Spatial Analysis of Rur-Urban Migration; with Emphasis on Distance and Accessibility: Case Study, the County of Mamasani

J. Sajadi
Assistant Professor in Geography and Urban Planning, Shahid Beheshti University, Iran

I. Ebrahimzadeh
Associate Professor in Geography and Urban Planning, Sistan and Baluchestan University, Iran

A. Shamsoddini*
Ph. D Student in Geography and Rural Planning, Islamic Azad University, Science Research Unit, Tehran, Iran

Extended abstract

1- Introduction

Ignoring the villages in the process of development plans, particularly in the developing countries caused considerable differences and socio-economic between rural and urban communities. The poverty and deprivation derived from such situation made the rural residents to migrate to other settlements such as towns and cities in order to improve their own social and economical position. This kind of movements which is due to different motivations satisfies the migrant’s in small towns. The impacts of ignoring the villages in the development plans were the lack of services and opportunities as well as the lack of settlement hierarchies for the better distribution of services which led to immense rural migration. In such cases villages with further distance from the urban centers with unsuitable accessibility find their security both socially and economically in migrating to the towns and cities, where they are being considered as a more deprived residents. However this kind of migration is found in different levels of the country from national to local ones. The individual and family movements of rural residents of Mamasani are an obvious example for this claim. As such 27 out of 35 Mamasani’s villages have had negative population growth rate which ranges between -0/7 to-7/39 percent. Due to the importance and sensitivity of unplanned rural - urban migration and its rate of increase as well as its due depopulation particularly in regard to the young ones, this paper attempts to understand the factors which have been causing the rural –urban migration in Mamasani County. It also tries to focus attention on the role of distance, accessibility and services in such movements.

2- Theoretical Bases

The increase of inequality between rural and urban centers particularly in regard to income, job opportunity, services and etc. in the developing world have been acting as a push and pull factors between these centers and led to immense migration to the urban centers. In fact the lack of facilities for sustainable livelihood in the rural areas not only led to poverty and the increase of socio-economic gaps between these centers but in case of continuity causes the deserted villages. In this case distance as a physical and relative indicator can be considered as basic factors for determination of interaction and movement between these places. As a result the theoretical bases of this research are mainly based on
the gravity and distance decay Models. These models are generally based on the theory that “everything is related to everything else”. The first model is taken from Isaac Newton which throws light on geographer’s understanding of flows and movements between places. It believes that nearby things are more related. So the flow of migration between the cities is directly related to the size of the cities involved and inversely proportional to the distance separating them. These theories for justifying the volume of migration pay attention to distance and accessibility too. Accordingly settlements with more services and less distance in regard to its peripheral centers have more attraction.

3- Discussion
The analysis of data shows that the 52 percent of samples household have mainly migrated due to their social needs such as lack and shortage of welfare and livelihood opportunities in the original villages. The accessibility to job opportunities and income increase were the reason for 39 percent of the samples for migration to Norabad. For the illumination of the role and importance of Norabad in the population changes of the migrant’s origin, the relationship between distance and their population for the years 1375 and 1385 were calculated. The finding shows that those villages with distance under the median have more population and this is vice versa for those higher than median. For the better understanding of the relationship between the populations of original villages with services the centrality index were calculated. Accordingly the median for all the villages was 19 and the range of changes were between 2-103 and from 35 of villages 25 were below the mean and 8 out of 10 villages which were above the mean had a population of more than 1000 person each.

The analysis of data also shows the relationship between the unsuitability of roads with distance and the landforms on which the villages are situated with their out-migration. As such among 27 of villages with negative population growth rate 14 had an unsuitable roads and 15 from the landform point of view were mountainous- plains. on the other hand among 8 of those villages with positive population growth rate 5 had a suitable road, 6 were plain-mountainous and 5 had a distance below the mean.

4- Conclusion
The spatial analysis of the migration causes shows the role of distance and other variables such as services, means of accessibility, mountainous situation and unsuitable roads and the landform of the villages in their out-migration. Accordingly when the mountainous situation and unsuitable roads of migrants origin were added to the high distance from Norabad the result was the decline in services and consequently the increase of migration and under population of the villages. This is vice versa for those with lower distance, better accessibility and plain landform.

5- Suggestions:
The most important suggestions which can be given for the betterment of the study area is summarized as below
*planning for the reduction of spatial inequality between Norabad and the peripheral villages by adapting the regional approach in rural development
* Paying special attention to the role of distance and accessibility in spatial and hierarchical arrangement of rural settlements
*extension and renewing the road networks between urban and rural centers in particulate to those villages further away from the urban centers

Key Words: Village-migration-rural migration-distance-accessibility-services-Mamesani County