

Internal Migration and Urbanization in Iran: Status, Challenges and Policy Guidelines

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Abstract

Over the past three decades, an average of one million people have annually moved within the borders of the country. Migration has taken place chiefly from less developed regions to more advanced areas. This has in turn led to an increase in the population of in-migration regions, and a decrease in the population of out-migration areas. The rate of urban-urban migration has increased significantly, but the reverse has been seen in the rural-rural migration rates over the past few decades. A constant decrease has also been detected in the rates of rural-urban migration. The highest rates of migration have occurred within the 20-34 age range; i.e. the age of activity and employment, education, marriage, and military service, and the sex ratio of migrants (particularly interprovincial migrants) has been higher than the similar figure in the total population. Female migrations have been basically due to tied migration, i.e. following their families. The lowest percentage of women's absorption has been in urban-rural migration while the highest has been in rural-urban migration. In 1956, less than one-third of the population were urban dwellers. While in 2011, over 70% of the national population resided in cities. The most significant factor in the increase of urban population growth, during recent years, has been the natural urban population growth.

Socio-economic disparities, destruction of rural regions, bio-environmental pollution in major cities, peri-urbanism, lack of proper welfare amenities for migrants in the destinations, and vulnerability of those left behind in the rural regions, are among the most important national challenges of migration and urbanization. To control internal migration in the country, so far policies such as moving the population from densely populated regions, controlling the growth of major cities, developing secondary cities, and rural development have been implemented. The policy of developing secondary cities has been a greater success. Among the proposed policy guideline are paying more attention to less developed rural regions (in order to decrease regional disparities), applying proper employment plans in receiving and sending regions, increasing the socio-economic participation of women to reinforce their role in migration, offering the necessary support strategies for providing socio-economic and welfare security for vulnerable people in rural regions (in particular the elderly population) and urban regions (peri-urbanites).

1. Introduction

Migration, as one of the key factors of population dynamism, brings about changes in the structure and dynamism of the population, leading to changes in the social, cultural, and economic conditions in both origin and destination of migrants. Migration can be seen as a form of social adaptation and compatibility mode in response to economic and social needs. Nowadays, movements have become much easier, vaster, and mostly target achieving higher

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welfare, and gaining better facilities, as well as improving living conditions. The increasing number of studies related to migration has been mostly a reaction to the policy-makers and programmers interest in regard to population growth and urbanization.

Over the course of the past century, changes in mortality and fertility in Iran have played a decisive role in population changes. With an improvement in the health conditions and the relative control of mortality, the role of fertility in population growth gained momentum. However, the fertility rates dropped below the replacement level. Under such demographic circumstances it can be argued that internal migrations have been amongst the determining factors impacting population growth in the country at provincial levels as well as smaller areas.

In Iran, like in most other countries, development has been the cause of rural-urban migration. Other factors intensifying the rural-urban trend of migration include the Land Reform Act of the 1960s, the rapid changes in urban society from the early 1970s onward, the Islamic Revolution, the Iran-Iraq war, and the dominant approach to rural development (Vosoughi, 1987; Taleb and Anbari, 2005; Azkia and Ghaffari, 2004; Rostamalizadeh and Ghasemi-Ardehaee, 2012; Jomehpour, 1999). Among the outcomes of internal migration is the extension of urbanization.

Rural-urban migration has brought about a myriad of changes in the conditions of rural and urban areas. The namely out-migration regions, which are mostly small and disadvantaged, have lost much of their skilled labour force due to the absence of proper labour absorption mechanisms. This in turn has gradually led to the desertion and abandonment of rural areas. In addition, the increase of migration has caused irregularities in social and economic conditions and the physical expansion of cities. The rise of poverty, inadequate access to housing and urban services, peri-urbanism, insufficient transportation systems, and inefficient urban amenities are examples of problems caused by migration.

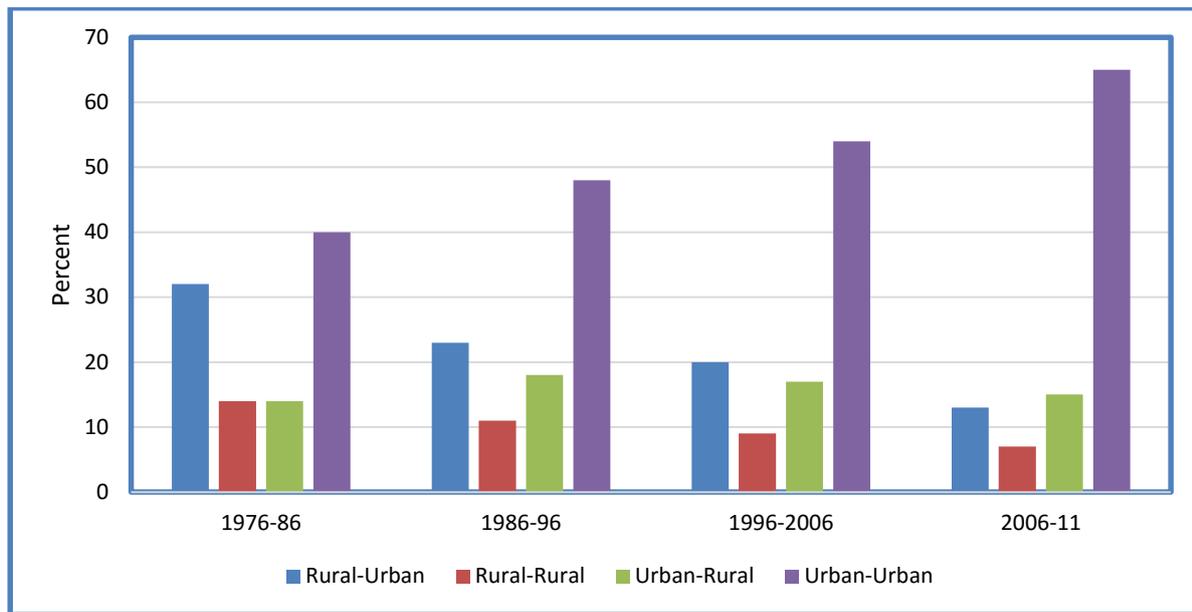
2. Internal Migration and Urbanization Conditions in Iran

2.1 Number of Migrants and Patterns of Migration During 1976-2011

From 1976 and 1986, around 5.7 million of the total population of the country were migrants. During this period, due to the huge influx of Afghan citizens to Iran, the previous residence of the sizeable number of migrants (12.2 %) was reported to be “outside the country”. In 1996, the percent of the country’s migrant population rose to 14.5 and with a following gradual increase, it reached to 17.2 in 2006. The percentage, however, was 7.4 in 2011. A comparison of this five-year figure with that of the 1996-2006 period indicates the percentage has dropped considerably in the last five years.

Figure 1 shows the percentage of internal migrants by the type of migration during 1976-2011. It can be observed that during this period, urban-urban migration has had a rapid increase, but the rural-rural migration has decreased. A noteworthy point here is the regular downtrend of rural-urban migration in the past 35 years. In particular, the percentage of urban-rural migration has been greater than that of rural-urban migration in 2011.

Figure 1: The Relative Distribution of Internal Migrants by the Type of Migration, Iran 1986-2011.



Source: 1986, 1996, 2006 and 2011 Censuses.

2.2. Migration Balance of Provinces

The trend and balance of inter-provincial migration during 1986-2011 indicate that the highest number of migrants have entered Provinces of Tehran (including Alborz), Isfahan, and Khorasan Razavi, and Tehran Province along with Khuzestan and Eastern Azerbaijan have had the highest percentage of out-migrants during the period. Regarding the fact that these percentages are highly influenced by provincial population size, the Provinces of Ilam, Chaharmahal Bakhtiari and Kohkilooyeh and Boyerahmad have had the lowest number of in-migrants, and Provinces of Ilam, Kohkilooyeh and Boyerahmad, and Yazd (all among the low-population Provinces) have had the lowest number of out-migrants.

The Provinces of Tehran and Isfahan have always had the highest positive net migration rates, while the highest negative net migration rates belong to East Azerbaijan, Kermanshah, and Khuzestan. Khuzestan province has had the highest negative net migration (due to war) during 1976-1986. However, in the following decade (1986-1996) this Province has had a positive net migration. The Province of Fars, which enjoyed the second highest positive net migration rate after Tehran Province during 1976-1986, joined the Provinces with higher negative net migration rates in the next three census periods. In contrast, Gilan province, with a negative net migration during 1976-1996, has had a considerable positive net migration in the past two censuses.

Tehran Province which has always had the highest positive net migration, changes to an out-migration Province in 2011 census. Alborz Province, which was separated from Tehran Province during the period between the past two censuses, has now taken the place of Tehran Province in the 2011 migration census. Therefore, the migration status of Tehran Province in the past has been influenced by this now-separated region.

In the 1996-2006 period, the highest annual positive net migration rates were in the Provinces of Tehran, Yazd, and Qom while the highest annual negative net migration rates were reported in the Provinces of Kermanshah, Hamedan, and Ardebil. In the 2006-2011 period, the Provinces of Alborz, Semnan, and Bushehr had the highest positive net migration rates, while the Provinces of Lorestan, Kermanshah, and Chaharmahal and Bakhtiari had the highest negative net migration.

The total migration rate illustrates the fact that in the 1996-2006, and 2006-2011 periods, the Provinces of Alborz, Semnan, Qom, Markazi, and Bushehr were impacted most by inter-provincial migrations and the Provinces of Kerman, Fars, Sistan and Baluchistan, and West Azerbaijan were the least impacted. Between the two periods, there has been a reduction in the impact rate of inter-provincial migrations on provincial populations, and the highest change was reported in the North-western Provinces of the country.

2.3. Migrants' Age and Sex composition

The percent of population in young age groups in the migrant population is higher than that in the total population. In the 2006 census, about 38 percent of the migrant population are in the two age groups of 20-24, and 25-29. The next age groups includes 15-19, and 30-34. These age groups are generally the ages of work and activity, education, marriage, and military service (for males). In the two censuses of 2006 and 2011, in all migrant age groups, the number of men is higher than women. The 2011 census shows that the sex ratio of the total population (101.8) had been lower than that of the total migrant population (110.7), and particularly that of inter-provincial migrant population (124.6). The highest difference is related to the 15-24 followed by 35-69 age groups. These illustrate the prominence of male presence in internal migration.

2.4. Causes of Internal Migration

In the 2011 census (Table 1), 48 percent of migrations have been tied. Then the next most common reasons include work, education, and military service. Excluding "tied migrations" and "miscellaneous factors", the share of "military service", and "access to better housing" lead to a higher percentage for urban-rural migrations than rural-urban ones; however, the share of the remaining factors is higher for migrations to urban regions. For the factors "education and graduation" and "tied migration", female migrants have a higher share compared to men while male migrants have a greater share in other factors.

3. Urbanization

The first census conducted in Iran shows that less than one-third of the population (31.4 %) lived in urban areas. In 1981, urban and rural areas had an equal share of the population, with the urban population continuing to grow larger in the subsequent years. In 2011, over 70% of the country's population resided in urban regions. During the period 1956-2011, the urban population of Iran increased about 9 times.

The annual average growth rate of urban population in the period 1956-1976 stood at about 5 percent, going up about 0.5 percent during 1976-1986. The sharp increase of total population during 1976-1986 led to accelerating the growth rate of the urban (and even rural) populations.

However, the rate had a downward trend after that, falling to 2.1 percent in the 2006-2011 period.

Table 1. The Relative Distribution of Internal Migrants by Reason of Migration, Destination Place, and Sex, Iran 2011.

Sex/ Destination	Reason for migration									Total	Number
	Job	Better Job	Job transfer	Education/ Graduation	Military service	Better Housing	Tied Migration	Other	Not Declared		
Men	11.2	6.5	7.5	13.8	11.0	15.3	26.0	6.5	2.2	100	2908560
Women	1.5	0.8	1.2	14.2	0.0	5.4	68.6	5.9	2.4	100	2626106
Urban	6.6	3.9	5.1	15.4	4.1	10.1	46.0	6.6	2.2	100	4302086
Rural	6.7	3.6	2.4	8.9	11.9	12.3	46.8	5.1	2.4	100	1232580
Total	6.6	3.8	4.5	14.0	5.8	10.6	46.2	6.2	2.3	100	5534666

Source: Iran 2011 Census

The gap between the annual growth rate of urban and rural population is due to a number of factors. Considering the fact that the natural growth rate of population in urban areas is lower, rural-urban migration, transformation of villages into cities, and the inclusion of villages in cities are of crucial importance in this respect. Yet, their influence has not been the same during different periods. In the 1966-1976 period, a sizable number of rural inhabitants headed for cities and the migration continued in the following decade. As a result, up to the 1986 census, the rural-urban migration can be viewed as an influential factor accounting for the increase of urban population and decrease of rural population. With the fall of rural-urban migration, the share of other factors in the urban population growth increases. In the 1996-2006 period, the share of migration in population growth was only 15 percent, while the share of the natural growth of urban population, transformation of villages into cities, and inclusion of villages in cities stood at 58, 23, and 3 percent respectively (Kazemipour, 2012).

Iran's urban population was about 54 million in 2011 which grew by 11%, 46%, and 100% compared to 2006, 1996, and 1986. The highest increase is pertinent to the Provinces of Bushehr, Hormozgan, and Chaharmahal and Bakhtiari; while the lowest is in Sistan and Baluchistan, Lorestan, and Hamadan. 201 cities were registered in the first ever census of Iran, and the number of cities in 1976, 1996, and 2011 were 373, 612, and 1139 respectively. In the 1956-2011 period, the number of cities grew over 5.5 times as much. Of course, the percentage of the growth of urban areas has been different during different censuses, with the least being for the 1986-1996 period, while the highest marking the 1996-2006 period. The annual growth of the number of cities in Iran during 2006-2011 was approximately 2.4 percent. Some 31 percent of Iran's cities in 2006 had a population below 5000; adding to this the number of cities with a population of 5000 to 10000, the percentage of cities with a population below 10000 reaches 55 percent. These figures are 33, and 57, respectively in 2011 (Mahmoudian and Ghasemi-Ardehaee, 2013).

4. Challenges Related to Migration and Urbanization

Studying the conditions of migration and urbanization in Iran indicates a multitude of issues and challenges. The in-migration of developed Provinces and the out-migration of less developed ones clearly shows the economic and societal disparities of regions. The intensity and incessant flow of rural-urban migrations has also made the majority of rural areas prone to absolute destruction. Rural migration has also intensified underdevelopment through vacating the rural areas from the young population; most non-migrants (primarily women, and the elderly) residing in rural areas lack proper and sufficient economic and welfare amenities (Mahmoudian and Ghasemi-Ardehaee, 2013). Unleashed urban sprawl and inappropriate urbanization, particularly in megalopolises has brought about unfavourable repercussions (such as environmental degradation), and migrants (mostly peri-urban dwellers) suffer from lack of proper welfare amenities in the destination.

5. Migration and Urbanization Policies

Generally, the policies which influence the migration and redistribution of population can be dichotomized accordingly: direct policies which are designed openly for the change of the process of migration, and indirect policies with their impact on migration at the second stage and following the basic goals of those policies. Direct policies regulate and systematize the models of residence and replacement. This process comprises establishing barriers in the process of migration to cities, travelling restrictions, and resettlement plans. The general objective of indirect policies is the enhancement of the status quo in the origin or creating different places of migration such as border areas or midway cities. The goal is that through creating more attractive areas, the power of large cities in drawing large populations would be decreased. Examples of indirect policies are providing general welfare services and facilities in rural areas, industrial and administrative decentralization, land reforms, rural development programs, supporting the price of agricultural produce to raise rural revenues, income policies to prevent the rise of urban wages, and extending education and many urban development policies which are implemented with the goal of helping migrants and enhancing living conditions in urban areas which also bear indirect and inadvertent effects on migration (Sanaei, 1996).

5.1. Migration Policies Implemented in the Country

In Iran up to the Islamic Revolution, a direct policy of migration - in general – and a direct rural-urban migration policy – in particular – had not been implemented. Following the Revolution, specific rules and regulations were formulated and enforced for the housing and employment of people in Tehran and large cities. At that time, purchasing a residential unit, authorizing employment, and even matriculating children at school became possible through submitting a special ID card for receiving various basic commodities which was specific to that city or region (Zanjani, 2001: 208). Through this policy, planners were after preventing the precarious expansion of Tehran and a number of the large cities. Since a large portion of these migrants to megalopolises was comprised of rural inhabitants, this policy could be envisaged as the first direct policy enforced in the context of rural-urban migration, in general, and migration from rural areas or other cities to Tehran in particular.

Determining a 120-kilometer zone around Tehran in which heavy and pollutant industries are forbidden did result indirectly in the decrease of the capital's population load, thereby bringing about new industrial townships and strengthening the existing low population cities beyond the zone (ibid). In 1990, Iran Supreme Council of urban Development approved establishing six new cities (Hashtgerd, Parand, Pardis, Andisheh, Eshtehard, and Zavieh) up to 2011, for the redistribution of population in Tehran, and to control migration (Shahabian, 2004:81). An appropriate and regulated distribution of the population in Tehran through housing the surplus population of this megalopolis in the new cities was among the main goals of establishing these cities.

Another indirect policy of rural-urban migration control is the rural development programs. The starting point of these programs can be attributed to the Land Reform Act of 1963. After the Islamic Revolution, rural development plans were performed under the supervision of the Ministry of Agricultural Jihad. Providing insurance for rural inhabitants, optimizing and renovating rural housing, and also providing facilities and loans, are examples of the latest plans for rural development. In mid-2010, the MPs reviewed Article 174 of the Fifth National Development Plan Bill under the title of "Rural Development" and thus obliged the government to formulate policies related to incentives for reverse migration (urban-rural) and relative stabilization of the rural population until the end of the first year of the Plan. Some examples of these supports include improving rural development indices, providing modern services, and producing a program for prioritizing rural services with respect to regional and local circumstances.

5.2. Outcome of the Implemented Policies

The first direct migration policy in Iran was only enforced in a limited time span. At the time, purchasing residential property in Tehran required a specific economic rationing ID card and so migrants to Tehran had to resort to residing in townships and villages on the outskirts of the capital. The result was the growth of those villages and townships –which were technically beyond the specific zone of Tehran and its exclusive restrictions – instead of the rise in the population of the city of Tehran. To this end, within the first five-year period (1976-1981) of the 1976-1986 decade the share of migration in the rise of the population of the city of Tehran, compared to the previous 10 years, increased going from 1.19 in 1976 to 2.24 percent in 1981, however, it acquired a negative trend from 1981 and, for the first time Tehran's population growth fell below its natural growth rate (Zanjani, 1989:26).

This policy resulted in absorbing the migrants of Tehran by the cities around it and the cities enjoyed an excessive population growth. Throughout the 1976-1986 period (when migration policies in Tehran were being implemented), cities such as Rajaeishahr, Mehrshahr, Gharchak, Islamshar, and Robotkarim enjoyed an annual growth rate of 30.3, 30.18, 15.6, and 14.2 percent, respectively. Albeit the goal behind the establishment of these cities was indeed the above, assessments revealed that migrants first entered these cities (townships) and subsequent to their financial betterment and acquaintance with the urban and megalopolis environment, intend to migrate to Tehran.

Establishing new cities, to some extent, helped to direct the migrants to regions other than Tehran. Findings of Zebardast and Jahanshaloo (2007), indicate that half of the families residing in the new city of Hashtgerd are the surplus population of Tehran and Karaj. One of the important reasons of migration to the new city of Hashtgerd is the low price of housing.

Regarding rural development, it must be pointed out that many of such plans have actually contributed to the migration of rural inhabitants. The Land Reform conducted in Iran – an example of rural development plans – expedited the mechanization and commercialization of agriculture and thus created rural workers who would earn daily wages. Major landowners expelled farmers and used daily workers at an extended rate. Thus, for most farmers, migration was the last remaining choice.

5.3. Policy Options

Considering the condition of migration and urbanization in the country, the following policy options can be suggested:

- Diversifying the resources of data on migration through consolidating registration data and the periodical implementation of national surveys, for better and more precise understanding of the causes of migration and migrants' situation.
- Paying further attention to less developed regions to reduce regional disparities.
- Implementing appropriate employment policies both in out-migration areas (in order to reduce out-migration) and in in-migration areas (in order to ensure migrants' further adaptability with the destination).
- Increasing the socioeconomic participation of women to reinforce their informed and creative role in migration.
- Providing the necessary protection guidelines to ensure the socioeconomic and welfare security of vulnerable inhabitants of rural areas (the rural elderly in particular) and of urban areas (peri-urbanites).
- Providing a more precise definition of urban and rural areas in the context of demographic, economic, social, and environmental criteria in order to manifest the more real differences of urban and rural areas.

5.4. Policy Recommendations

The studies conducted on the direct policies of rural-urban migration demonstrate that only a few states including China and Poland have managed somewhat to decrease rural-urban migration through authorizing legal restrictions and residence permit. In other countries such as Congo, Niger, Zaire (now the DRC) etc., these policies failed due to their weakness in enforcement. Difficulty of enforcing legal restrictions, ease of forging documents and the huge rate of fraud in work and residence permits, the easy return of those expelled through active migration network (friends, relatives, fellow citizens, etc.) are some examples of difficulty of controlling rural-urban migration (Wang, 1997; Liang, 2001; Wang and Huen, 1998; Obray, 1991).

Establishing schools in the rural areas of many countries deters the youth from migration because of education, but develops this demand and power among students to seek jobs in

urban areas. Furthermore, building roads increases the contact between rural areas and remote regions, thereby facilitating Migration. A research conducted in India illustrates that initiatives to develop the small-scale cottage industries in the rural areas may augment rural-urban migration, as these industries enhance the skills of rural inhabitants, giving them more acceptance in the urban labour market. Another research conducted in Malaysia too, indicates that regional and rural developments prompt stage-by-stage migration (i.e. from rural areas to small cities and subsequently to regional centers) and thence to hubs in cities (Obray, 1991: 142-143).

In view of the cases mentioned and the policy experiences of Iran during the past decades, the following principles can be taken into consideration for the formulation of rural-urban migration policies:

- Formulating policies for migration must be based on a proficient and efficient management system and expertise. In this regard, it is recommended to establish an institution to take charge of migration whose responsibilities will include collecting data and information, supporting research activities, and policy making on migration.
- Preventing any measure that detracts the principles of individual's free relocation in the process of selecting their habitat. Therefore, the direct policies of rural-urban migration must be flexible, adjustable and variable in accordance with the spatiotemporal context.
- Focusing on the typology, etiology, and eventuality of the outcomes of migration is crucial. Migration may be temporary, or permanent. The reason of migration for some may be finding jobs, education, etc., while for some others it may be simply tied-migration. These various kinds of migration will definitely have different outcomes. It is recommended to formulate different policies for different kinds of migrations with different reasons.
- Coordination, harmony and coverage of the different migration policies is highly recommended. For example, in the early years of the Islamic Revolution, the direct and indirect policies adopted sought to decrease the migration of rural dwellers to cities, while, on the other hand, giving various special benefits and privileges to urban dwellers motivated this kind of migration.
- The trend of population changes in capital cities and megalopolises indicate that although enforcing certain policies may decrease migration, it cannot prevent or stop it. Therefore, in terms of the overall goals of development, policy guidelines must be geared to help migrant families to adjust and adapt themselves to life in megalopolises. Meanwhile, organizing and empowerment of peri-urbanites, in order to achieve sustainable development, must not be overlooked.
- Attending to social and environmental perspectives in development planning is essential. The study conducted by Ghasemi-Ardehaee and Rostamalizadeh (2012), on the "Impact of Rural Housing Loans in Changing Rural Life" depicts that in providing rural housing, mainly the quantitative nature and ideally resilience against natural disasters have been highlighted, and little attention is paid to the principles and criteria of rural housing plan (rural architecture, culture, lifestyle, and means of livelihood),

and its quality. As a result, the policy which was propelled towards rural development may actually lead to rural underdevelopment.

References

- Azkiya, M. and G. Ghaffari, (2004). **Rural Development: Focusing on the Iranian Rural Community** (in Persian), Tehran: Nay Press.
- Ghasemi-Ardehaee, A. and V. Rostamalizadeh, (2012). "Impact of rural housing loans in rural lifestyle changes" (in Persian), **Journal of Rural Environment and Housing**, No.139, pp. 67-84.
- Jomehpour, M. (1999). "A review of economic stance of rural development in the process of planning national development planning" (in Persian), Proceedings of the conference on 50 years of development planning in Iran, Tehran: Allameh Tabatabaee University.
- Kazemipour, S. (2013). "The Trend of changes in urbanization changes and spatial distribution of population in Iran" (in Persian), Proceedings of the National Conference on Population: Quality and Strategies, Tehran: Iranian Department of Civil Registration Organization, 12-13 March, pp. 127-153.
- Liang, Z. (2001) "The age of migration in China", **Population and Development Review**, 27(3): 499-524.
- Mahmoudian, H. and A. Ghasemi-Ardehaee (1992). **Migration and urbanization in Iran**, Research Report, Tehran: University of Tehran and UNFPA (<http://iran.unfpa.org/situation.asp>).
- Obay, A. S. (1991). **Migration, Urbanization, and Development**, Translated (in Persian) by Farhang Ershad, Tehran: Institute of Work and Social Security.
- Rostamalizadeh, Valiollah and Ali Ghasemi-Ardehaee (2012). "Socio-demographic consequences of the imposed war on the society of Iran" (in Persian), **Research Journal of the 4 Holy Defense**, 1(2), pp. 59-79.
- Sanaei, P. (1996). "On the policies and strategies adopted in the development plans of before and after the Islamic Revolution with emphasis on the contemporary policies and strategies of rural-urban migrations in Iran" (in Persian), Unpublished Master's thesis of demography, Faculty of Social Sciences, University of Tehran.
- Shahabian, P. (2004). **Collection of the Adoptions of the Iran Supreme Council of Architecture and Urban Development During 1991-2000** (in Persian), Tehran: Payameh Sima Design and Dissemination Press.
- Statistical Centre of Iran, Detailed Results 1956-2011 Censuses.
- Talab, M. & Anbari, M (2005). **Rural sociology: Aspects Dimensions of Change and Development in Iran's Rural Society** (in Persian), Tehran: University of Tehran Press.
- Vosoughi, M. (1987). **Rural Sociology** (in Persian), Tehran: Keyhan Press.
- Wang, F. (1997) "The breakdown of a great wall: recent changes in household registration system in china", Working Paper, Moderne China-Studien, Universitat zu Koln.
- Wong, L., and W. P. Huen (1998) "Reforming the household registration system in Shanghai and Shenzhen", **International Migration Review**, 32(4): 974-994.
- Zanjani, H. (1989). "Tehran's population and its future" (in Persian), **Journal of Environmental Studies**, Tehran. No.15, pp.23-40.
- Zanjani, H. (2001). **Migration** (in Persian), Tehran: SAMT.
- Zebardast, E. and L. Jahanshahloo, L. (2007). "On the performance of the new city of Hashtgerd in drawing the surplus of the population" (in Persian), **Journal of Geography and Development**, No.10, pp. 5-52.