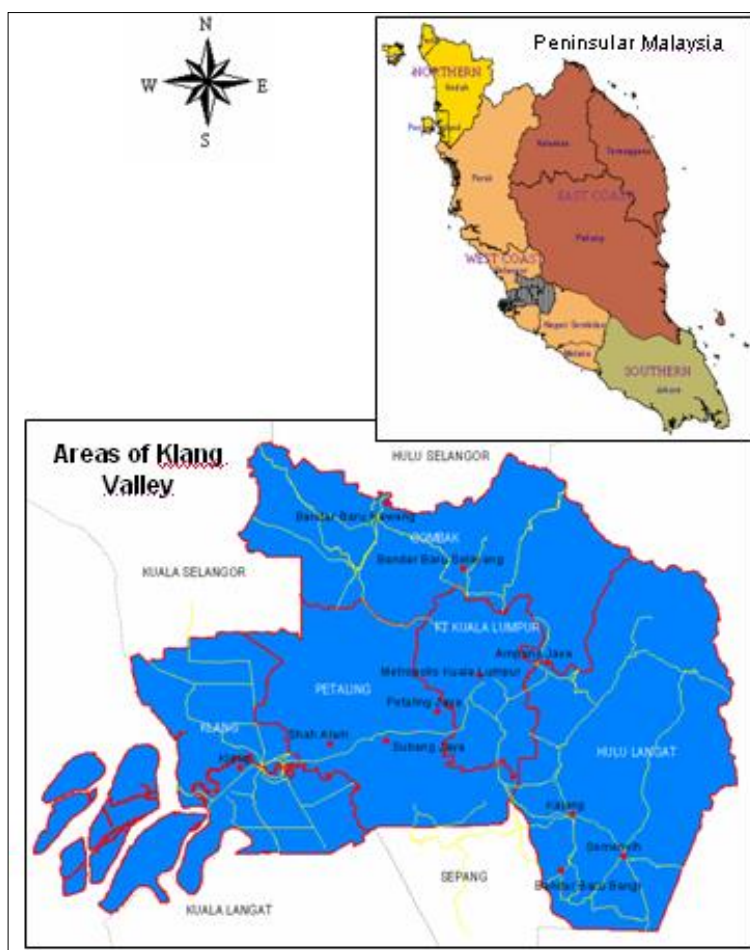


Figure 1: The location map of the Klang Valley and its cities. *Source: Mohd Fadzil et al. 2014*

For the administrative purposes, the region is administered by eight Local Authorities: the Kajang Municipal Council (MPKj), the Ampang Jaya Municipal Council (MPAJ), the Selayang Municipal Council

(MPS), the Shah Alam City (MBSA), the Petaling Jaya City (MBPJ), the Subang Jaya Municipal Council (MPSJ), and the Klang Municipal Council (MPK). As such, many larger cities of Malaysia are located in this region, e.g. Kuala Lumpur Metropolis City, Petaling Jaya City, Klang City, Shah Alam City, Subang Jaya City, etc. In the fact that, this region represents the overall development growth of Malaysia.

4. CHARACTERISTICS OF URBAN MIGRANTS IN THE KLANG VALLEY

4.1 Status of migration

As mentioned above, from the total 364 samples, about 89.3% of the households are migrant households whilst non-migrant households only records 10.7%. By a ratio, the number of migrant and non-migrant households is equal to 8:1. This ratio explains that migration is the most important element contributed to urban population growth in the Klang Valley, and it shows the relevance of migration scenario to be taken into consideration in urban planning decision-making. The average size of household migrants is nearly five which is 4.68.

For this analysis, the migrants are classified into three types of migrations: the migration within the areas of the Klang Valley (17.0%), the migration from outside the Klang Valley (40.4% - the highest), and the migration from outside and within the areas of the Klang Valley (31.9%). All these figures are shown in Table 1.

Table 1: Status and types of migration

Types	Number	%
Migration within the Klang Valley	62	17.0
Migration from outside the Klang Valley	147	40.4
Migration from outside and within the Klang Valley	116	31.9
Sub-total	325	89.3
Not migrating	39	10.7
Total	364	100.0

From Table 1, the migration within the Klang Valley is referred to the changing place of usual residence crossing local planning units (or local authority areas) boundary, and the migration from outside then is referred to migrants who come from areas outside the Klang Valley (i.e. other districts of Selangor or other states).

4.2 Demographic characteristics

Most of the respondents are males (65%) while females constitute 35%. Nevertheless, this information does not mean that male is greater than female in volume as the target respondent is the head of the household. In terms of ethnicity, most of the respondents are Malays (79.4%), followed by Chinese (12.3%), Indians (7.4%) and others (0.9%). In terms of age group, most of the respondents are from 35-44 age group (38.8%). It is found that migration from outside and within the areas of the Klang Valley has a higher percentage. This is followed by the 45-54 age group (25.0%). The migrants from 25-34 age group also have a significant percentage. The age groups of the < 25 years and the > 55 years have a lower percentage in migration. This situation is already expected because of the < 25 years age group, for example, is still at the bottom of the career ladder, fresh graduates, unstable economic position and a limited social network. Meanwhile, the < 55 years age group has already settled down to live in their

places of usual residence and they enjoy with existing social network. Subsequently, this group of people live in places of usual residence for quite a long time. This measurement is based on the time span factor, where this group has been in the working field quite long. In average, the age size of migrants is 41.2 years. All figures are shown in Table 2.

Table 2: Sex, ethnicity and age group

Demographic Characteristics	% Migrants			Total
	MW	MO	MT	
Sex				
Male	11.6	30.1	23.1	65.0
Female	7.4	15.1	12.7	35.0
Total	19.0	45.2	35.7	100.0
Ethnicity				
Malay	14.8	33.3	31.4	79.4
Chinese	2.5	6.2	3.8	12.3
Indian	1.8	4.9	0.6	7.4
Others	0.0	0.9	0.0	0.9
Total	19.0	45.2	35.7	100.0
Age Group				
Less than 25 years old	0.9	3.4	0.0	4.3
25 – 34	3.7	12.3	5.8	21.8
35 – 44	4.3	14.4	20.0	38.8
45 – 54	8.0	9.5	7.4	25.0
55 and above	2.1	5.5	2.5	10.2
Total	19.0	45.2	35.7	100.0
<i>Mean</i>				41.2

Note: MW= migration within the Klang Valley, MO= migration from out of the Klang Valley, MT= migration within and out of the Klang Valley

Table 3: Marital status, educational level and qualification

Demographic Characteristics	% Migrants			Total
	MW	MO	MT	
Marital status				
Married	16.9	38.4	34.2	89.5
Divorced	0.0	0.3	0.9	1.2
Widowed	0.6	0.0	0.0	0.6
Single	1.6	6.5	0.6	8.7
Total	19.0	45.2	35.7	100.0
Educational level				
Primary	0.0	0.9	0.3	1.2
Lower secondary	0.0	2.5	0.3	2.8
Upper secondary	5.5	9.9	6.7	22.2
Pre-university and above	13.6	32.0	28.3	73.8
Total	19.0	45.2	35.7	100.0
Qualification/ certificate				
University degree (B.A, M.A, Ph.D)	8.6	25.9	21.8	56.3
Diploma	5.3	6.2	5.8	17.2
Vocational	0.3	1.8	1.8	4.0
Nil	4.9	11.4	6.2	22.5
Total	19.0	45.2	35.7	100.0

Note: MW= migration within the Klang Valley, MO= migration from outside the Klang Valley, MT= migration from outside and within the areas of the Klang Valley

Having the above three aspects, there are another three aspects of demographic profiles which influence urban planning process being studied in this research. The aspects are marital status, educational levels and qualifications (Table 3). From Table 3, it is found that most of the migrants are married (89.5%). Other categories are in lower percentage. Migrants who are still single would cause an increase of total households. However, the percentage of this group is also small (8.7%). In terms of educational level, most of the respondents (73.8%) receive a university education. From that, 73.5% have qualifications at diploma and degree (some has a doctorate) levels. The percentage of migrants that receive only primary education is very small (1.2%). Migrants who have high levels of education and qualifications mainly come from outside the Klang Valley representing more than 50.0%.

4.3 Socioeconomic characteristics

Socioeconomic characteristics contribute more effects on migration decision-selectivity rather than demographic characteristics. Table 4 shows the characteristics of employment and urban economic activities of migrants in the Klang Valley.

Table 4: Employment and urban economic activities

Socioeconomic Characteristics	% Migrants			Total
	MW	MO	MT	
Type of occupation				
Professional, manager, technical worker	5.3	11.1	11.6	28.0
Administrator	4.0	10.2	8.0	22.2
Salesperson, small or medium scale businessman/businesswoman	3.4	5.3	4.9	13.6
Clerical worker	2.1	4.6	2.5	9.2
Other services	1.8	4.0	3.0	9.0
Production	0.3	1.8	1.6	3.7
Housewives, retiree, student	2.1	8.3	4.0	14.4
Total	19.0	45.2	35.6	100.0
Status of employees				
Private	9.9	19.0	18.8	47.7
Public	4.0	12.3	9.5	25.9
Self-employed	3.4	5.8	3.7	12.9
Others	1.8	8.0	3.7	13.6
Total	19.0	45.2	35.6	100.0
Industrial sectors (urban economic activities)				
Finance, real estate, insurance and business activities	3.7	9.5	6.7	20.0
Education	3.0	7.4	5.5	16.0
Transport, storage, and communication	3.7	3.7	1.8	9.2
Construction	2.5	1.2	3.7	7.4
Public administration and defence	0.6	3.7	2.8	7.1
Others	5.6	19.7	15.2	40.3
Total	19.0	45.2	35.6	100.0

Note: MW= migration within the Klang Valley, MO= migration from outside the Klang Valley, MT= migration from outside and within the areas of the Klang Valley

From Table 4, most of the migrants (28%) are employed as professionals, managers, and technical workers. This is followed by administrators (22.6%), salespersons and small-and-medium scale businessman/businesswoman (13.6%). Other types of employment are a lower percentage, instead, housewives, retired and student record 14.4%. Most of them are private servants (47.7%) and followed by public servants (25.9%). Among them are also self-employed (12.9%), and others (13.6%). Those

who are involved in financial, real estate, insurance and business sectors represent 20%, educational sectors (16%), and others.

Table 5 indicates the level of income of migrants. The average income of migrants is RM4,300 per month. Most of the respondents have incomes of more than RM3,501 per month (45.3%) which is parallel to the types of employment they have involved. In the fact that, the majority of respondents have also higher total household income which is more than RM5001 per month. The group of migrants who have high income is very likely to migrate more often compared with the group of migrants who has low income. This happens because, with high income, they have more opportunities to choose better homes in more suitable places.

Table 5: Level of income of respondent and total household

Socioeconomic Characteristics	% Migrants			Total
	MW	MO	MT	
Respondent income				
Less than RM1000	2.5	8.6	3.7	14.8
RM1000 - RM2500	2.1	7.4	8.3	17.8
RM2501 - RM3500	4.9	11.4	5.8	22.2
RM3501 - RM5000	4.3	9.0	9.9	23.1
RM5001 and above	5.3	9.0	8.0	22.2
Total	19.0	45.4	35.6	100.0
<i>Mean =</i>				<i>RM4,300</i>
Total household income				
Less than RM1500	0.0	3.4	0.3	3.7
RM1500 - RM3000	0.9	4.9	2.1	8.0
RM3001 - RM5000	3.7	7.1	5.8	16.6
RM5001 - RM10000	9.2	23.4	21.3	53.9
RM10001 and above	5.3	6.5	6.2	17.8
Total	19.0	45.4	35.6	100.0
<i>Mean =</i>				<i>RM8,400</i>

Note: MW= migration within the Klang Valley, MO= migration from outside the Klang Valley, MT= migration from outside and within the areas of the Klang Valley

Table 6 shows the status of homes, period of living, and monthly payment for a house. With quite a high total income, it is found that the majority of migrants (74.5%) own their house. However, the percentage of migrants who live in rented houses is quite big that is 23.7%. There is a big possibility that this situation will stimulate migration in the future because people are encouraged by the desire to have their own house. Moreover, a lot of migrants (18.5%) who came from outside the Klang Valley and with have high total household income still rent their houses. They have also rented for quite a long time, for example, some have rented for seven years and longer. However, there is a case that moving houses sometimes does not involve migration because it does not cross the boundary of local authority' areas. In terms of housing payment, the majority of migrants (83.5%) spend more than about RM500 per month. The average monthly housing payment is RM947 per month.

Table 6: Status of occupation and payment for house

Socioeconomic Characteristics	% Migrants			Total
	MW	MO	MT	
Status of occupancy				
Owner	13.9	30.1	30.5	74.5
Tenant	5.3	13.6	4.9	23.7
Others	0.0	1.6	0.3	1.8
Total	19.2	45.2	35.7	100.0

Number of year living in the dwelling				
6 months – 11 months	0.9	3.0	1.6	5.5
1 year – 3 years	3.7	14.8	9.0	27.4
4 years – 6 years	4.3	8.6	15.1	28.0
7 years and more	10.2	18.8	10.2	39.1
Total	19.2	45.2	35.7	100.0
<i>Mean (years) =</i>				6.9
Monthly payment for the house				
Less than RM500	4.0	9.2	3.4	16.6
RM500 – RM1000	9.5	25.2	20.0	54.8
RM1001 – RM1500	3.0	6.7	6.2	16.0
RM1501 – RM2000	2.5	3.7	4.9	11.1
RM2000 and above	0.0	0.3	1.2	1.6
Total	19.2	45.2	35.7	100.0
<i>Mean =</i>				RM947

Note: MW= migration within the Klang Valley, MO= migration from outside the Klang Valley, MT= migration from outside and within the areas of the Klang Valley

Table 7: Place of work and transport

Socioeconomic Characteristics	% Migrants			Total
	MW	MO	MT	
Place of work				
DBKL	5.8	9.5	14.8	30.1
MPKj	3.4	6.5	5.5	15.3
MBSA	3.0	7.7	3.4	14.1
MPSJ	3.4	6.5	4.3	14.1
MBPJ	1.2	3.4	2.8	7.4
Not related	0.9	9.2	3.7	13.9
Others	1.3	2.5	1.3	5.0
Total	19.0	45.2	35.7	100.0
Distance between housing area and the workplace				
Less than 10km	4.0	10.6	5.5	19.3
11 – 20km	5.8	14.3	6.9	24.5
21 – 30km	6.4	9.5	12.9	30.1
31 – 50km	2.1	7.7	6.4	17.7
50km and above	0.7	3.0	4.0	8.4
Total	19.0	45.2	35.7	100.0
<i>Mean =</i>				21.6km
Mode of transport used to go to workplace				
Own vehicle	16.9	35.4	32.6	84.9
Public transport	0.0	0.9	0.0	0.9
Others	0.3	0.6	0.0	0.9
Not related	1.8	8.4	3.1	13.3
Total	19.0	45.2	35.7	100.0

Note: MW= migration within the Klang Valley, MO= migration from outside the Klang Valley, MT= migration from outside and within the areas of the Klang Valley

Table 7 shows the features of the place of work and transportation that are used to go to work. It is found that the most of the migrants work in the DBKL area (30.1%), MPKj (15.3%) and MBSA (14.1%). Because the DBKL, MBPJ and others are out of the areas of the survey, more than 42.5% of migrants work outside their housing areas. This shows that moving house does not necessarily involve the change of place of work. In terms of distance to place of work, most migrants work at places that are not further than 30km from their house (73.9%) and only 8.4% of them work far which is more than 50km away from the house where most of them use their own transport vehicles (84.9%). In this case, the optimum

distance from the house to the workplace is 21.6km which is based on average distance records by migrants.

As important the points for the above findings, there is a slight difference that can be seen especially between features of migrants who come from the Klang Valley and migrants who come from outside the Klang Valley. It is found that migrants who come from outside the Klang Valley are more likely to have a good educational level and occupation, high income and own their own house compared with migrants who come from the Klang Valley. Thus, the process of economic, physical and social development in the Klang Valley will stimulate the migration process specifically potential migrants who come from out of the Klang Valley into the place. This situation indicates the importance of information about migration distribution so that urban planning can be done more effectively to fulfil the needs of townsfolk especially potential migrants.

4.4 Characteristics of migrants at the time of arrival to the Klang Valley

As mentioned above, the highest percentage of migrants come from outside the Klang Valley. The states that contribute to the figure include Perak (16.9%), Johor (11.0%), Kelantan (10.5%) and Melaka (7.6%). Besides that, there are also migrants who come from Selangor but outside the Klang Valley areas such as Kuala Selangor, Sabak Bernam and Banting. Thus, there are some interesting characteristics of the outside migrants to be discussed later. Table 8 shows the characteristics of migrants at the time of arrival in the Klang Valley in terms of year of migration, destination choice and status of moving.

Table 8: Year, destination choice and status of moving

	Percentage
Year of arrival	
The 1970s and before	1.6
1971 - 1980	5.2
1981 - 1990	19.5
1991 - 2000	27.5
2001 till now	18.4
Not applicable	27.7
Total	100.0
First place of destination in Klang Valley	
DBKL	18.4
MBSA	17.0
MPSJ	14.0
MPKj	12.4
MBPJ	6.6
MPS	1.7
MPK	1.1
MPAJ	1.1
Not applicable	27.7
Total	100.0
Dwelling status at the time of arrival	
Rented room/ house	39.6
Own/ family house	20.6
Others (e.g. hostel)	7.7
House/ room provided by employer	3.6
Friend's house	0.8
Not applicable	27.7
Total	100.0

Status of moving at the time of arrival	
Alone	31.9
With wife/husband/children	25.5
With other relatives	12.1
With friends	2.5
Others	0.3
Not applicable	27.7
Total	100.0

From Table 8, the percentage of migrants who move to the Klang Valley increases in the period before 1970 to 1991-2000. The highest percentage is 27.5% which is in 1991-2000. The lowest percentage is 1.6% (before 1970). An obvious increase of 14.3% in the percentage of migration occurs from 1971-1980 to 1981-1990. This increase happens possibly because of urbanisation process in the Klang Valley around the 1980s. The percentage of migrants who move to the Klang Valley has declined from 27.5% in 1991-2000 to 18.4% in 2001 till now. This decline is caused possibly because of a disurbanisation process that brings change to the typology of migration where an increase of migration between the cities in the Klang Valley itself occurs. Censuses data in 2000 and 2010 by the Department of Statistics, Malaysia as presented earlier show that migration between cities happens more frequently than migration from rural to urban areas.

In the early stage of migration, most of the migrants live in the DBKL area (18.4%). This is followed by the MBSA (17.0%), MPSJ (14.0%) and MPKj (12.4%). Other areas in the Klang Valley only receive migration of less than 7.0% (Table 8). Still referring to Table 8, most of the migrants (39.6%) live in rented housing when they arrived in the Klang Valley. This is because, in the beginning of migration, most of them migrate alone (31.9%). The percentage of migrants who migrate with their family is 25.5% and this group lives in their own house or in rented housing. Usually, a migration that involves the whole family is permanent migration or change of the workplace. Since they mostly migrate alone, it is found that most of them are at the age of less than 25 when they arrived in the Klang Valley (41.5%). At this early age, most of them (41.8%) are not married. These two figures are shown in Table 9.

Table 9: Age group and marital status

Demographic Characteristics of Migrants	Percentage
Age group at the time of arrival	
Less than 25 years old	41.5
25 - 34	18.1
35 - 44	8.2
45 - 54	3.8
55 and above	0.5
Not applicable	27.7
Total	100.0
<i>Mean =</i>	<i>27 years old</i>
Marital status at the time of arrival	
Married	30.5
Single	41.8
Divorced	0.0
Widowed	0.0
Not applicable	27.7
Total	100.0

In terms of the status of employment, as referring to Table 10, most of the migrants (40.4%) are employed when they arrive in the Klang Valley. The percentage of migrants who are unemployed is 27.0% (including the percentage for others). Other categories refer to students, housewives and pensioners.

Table 10: Employment and quality of living

Socioeconomic Characteristics of Migrants	Percentage
Employment status at the time of arrival	
Employed	40.4
Self-employed	4.9
Unemployed	2.7
Others	24.3
Not applicable	27.7
Total	100.0
**Period of time in looking for the first job	
Less than 3 months	14.6
4 - 8 months	4.9
9 - 12 months	2.2
1 year and above	1.4
Not applicable	27.7
Total	100.0
Level of economic and social status in the Klang Valley	
Much better	54.7
Worse	6.3
The same	8.5
Don't know	2.7
Not applicable	27.7
Total	100.0

Note: **refers to migrants who are unemployed and others

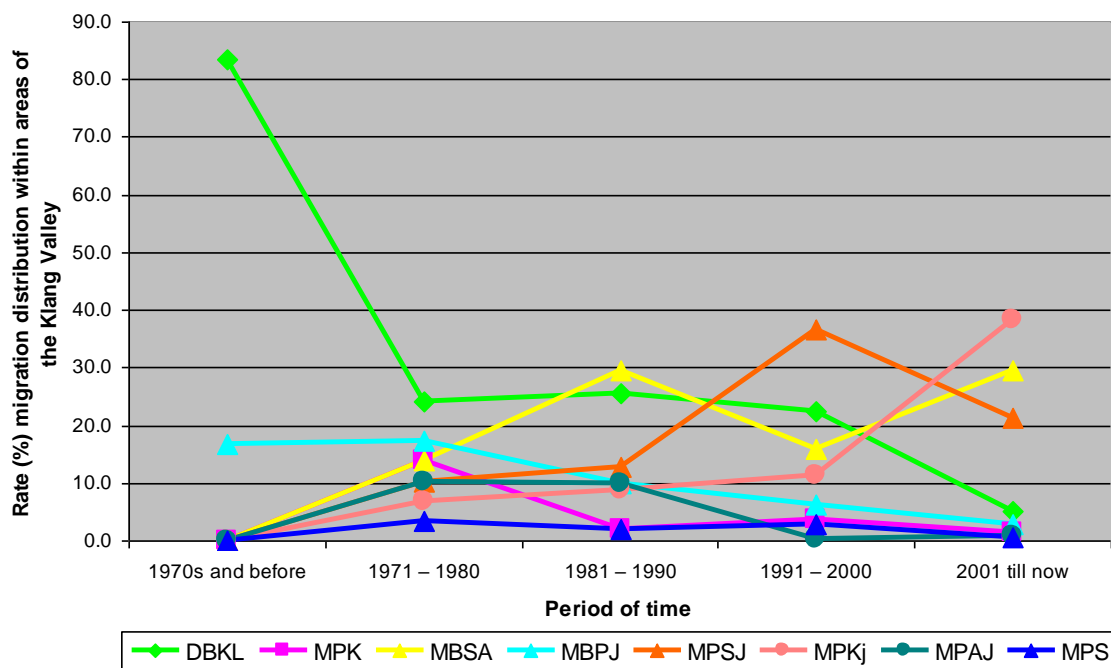
Table 10 also indicates that there is a group of unemployed migrants who took only less than three months to get a job in the Klang Valley (14.6%). From 4 – 12 months is 7.1%. Those who took one year and more constituted only 1.4% which is the lowest percentage. This shows that it is easy for the migrants to find work in the Klang Valley. Thus, most of the migrants are satisfied to live here (54.7%). From the discussions above, it can be seen that there are three important characteristics of migrants' arrival in the Klang Valley: most of the migrants come from the age group of 25 and less which constitute 27 years on average, are unmarried and are unemployed. The age group of 25 and less will lead to population growth through marriage and new births. Hence, there would be demands for new housing areas, urban infrastructure and also urban services. For migrants who are unemployed, the urban sector should provide suitable job opportunities for them. Generally, these scenarios are faced by all cities around the world that are affected by migrations.

4.5 Trends and distribution

The examination is based on the frequency of migrants changing their places of usual residence in the Klang Valley. In this case, 325 migrants have been asked two related questions: (a) frequency of moving (changes of places of usual residence) within areas of the Klang Valley, and (b) the places of destination with a period of moving. The calculation of the frequency of moving is based on five periods of time: the years before 1970, 1971-1980, 1981-1990, 1991-2000 and 2001 till now. The results of the examination can be shown Table 11 (see also Figure 2).

Table 11: The distribution (%) of migration, before 1970 to 2001 till now

Periods of time	%								Total
	DBKL	MPK	MBSA	MBPJ	MPSJ	MPKj	MPAJ	MPS	
The 1970s and before	83.3	0.0	0.0	16.7	0.0	0.0	0.0	0.0	100.0
1971 – 1980	24.1	13.8	13.8	17.2	10.3	6.9	10.3	3.4	100.0
1981 – 1990	25.5	2.0	29.4	9.8	12.7	8.8	9.8	2.0	100.0
1991 – 2000	22.4	3.8	16.0	6.3	36.7	11.4	0.4	3.0	100.0
2001 till now	5.1	1.4	29.6	2.8	21.3	38.4	0.9	0.5	100.0

**Figure 2:** Trends and distribution of migration within areas of the Klang Valley, from the years before 1970 till now

From Figure 2, it is found that DBKL leads with a high rate of migration percentage in the early 1970s and before, and is followed by MBPJ. Other areas in the Klang Valley experience a low rate of migration percentage. From 1971 to 1980, the scenario of migration distribution is nearly the same. But the percentage of migration to the DBKL area declined significantly from 83.3% before 1970 to 24.1% in 1971-1980 (Table 11). At the same period, MBSA, MPK, MPSJ and MPAJ started to receive migration. Apart from that, MBPJ records an increase in the percentage of migration, but only in small rates. In 1981-1990, the rate of migration percentage for MBSA area exceeded the rate of migration percentage for DBKL. Besides that, an increase in the rate of migration percentage for MPSJ occurred, exceeding the rate of migration percentage for MBPJ. At the same period, MPK, MPS, MPAJ and MBPJ experience a decline in the percentage of migration. In 1991-2000, the rate of migration percentage for MPSJ exceeds the rate of migration percentage for the Klang Valley areas with high rate of percentage change that reached 36.7%. Starting 2001 till now, MPKj has led the others in the rate of migration percentage. MPKj has experienced a linear increase in the percentage of migration since 1971-1980 to 2001 till now. DBKL

still receives migration but with a low rate of percentage. This has happened possibly because of reverse migration where a lot of the DBKL population migrate to the outskirts of the city. This would pioneer by a group of people who already have families, have quite stable income and are interested in owning their own house. At the same period, MPSJ has experienced a decline in the rate of migration percentage whereas MBSA has experienced an increase in the rate of migration percentage. Overall, MPKj, MBSA and MPSJ dominate the rate of migration percentage compared with other areas in the Klang Valley. Based on this examination, it can be concluded that MPKj will be one of the centres of migration in the Klang Valley in the future. Thus, it can be concluded that the trend and focused distribution of migration in the Klang Valley will occur in the outskirts of the metropolitan territory of Kuala Lumpur.

4.6 Group dominates migration flows

This analysis attempts to identify which group of the three types of migrants dominate migration in the Klang Valley. For that purpose, several variables are monitored. It includes types of migration, age group, the frequency of moving, the period of occupation, the status of occupation and the total amount of household income.

As mentioned before, the migration in the Klang Valley is dominated by those who came from outside the Klang Valley (see Table 1). This group influences a lot the features of migration in the Klang Valley. From the period of occupancy aspect, 39.1% of this group live for seven years and longer in a place of residence (Table 12). The relationship between types of migration and period of occupancy is significant, that is, P value equals 0.001 (with 1 cell account less than 5). Owing to the long period of occupancy in a place of usual residence, the frequency of moving becomes low. It is found that 25.8% of them only migrate once prior to the survey (Table 13). The relationship between types of migration and frequency of moving within the Klang Valley is also significant that is P value equals 0.000 (with 1 cell account less than 5).

Table 12: Types of migration and period of occupancy

Types of Migration	Period of occupancy				Total
	6 months - 11 months	1 year - 3 years	4 years - 6 years	7 years and above	
Migration within the Klang Valley	3	12	14	33	62
	0.9%	3.7%	4.3%	10.2%	19.1%
Migration from outside the Klang Valley	10	48	28	61	147
	3.1%	14.8%	8.6%	18.8%	45.2%
Migration from outside and within the Klang Valley	5	29	49	33	116
	1.5%	8.9%	15.1%	10.2%	35.7%
Total	18	89	91	127	325
	5.5%	27.4%	28.0%	39.1%	100.0%
<i>P value</i>					<i>0.001</i>

Note: 1 cell (8.3%) has expected count which is less than 5. The minimum expected count is 3.43.

Table 13: Types of migration and frequency of moving within Klang Valley

Types of Migration	Frequency of moving within Klang Valley				Total
	1 time and less	2 times	3 times	4 time and above	
Migration within the Klang Valley	9 2.8%	44 13.5%	6 1.8%	3 0.9%	62 19.1%
Migration from outside the Klang Valley	81 24.9%	37 11.4%	21 6.5%	8 2.5%	147 45.2%
Migration from outside and within the Klang Valley	3 .9%	57 17.5%	42 12.9%	14 4.3%	116 35.7%
Total	93 28.6%	138 42.5%	69 21.2%	25 7.7%	325 100.0%
<i>P value</i>					<i>0.000</i>

Note: 1 cell (8.3%) has expected count which is less than 5. The minimum expected count is 4.77.

To identify which age group from the group that migrates actively and not actively, a Chi-square test between age group and frequency of moving was done. It is found that the relationship between age group and frequency of moving is significant, that is, P value equals 0.002 (with 4 cells account less than 5) (Table 14). Referring to change of place of usual residence for three times and above, the 35-44 age group is the group with the highest percentage (13.2%). The 25-34 and 45-54 age group constitute 6.1% and 7.1% respectively. This result explains that the 35-44 age group migrates more actively compared with the 25-34 and 45-54 age groups.

Table 14: Relationship between age group and frequency of moving

Age groups	Frequency of moving within the Klang Valley				Total
	1 time and less	2 times	3 times	4 times and above	
Less than 25 years old	10 3.1%	2 .6%	1 0.3%	1 0.3%	14 4.3%
25 - 34	27 8.3%	24 7.4%	18 5.5%	2 0.6%	71 21.8%
35 - 44	27 8.3%	56 17.2%	31 9.5%	12 3.7%	126 38.8%
45 - 54	16 4.9%	42 12.9%	16 4.9%	7 2.2%	81 24.9%
55 and above	13 4.0%	14 4.3%	3 0.9%	3 0.9%	33 10.2%
Total	93 28.6%	138 42.5%	69 21.2%	25 7.7%	325 100.0%
<i>P value</i>					<i>0.002</i>

Note: 4 cells (20.0%) have expected count which is less than 5. The minimum expected count is 1.08.

From the status of occupancy aspect (see Table 15), the owners outnumber tenants (74.5% and 23.7% respectively). The majority of the owners (51.7%) have moved two times and less prior to the survey. The result of Chi-square test between the status of occupancy and frequency of moving finds that the relationship between both variables is significant, that is, P value equals 0.014 (with 4 cells accounting less than 5). So, this explains that owners have a low tendency to migrate or change their place of usual residence. However, it is also found that most of the tenants migrate less that is 18.1% of them have

changed places of usual residences two times and less. This situation is not expected because usually, the tenant tends to migrate more often than the owner (Table 15).

Table 15: Relationship between status of occupancy and frequency of moving

Status of occupancy	Frequency of moving within the Klang Valley				Total
	1 time and less	2 times	3 times	4 times and above	
Owner	60 18.5%	108 33.2%	49 15.1%	25 7.7%	242 74.5%
Tenant	30 9.2%	29 8.9%	18 5.5%	0 0.0%	77 23.7%
*Others	3 0.9%	1 0.3%	2 0.6%	0 0.0%	6 1.8%
Total	93 28.6%	138 42.5%	69 21.2%	25 7.7%	325 100.0%
<i>P value</i>					<i>0.014</i>

Note: 1) 4 cells (33.3%) have expected count which is less than 5. The minimum expected count is .46.
2) *Employer’s houses, etc.

Table 16: Status of occupancy and age group

Status of occupancy	Age group					Total
	Less than 25 years old	25 – 34	35 – 44	45 – 54	55 and above	
Owner	3 0.9%	35 10.8%	104 32.0%	69 21.2%	31 9.5%	242 74.5%
Tenant	11 3.4%	33 10.2%	20 6.2%	12 3.7%	1 0.3%	77 23.7%
*Others	0 0.0%	3 0.9%	2 0.6%	0 0.0%	1 0.3%	6 1.8%
Total	14 4.3%	71 21.8%	126 38.8%	81 24.9%	33 10.2%	325 100.0%
<i>P value</i>						<i>0.000</i>

Note: 1) 6 cells (40.0%) have expected count which is less than 5. The minimum expected count is .26.
2) *Employer’s houses, etc.

With reference to Table 16, the situation may be due to the most of the tenants (13.6%) come from the 25-34 age group and less than 25 years. As argument earlier, this group migrates less because they still at the beginning of their careers. So, they focus on career and economic development more compared to other activities such as migrating. In addition (refer to Table 17), it is found that most of the migrants in this age groups (9.4% out of 26.1%) have a lower level of total household income which is RM5,000 and less. The factor of lower income also affects the migratory decision.

Table 17: Age group and total of household income

Age group	Structure of total house income					Total
	Less than RM1500	RM1500 – RM3000	RM3001 – RM5000	RM5001 – RM10000	RM10001 and above	
Less than 25 years old	6 1.8%	0 0.0%	0 0.0%	7 2.2%	1 0.3%	14 4.3%
25 – 34	2 0.6%	8 2.5%	14 4.3%	40 12.3%	7 2.2%	71 21.8%
35 – 44	2 0.6%	4 1.2%	18 5.5%	82 25.2%	20 6.2%	126 38.8%
45 – 54	1 0.3%	6 1.8%	18 5.5%	33 10.2%	23 7.1%	81 24.9%
55 and above	1 0.3%	8 2.5%	4 1.2%	13 4.0%	7 2.2%	33 10.2%
Total	12 3.7%	26 8.0%	54 16.6%	175 53.8%	58 17.8%	325 100.0%
<i>P value</i>						<i>0.000</i>

Note: 9 cells (36.0%) have expected count which is less than 5. The minimum expected count is .52.

Overall, it has shown that the group that dominates the migration flows in the Klang Valley is the 35-44 in age. This age group is believed to influence the demographic and socioeconomic characteristics of urban migrants in the Klang Valley. They have a stable career and financial so that many more opportunities will come across them through migration.

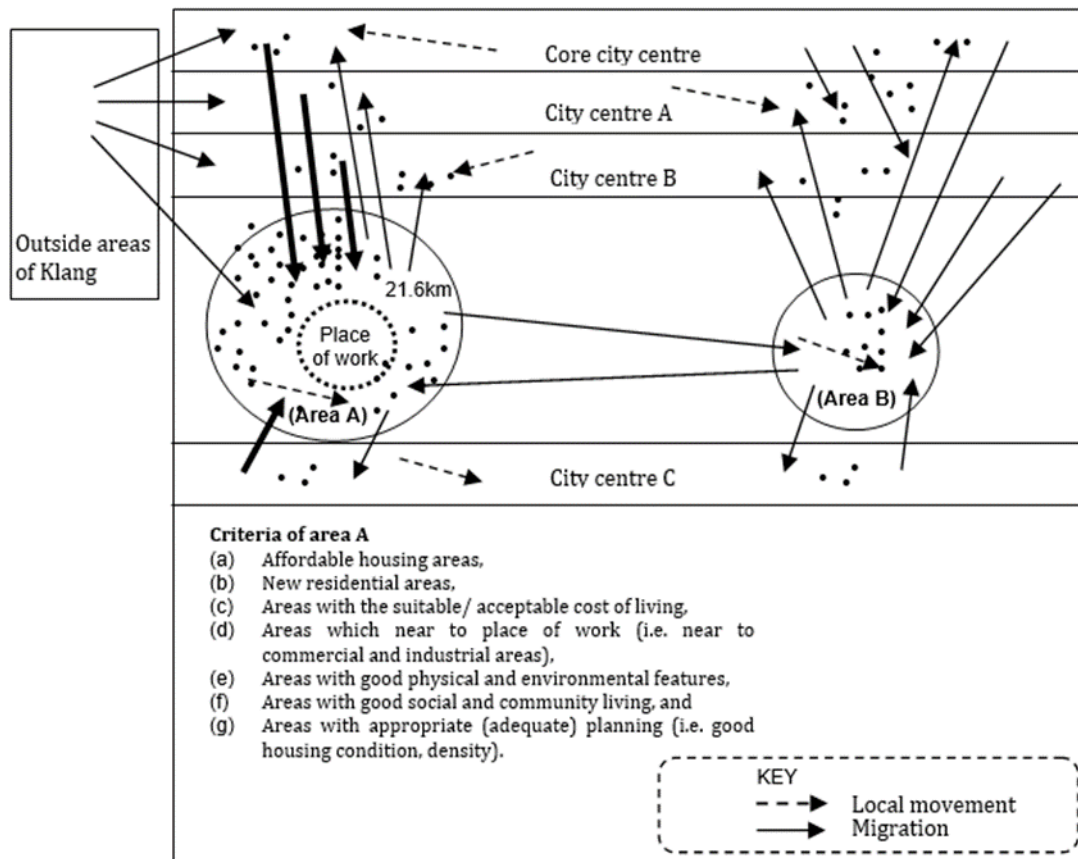
5. CONCLUSIONS

This paper has discussed the results of the migration behavioural survey that is on the characteristics migration distribution in the Klang Valley. It includes the characteristics of urban migrants in demographic and socioeconomic aspects, the characteristics of migrants at the time of arrival in the Klang Valley, and the trends, distribution and the group of dominating the migration distribution. It has shown that the migration is a unique element of urban that is very significant to urban development planning. So, there is a need for policy makers to understand where places in urban areas which will become the centre of migration streams in the future. It includes mapping the distribution of potential migration flows in urban areas, estimating the number of potential migrants in specific areas, understanding a complex scenario or problems which create from migration distribution, and understanding relationships between migration and other urban phenomena. For this purpose, by working on the seven factors of migration decision-selectivity that have been outlined in the literature, and with some information on the present characterisation of trends and distribution of migration, it is possible to conceptualise the spatial distribution of migration in the Klang Valley.

The trends and distribution of migration in the Klang Valley based on the above findings can be summarised as follows:

- the migration trend in the Klang Valley tends to focus on the areas outside the FT Kuala Lumpur (DBKL) area, especially in the surrounding (neighbouring or near) new development areas (i.e. from the DBKL to MPKj); and
- more out-migration flows from big cities to the urban fringe (new areas).

By taking into consideration of the seven factors and the above summarised findings, a conceptualisation of spatial migration distribution in the Klang Valley can be illustrated and shown in **Figure 3**.



Note: Distribution of points represents the distribution of migration flows. More points show more migration flows in a specified area.

Figure 3: Conceptualisation of spatial distribution of migration in the Klang Valley. *Source: Author, 2017*

Figure 3 attempts to show that most people in the Klang Valley migrate to suitable areas for fulfilling their desires and satisfaction in life. Their desire may fulfil when the areas offer the seven factors as mentioned. In this case, area A which has the seven factors will become the centre of migration flow in the future compared to other areas (Area B). It is expected that areas which become the centre of migration are housing areas that are near the place of work (i.e. commercial and industrial areas) in an optimum radius of 21.6km. This range of distance is based on the findings as shown Table 7. The areas are the urban fringes (new urban areas) that are near the core city centre (Kuala Lumpur) and other nearby cities. More migration flows which focus on the areas are expected to come from big cities in the Klang Valley. This expected scenario is shown by dark black arrows in Figure 3.

The spatial distribution of migration as shown in Figure 3 is expected to continue in the next decade and this scenario would provide the policy makers with the best ways to understand the future of migration destination choice in the Klang Valley. Also, this scenario is expected to happen in the other big cities in Malaysia and the other cities of developing countries.

Finally, as respond to the scenario, urban planners, in particular, should take migrants' desires and voices into account when putting forward development agendas at both the national and local levels. As mentioned above, migrants can become a key driver of development when the right development policies and strategies are put in place. This is can be done by incorporating migrants into cities in providing adequate infrastructure and services, and all other aspects of development. More importantly, the development must incorporate an appropriate area-based understanding of potential migration, settlement patterns, and vulnerability factors. These groups, for instance, should be included in relevant national development plans, such as plans for the provision of affordable housing, education and health facilities. They also should not be seen as mere recipients of a burden, but as potential contributors and partners in the development of cities. If appropriately managed, the potential migrants can generate a considerable boost for local economies by steering create jobs and spurring growth. Also, for that purpose, local authorities and other actors must, therefore, harness and optimise the skills, productivity, and experience migrants and bring them to origin communities. All these would be a better way to make cities and all residents inclusive, safe, resilient and sustainable.

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