

Spatial Modelling of Migration Decision-Selectivity in the Klang Valley Region, Malaysia

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ABSTRACT

In the era of global urbanization, migration phenomena—particularly urban-to-urban migration—is one of the key drivers of urban development. This has led to a higher demand for spatial-social and spatial-economic activities, tremendously spurring the changes in demographic, size, and urban socio-economics. However, many researchers agree that this phenomenon is quite difficult to understand, particularly destination choices, due to complexity in migration behavioral factors. Inspired by this, this article attempts to demonstrate the capability of the ‘MGP model’, the so-called ‘migration potential model’—a GIS-based multicriteria decision analysis approach, which incorporates migration decision-selectivity factors—for spatial migration modelling in the Klang Valley, Malaysia. Empirically tested, the MGP model, intended to be an advanced approach in migration analysis, GIS, and MCDA applications that provides urban planners with information about the areas that will be the centers of potential migration, will look at locations and expected levels. Finally, this article concludes with a discussion on the advantages of the MGP model, particularly for urban planning purposes and suggestions for further research.

KEYWORDS

MGP Model, Migration, Migration Decision-Selectivity, Sustainable Development, Urban Planning

INTRODUCTION

The study on human mobility, especially internal migration, is very important according to its relevance to development policy (Obudho, 1994; Willis, 2010; Mohd Fadzil and Ishak, 2011; Mohd Fadzil and Ishak, 2014). This is because migration is one of the key drivers of urban growth and economic developments. In recent years, migration trends and patterns have become increasingly important as a result of urbanization dynamics and socioeconomic changes (Greenwood, 1997; Kloos et al., 2010). Therefore, many developing countries in the world are facing uncontrolled migration streams. In Malaysia, for example, the patterns of urban-urban and urban-rural movement have been relatively popular compared to rural-urban, manifesting in the implementation of regional development policies and strategies, e.g. corridor economic regions, rural transformation policy in the country. The similar scenario happened in Brazil, where there was an increase of migration flow to medium-sized towns

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and heavier rates of return migration (Kloos et al., 2010). As a consequence, migration increases the issues of urban sprawl, reclamation of agricultural land, environmental degradation as well as potentially to bring unmoral or unhealthy lifestyles to the destination's society such as drug addiction, snatch thefts, free sex, obesity, etc. In addition to this, many studies have shown that migration also increases exposure to disease infections, transmissions and spreading (Kloos et al., 2010). These negative impacts are actually added to the strain of a shortage of housing, urban facilities, social services, traffic congestion, jobs or labor market, particularly in urban areas, and therefore, has indicated the importance of migration studies in the development planning context - especially in projecting migration concentration flows as spatially-strategic information to formulate intervention strategies and future urban development policies. In Malaysia, only a few researchers have focused on this and thus made this shortfall unsolved (Mohd Fadzil, 2010).

This inevitable spatial phenomenon is directly influenced by spatial-social and spatial-economic factors (Mohd Fadzil, 2018a; Mohd Fadzil, 2018b) that bring a higher volume of people to cities to pursue great opportunities, social well-being, and satisfaction in life (UNDP, 2009). Moreover, migration is a dynamic behavior, but the available data is quite limited (Plane and Rogerson, 1994; Skeldon, 1998; Caglar, 2014), especially for urban planning purposes. As expressed earlier, this situation leads to difficulties in planning and managing urban growth, especially to fulfil what migrants want and the same time to intervene in what they have created. At this point, urban sectors -particularly planners - are obligated to understand and estimate the migration behavior (or its distribution), even though it is a very complex task (Mohd Fadzil and Ishak, 2011; Plane and Rogerson, 1994; Mohd Fadzil, 2018a).

Dealing with this issue, Mohd Fadzil (2018a) has developed a migration potential model, the so-called MGP model. This model incorporated migration decision-selectivity factors to identify the migration decision-selectivity (destination choices) within cities. Further, it is an alternative approach for generating useful information about migration behavior that relies on urban planning purposes. Hence, this paper attempts to demonstrate the capability of the MGP model for spatial modelling the distribution of migration in the Klang Valley, Malaysia.

DEVELOPMENT AND MIGRATION DECISION-SELECTIVITY

Human mobility, particularly migration behavior, is becoming the cross-cutting issue of development not only in relation to improving access to goods and opportunities but also in terms of pursuing social well-being and satisfaction in life (Mohd Fadzil, 2017; Mohd Fadzil, 2018b; United Nations, 2012). This situation has called the UNDP (2009) to put forward migration as one of the foremost issues in urban development globally. Ergo, no doubt, migration is a part of urban development (Guest, 1994; Mohd Fadzil and Ishak, 2011), where both become a tied component of urbanization, and neither of which should be neglected. As development increases, migration patterns are also expected to shift in this direction but are unlikely to decrease in volume (Skeldon, 2010). All the world seems to be on the move for some reason (Sheller and Urry, 2006). This would include international students, holidaymakers, business people, sports stars, expatriates, members of diasporas, refugees, backpackers, young mobile professionals, and not exclude public people, nationally and globally. This has filled the world with airports, buses, ships, and trains, as well as information and telecommunication technologies to accommodate and facilitate those moving across cities or regions. Subsequently, the areas change tremendously into urbanized stock and a more developed urban infrastructure. IOM (2017) heightened the importance of migration in the era of knowledge and information overload, since it has influenced the roles of policy makers, practitioners, researchers, students and the general public to promote a balanced understanding of migration's dynamics, complexities and its impact on world development. To this extent, migration, especially internal migration, becomes the agent of urbanization and demographic changes as well as societal life (UNDP, 2009; Kuschminder et al., 2018; Mohd Fadzil, 2018b).

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