An Analysis of the Impact of Population Aging on Rural Development
(Case Study: Jolgah Rokh, Torbat-Heydaryah)

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Extended Abstract
1. Introduction
The aging population is a universal phenomenon that all countries will come with the strength and weakness, and it is a process known as the consequence of "demographic transition" in which fertility and mortality decrease from high to low levels. The phenomenon of population aging in all aspects of human life, including age structures, values, criteria, and creation of community organizations, causes to considerable changes. Hence, dealing with the challenges ahead of it and adopting appropriate policies to improve physical, mental and social states of old persons and also promoting community development are of considerable importance. On the whole, the effects and the role of population aging on social development from multiple socio-economic aspects, such as disability and reduction of economic activity, tendency to isolation in the elderly, fertility reduction and so on can be studied. Now, Jolgah Rokh, a region of the city of Torbat Heydaryah, because of migrating of its youth, faced with increase of aging population. Therefore, in this paper, the issue of immigration, population aging and its effects and role on rural development of Jolgah Rokh, a region of the city of Torbat Heydaryah, were analyzed and it seeks to answer following questions: what are the socio economic consequences of aging population on rural development? And what kind of relationship is there between the aging of population and the level of development of villages of this region?

2. Theoretical Framework
The relationship between population and development seems to be a bilinear relationship, but in fewer cases, the age structure and development have been studied. The age structure affects economic indices and economic development. If the majority of people in a community live in the ages of inactivity, such as childhood or senility, economic pressure increases on active and employed population. In these conditions, the majority of working income, used in consumption expenditure and smaller portion allocated in saving and then in investment and this could have negative effects on economic development that consequently, this issue would create difficulties in promoting other aspects of the development. It can be said that population affects the different aspects of development through parameters and a variety of dimensions that the most important dimensions are as following: economic growth, population and manpower.

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3. Methodology
In this paper, we used the documentary field research methods and the analysis of secondary data. Information and required data obtained from the General Population Statistics and Housing and field survey (completing the questionnaires). In this research due to the large extent area, from the three rural districts, two rural districts named Payyn-Rkh and Myan-Rkh were randomly selected. The study population consisted of 3881 households in 33 villages in the two rural districts. The volume of sample villages was determined as 20 cases according to Sharp formula and correction formula. Also, to determine the sample size, the Kokeron formula was used which it resulted in 350 households and to determine the sample size based on separation of the villages the proportional allocation method was used. In order to determine young and old villages, each village having more than 15 percent of aging population (population having 65 years and over), was introduced as the old village. After determining these two groups, we analyzed the indices associated with socio-economic development of rural community in the form of a questionnaire survey in selected villages and then the consequences of the aging phenomenon on rural development was analyzed. As well as to analyze the questionnaires and to prepare the required maps the SPSS and GIS software were used orderly.

4. Results and Discussions
According to calculations conducted in the studied area, the percentage of older people in the sample villages show that villages named Roud-khanah, Chahar-hadrkht, Ghounchy, Bidestan, Vaset and Mokhtari have an old age structure, and villages named Khorram, Kouhi, Nasar, Ahmedabad Khaza’i, PoustynDvz, Robat - MyanDsht Sar-bala, Qesh- robat, Mahmoud-abad, Asad-abad, Pagdar, Heshmt-abad, Nizamiyah and Noury have a young age structure. Studies showed that there is a significant difference in the average socio-economic indices between young and old villages that represents the different levels of their development. In fact, the role of population aging in old villages appeared as reduction of the development levels. To understand the relationship between population aging and the level of development, the Spearman correlation coefficient was used. Spearman correlation coefficient equal to 852/-0 and significance level of 0.000 that on this basis, it can be said that, at a confidence level of 99%, there is a fairly strong inverse relationship between the aging population and the development of villages. In other words, due to the lack of rural development and the migration of youth, we will see their aging, and on the other hand, the population aging has significant effects on the level of village development.

5. Conclusion
In this paper, after recognizing the economic and social development indices, we considered them in the studied area. Through analyzing the indices, it is determined that in the villages having younger age structure, the development level is higher than villages with old age structure. However, the young villages themselves are at different levels in comparison to each other and some are more developed than others. For example, villages such as Nasar, Qeshrobat, Sar-bala and so on have better conditions than Nizamiyah, Khorram and Kouhi that the most important reason is their young more active population. Also, after studying the immigration status of rural young population, it was clear that the rural youth were forced to do village-to-city migration due to lack of proper facilities that led to aging population and the lack of villages’ development.
Then, after a field survey and analysis of research parameters in the study area, it can be said that economic and social consequences of population aging on development include:

A) Economic consequences such as increase of dependency ratio, decrease of activity, lack of job diversity and so on.

B) Social consequences including low motivation for innovation, low aspirations, low literacy, rigidity, reduction of rural population, disruption of age and sex composition. If the trend of decrease of young population in this area continues, in the near future we will have several haunted villages in the area that this issue itself has negative socio-economic consequences of abandonment, unused rural natural resources, water and arable land, loss of public investment, increase of migration to the cities and severe reduction of rural population, increase of the urban marginalization, unemployment in cities, and so on.

Key words: Aging population, Age composition, Jolgah-rokh region, The city of Torbat-Heydaryah

Reference (In Persian)
Reference (In English)


