

**Impact  
Factor  
3.025**

**ISSN 2349-638x**

**Refereed And Indexed Journal**

**AAYUSHI  
INTERNATIONAL  
INTERDISCIPLINARY  
RESEARCH JOURNAL  
(AIIRJ)**

**UGC Approved Monthly Journal**

**VOL-IV**

**ISSUE-VIII**

**Aug.**

**2017**

**Address**

• Vikram Nagar, Boudhi Chouk, Latur.  
• Tq. Latur, Dis. Latur 413512 (MS.)  
• (+91) 9922455749, (+91) 8999250451

**Email**

• aiirjpramod@gmail.com  
• aayushijournal@gmail.com

**Website**

• [www.aiirjournal.com](http://www.aiirjournal.com)

**CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE**

**Spatial Pattern of Male-Female In-Migration to Haryana,  
2001-A District Level Analysis****Harpreet Singh**

Assistant Professor

Department of Geography

National Defence Academy (NDA)

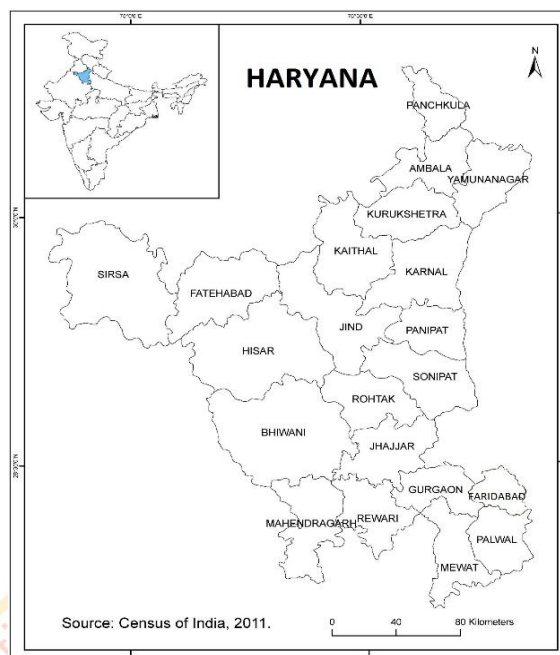
Khadakwasla, Pune-411023(MS)

**Abstract**

Human migration is considered as tool for survival and growth. The history of human migration is as deep-rooted as human evolution. Both male and female migrates from one geographical area to another but for different purposes. In general, male migrates for economic causes while female migrates for social causes. Haryana is one of the fast developing state of India and it attracts both male and female migrants from other states/UTs of India. The spatial spread of both male and female in-migrants varies over the space of Haryana either due to varying level of development or due to varying socio-cultural setups of all the districts. The present paper tries to understand the spatial spread of male and female in-migrants to all the districts of Haryana from other states and UTs of India. For analysis purpose the data from the migration tables of Haryana of census 2001 is used.

**Keywords:** Migration, Male, Female, Haryana, Spatial, District**Introduction:**

Demographically, both the gender (male and female) are the important component of any movement across any political or administrative boundaries. Various available literature on migration reflects that both the gender migrates for different purposes. The most prominent reason of migration for men and women are 'employment' and 'marriage' respectively. Irrespective of the reason behind their movement, both the gender plays an important role in the growth and development of any area. A combination of movement of males and females generates total migration. It is quite important to understand the sex differential of in-migrants from other states/Union Territories of India to Haryana which is marred with highly skewed sex ratio in India. It is observed from various literature that the area having low sex ratio generally attracts more female migrants than male migrants. The latest available census data shows that total 1.07 million males and 1.60 million females were enumerated as in-migrants to Haryana from other states/UTs of India during 2001. Nearly half million female in-migrants were more than the male in-migrants.

**Study area-**

Haryana is one of the 29 states of India. It lies between 27°39' to 30°35' N latitude and between 74°28' and 77°36' E longitude. Haryana is a landlocked state of north India. It is surrounded by the state of Uttar Pradesh in the east, Punjab and Himachal Pradesh in the north and Rajasthan in the west and south.

The state of Haryana was carved out on 1st November 1966 from the former state of East Punjab on a linguistic basis. The total geographical area of the state is 44,212 km<sup>2</sup> which is 1.4% of the geographical area of the country. In terms of its area; it is at 21st position while with 25.35 million population it stands at 18th position. River Yamuna forms its eastern border with the state of Uttar Pradesh. Haryana surrounds the National capital, Delhi from three sides and it has maximum area in National Capital Region (NCR).

**Objectives-**

- To understand the volume of in-migrants to Haryana from other states/UTs of India.
- To understand the spatial distribution of male in-migrants.
- To understand the spatial distribution of female in-migrants.

**Sources of migration data**

Census, Population Registers and Sample Surveys are the three principal sources of information on internal migration in India. To know the internal migration in India, census is the major source of secondary data. In India, census provides data of migrants based on place of birth (POB) and place of last residence (POLR). In the present study the data based on the place of last residence is used to understand the spatial pattern of both male and female in-migrants from other states/UTs of India. Since the latest available data is only for 2001 census hence this paper is entirely based on 2001 census data where migration Tables (D-Series) of Haryana for this census has been analyzed.

**Result and Discussion:****In-migration to Haryana from other states/UTs of India-**

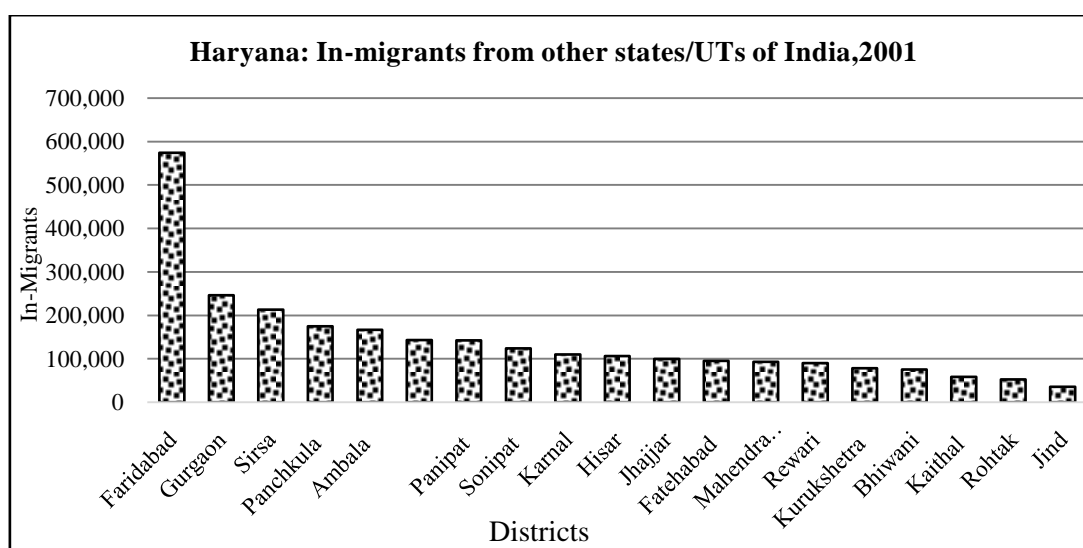
Haryana has made tremendous development in various fields hence it becomes the most preferred destination state for the migrants from other states/UTs of India. As per 2001 census, the total population of Haryana was 16 million and the total enumerated in-migrants from other states and Union Territories of India to Haryana were 2.67 million which constitutes 9.59 percent of the total population of Haryana. Hence, a fairly large proportion of population has been contributed by the in-migrants from other state/UTs of India. There were total 19 districts in Haryana during 2001. All these districts have high variation in term of development which leads to unequal distribution of in-migrants over Haryana. The spatial pattern of in-migrants also shows that it is not evenly distributed in all the districts of Haryana. Hence the spatial pattern of in-migrants varies from district to district. Some of the districts have very high concentration of in-migrants while other has very less concentration.

**Table 1**  
**Haryana: In-migrants from other states/UTs of India, 2001**  
**(Data by districts)**

State/Districts	Person	Percent
Haryana	2675920	100.00
Faridabad	573540	21.43
Gurgaon	245968	9.19
Sirsa	212857	7.95
Panchkula	174541	6.52
Ambala	166770	6.23
Yamunanagar	142787	5.33
Panipat	142396	5.32
Sonapat	123589	4.61
Karnal	110150	4.11
Hisar	106141	3.96
Jhajjar	99926	3.73
Fatehabad	94984	3.54
Mahendragarh	92985	3.47
Rewari	89794	3.35
Kurukshetra	78301	2.92
Bhiwani	75235	2.81
Kaithal	58017	2.16
Rohtak	52337	1.95
Jind	35602	1.33

**Source:** (i) Census of India (2001): Table D 2, Migration Tables of Haryana, data available on CD.



**Fig.1**

As per Table 1, out of total 2.67 million in-migrants more than 50 percent were enumerated in five districts of Haryana namely Faridabad, Gurgaon, Sirsa, Panchkula and Ambala. While the remaining 50 percent in-migrants were enumerated in the remaining fourteen districts of Haryana which shows a very high contrast in the distributional pattern of in-migrants.

Maximum numbers of in-migrants were enumerated in district Faridabad that is 0.57 million which is 21.43 percent of the total in-migrants (Table 1). Faridabad is the most preferred destination district by the in-migrants from other states/UTs of India because of its industrial development. Faridabad is known as the industrial hub of Haryana. Faridabad occupied first position among all the district with maximum numbers of industrial units i.e. 2471 in the year 2000 (Singh and Kaur 2004). Industrial development attracts the people as it provides employment/job opportunities to the people. The second largest number of in-migrants were enumerated in Gurgaon i.e. 0.24 million which is 9.19 percent of the total enumerated in-migrants. Gurgaon is also an industrial district of Haryana. Moreover the close proximity of both these districts to the National Capital, Delhi is also a major reason for more in-migration from other states/UTs of India. The third largest number of in-migrants were enumerated in district Sirsa that is 0.21 million. Sirsa is an agriculturally advanced district of Haryana. Hence it provides employment opportunities in agriculture sector and attracted the migrants from other state/UTs of India. As per Haryana Development report, planning commission, New Delhi 2001, the maximum percentage of agricultural labourers were found in district Sirsa i.e. 23.84 per cent.

The newly formed Panchkula district was at forth position among all the districts and account for 0.17 million in-migrants which were 6.52 percent of the total in-migrants (Table 1). The district is in the close proximity to state's capital, Chandigarh and serving as satellite town to the state's capital which results into more in-migration. The living cost is comparatively cheaper in Panchkula than Chandigarh hence most of the migrants settled in Panchkula.

Yamunanagar (5.33 percent), Panipat (5.32 percent), Sonipat (4.61 percent), Karnal (4.11 percent), Hissar (3.96 percent), Jhajjar (3.73 percent) and Fatehabad (3.54 percent) were in the medium category of districts having in-migration rate more than 3.50 percent from other states and Union Territories of India. Yamunanagar, Panipat, Sonipat and Karnal are the industrial districts where one or the other type of industries are located which attracted the migrants from other states

and Union Territories of India and most of them are located on National Highway no.1 which is again an important reason for in-migration of people. Hissar is an agricultural district hence attracted the migrants. Jhajjar being close to national capital, Delhi and industrially advanced district Gurgaon has fairly good rate of in-migration.

District Mahendergarh (3.47 percent), Rewari (3.35 percent), Kurukshetra (2.92 percent), Bhiwani (2.81 percent), Kaithal (2.16 percent), Rohtak (1.92 percent) and Jind (1.33 percent) were in the lowest percentage of in-migration. These districts formed a continuous belt from Kurukshetra in the north to Mahendergarh in the south. The peripheral location and distance from national as well as state's capital are the main deciding factors for low rate of in-migration.

District Jind was at the bottom position with less than 2 percent in-migrants (Table1). Total 35,602 in-migrants were enumerated in the district. District Jind remained a backward district in terms of development since its inception hence it could not attract more migrants. Jind is the only district having not only even a single large and medium scale industry at the time of state's creation (Singh and Kaur 2004, p150). Moreover district Jind has only 6 thousand hectares land under cultivation which is lowest among all the districts of Haryana (statistical abstract of Haryana 2001-02).

#### **Spatial pattern of Male In-Migrants to Haryana-**

Total 1.07 million males were enumerated as in-migrants to Haryana from other states/UTs of India. Maximum number of male in-migrants were enumerated in district Faridabad i.e. 0.27 million. While the lowest number of in-migrants were enumerated in Mahendergarh district that is 9011 which is less than 1 percent.

It is observed that there is quite high concentration of male in-migrants in few districts of Haryana. Out of total male in-migrants, more than 50 percent were enumerated in five districts namely Faridabad (25.4 percent), Gurgaon (8.24 percent), Panchkula (7.97 percent), Panipat (6.96 percent) and Sirsa (6.22 percent) and if we include Yamunanagar (6.02 percent) and Ambala (5.8 percent) districts then the percentage share reached to more than 65 percent of the total male in-migrants (Map1). This signifies that the major share of the male in-migrants was concentrated in few districts.

District Faridabad was at first position among male in-migrants with 0.27 million in-migrants which is more than 25 percent of the total male in-migrants. Since Faridabad is the most industrialized districts of Haryana hence it provides the employment availability for the males from other states and Union Territories of India also.

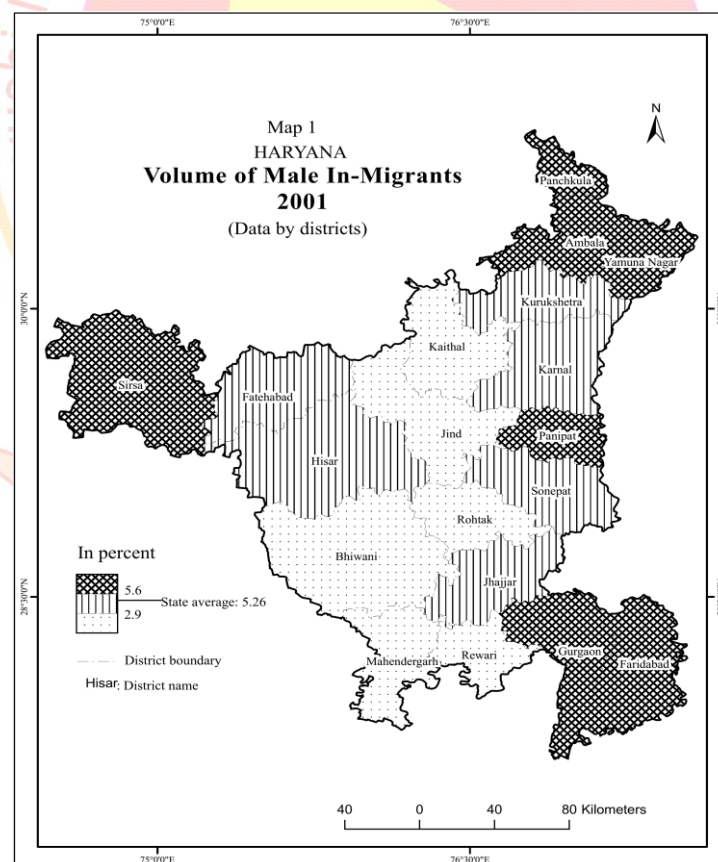
**Table 2**  
**Haryana: Volume of Male In-Migrants, 2001**  
**(Data by districts)**

State/District	Males	Percent
Haryana	1073999	100.00
Faridabad	272786	25.4
Gurgaon	90381	8.42
Panchkula	85629	7.97
Panipat	74753	6.96

Sirsa	66813	6.22
Yamunanagar	64694	6.02
Ambala	62334	5.8
Sonipat	49775	4.63
Hissar	46215	4.3
Jhajjar	45622	4.25
Karnal	44590	4.15
Fatehabad	33370	3.11
Kurukshetra	31545	2.94
Rewari	25189	2.35
Rohtak	21778	2.03
Bhiwani	18383	1.71
Kaithal	17405	1.62
Jind	13726	1.28
Mahendragarh	9011	0.84

Source:

(i) Census of India (2001): Table D 2, Migration Tables of Haryana, data available on CD.



Gurgaon had emerged as one of the most developed district of Haryana. Total 90,381 male in-migrants were enumerated in Gurgaon district during 2001 census (Table 2). Which is nearly 9



percent of the total in-migrants. Both these districts were in top position among the total in-migrants category. As per the statistical abstract of Haryana 2001-02, Gurgaon has the third largest number of registered factories in Haryana i.e. 978 which leads to the male selective migration from other states and Union Territories of India.

Gurgaon has also benefited due its location in the vicinity of National capital, Delhi from where migration of males is quite high. Moreover Gurgaon was at second position in terms of Human Development Index, 2001 (Human Development Report of Haryana, 2005). The newly formed Panchkula district was at third position in term of male in-migration with 85,629 male in-migrants. The nearness of Panchkula to the state capital, Chandigarh contributed to the high in-migration of males. District Panipat was at fourth position with 74,753 male in-migrants which is nearly 7 percent of the total in-migrants. The industrial development in Panipat attracted the male in-migrants from other states and UTs of India. The easy accessibility due to its location on National Highway no.1 and establishment of oil refinery which provides employment opportunities to male migrants results into fairly high number of male in-migrants. Panipat was followed by district Sirsa with 66,813 in-migrants. The main cause for male in-migration from other states and Union Territories of India is its advancement in agricultural sector in which a large segment of migrated male is involved. Sirsa is an agricultural district; it occupies first position in wheat production during 2000-01 by producing 10.15 lakh tones of wheat, which is 10.5 percent of total wheat production (Singh and Kaur, 2004). As per the statistical abstract of Haryana 2001-02, the district has the highest percentage of the gross irrigated area of the state that is 11.3 percent and has the highest number of male engaged as agricultural labourer that is 43,715. Yamunanagar and Ambala were at sixth and seventh position with 64,694 and 62,334 male in-migrants respectively. These two districts have a good industrial base which attracted the male in-migrants from other states and Union Territories of India. As per the statistical abstract of Haryana 2001-02, Yamunanagar has the second largest number of registered working factories in Haryana.

Out of total 19 districts, six districts were in the medium category of male in-migrants. Which included Sonapat (4.63 percent), Hissar (4.3 percent), Jhajjar (4.25 percent), Karnal (4.15 percent), Fatehabad (3.11 percent) and Kurukshetra (2.94 percent) (Map1). The districts which are located in a continuous belt on the eastern side are benefitted being close to National Highway no.1 while the agricultural prosperity of Hissar and Fatehabad contributed to male in-migration.

The districts which are having interior location namely Rewari, Rohtak, Bhiwani, Kaithal, Jind and Mahendragarh were in the lowest category (Map1). The peripheral location, industrial and agricultural backwardness are the reasons for the less male in-migration from other states and Union Territories of India. It is observed from the Human Development Index, 2001 that in term of Gross Domestic Products all these districts are located at the lowest rank with Mahendragarh at the bottom end; hence all these districts are termed as backward districts of Haryana.

### **Spatial pattern of Female In-Migration to Haryana-**

Ravenstein's laws of migration (1985) states that women are more mobile than men over shorter than long distance. Therefore, the number of women migrants, moving over shorter distance is likely to be higher than those of migrants moving over long distance. It is true in case of India, where a significant share of female migration is associated with marriage due to the prevailing cultural system. In the available literature till 1980s, the study of female migration was given very less importance than its counterpart male migrants. Moreover a large number of female migrates

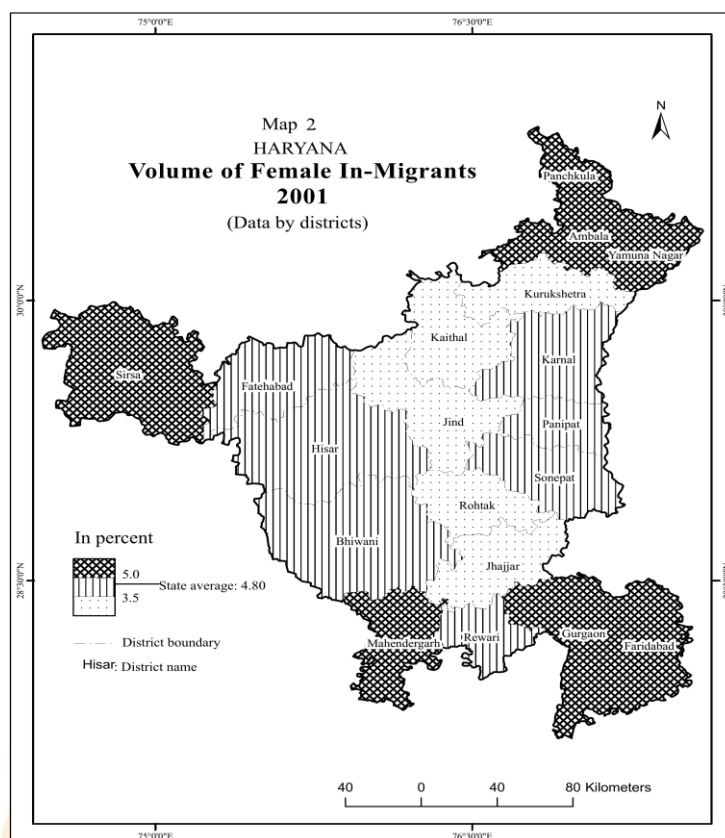


mainly because of marriage hence their contribution to the economy was overlooked by the demographers and the same is evidenced from the literature.

**Table 2****Haryana: Volume of Female In-Migrants, 2001****(Data by districts)**

State/District	Females	Percent
Haryana	<b>1601921</b>	<b>100.00</b>
Faridabad	300754	18.77
Gurgaon	155587	9.71
Sirsa	146044	9.12
Ambala	104436	6.52
Panchkula	88912	5.55
Mahendragarh	83974	5.24
Yamunanagar	78093	5.1
Sonipat	73814	4.61
Panipat	67643	4.22
Karnal	65560	4.09
Rewari	64605	4.03
Fatehabad	61614	3.85
Hissar	59926	3.74
Bhiwani	56852	3.55
Jhajjar	54304	3.39
Kurukshetra	46756	2.92
Kaithal	40612	2.54
Rohtak	30559	1.91
Jind	21876	1.37

**Source:** (i) Census of India (2001): Table D 2, Migration Tables of Haryana, data available on CD.



The lowest sex ratio in Haryana attracts the females from other states/Union Territories of India. It is a general perception that the areas with low sex ratio may pull females, as the demand for brides is higher in those areas. Kaur (2004), for example, examines the phenomenon of long distance marriages to very high male dominating areas.

Around 1.60 million females were enumerated as in-migrants to Haryana during 2001 census. Out of total 19 districts of Haryana, six districts comprises more than 50 percent of the total enumerated female in-migrants namely Faridabad (18.77 percent), Gurgaon (9.71 percent), Sirsa (9.12 percent), Ambala (6.52 percent), Panchkula (5.55 percent) and Mahendergarh (5.24 percent) (Table 2 & Map 2).

The largest number of female in-migrants were enumerated in Faridabad that is 0.30 million which was nearly 19 percent of the total enumerated female in-migrants. It is a well-known fact that district Faridabad is one of the highly developed district of Haryana with a very good industrial base and infrastructure. As mentioned earlier the district has the largest number of registered working factories which attracts the migrants. Gurgaon being one of the integral part of National Capital Region (NCR) has attracted 0.15 million females from other states and union territories of India which was nearly half of the total enumerated females in Faridabad. As per statistical abstract of Haryana 2001-02, Gurgaon has maximum number of females engaged in household industry that is 7916 during 2001. With 0.14 million female in-migration district Sirsa was at third position. District Sirsa was a part of cotton crop producing belt where more female workers were engaged as compared to male.

Ambala and Panchkula were at fourth and fifth position with 0.10 million and 88,912 female in-migration during 2001 census respectively. Ambala being located on National Highway no.1 has easily accessible for female from other states and Union Territories. While Panchkula has the

advantage of nearness to state's capital, Chandigarh. Mahendergarh with 83,974 female in-migrants was at sixth position. More numbers of female in-migration as compare to males can be related to the sex ratio of the district. In term of sex ratio the district ranked first among all the districts of Haryana with 919 female per 1000 males during 2001 census (Statistical abstract of Haryana, 2001). The general sex ratio of the district has increased from 910 in 1991 to 919 in 2001 whereas the Child sex ratio of Mahendergarh has reduced during the same period from 892 to 814. It may be correlated with the fact that the migration of more number of females as compare to males enhanced the general sex ratio during 1991-2001. Yamunanagar with 78,093 female in-migrants was holding seventh position among all the districts of Haryana which was 5.1 percent of the total enumerated female in-migrants.

Out of 12 districts total seven districts were in the medium category of female in-migration. These were Sonapat (4.61 percent), Panipat (4.22 percent), Karnal (4.09 percent), Rewari (4.03 percent), Fatehabad (3.85 percent), Hissar (3.74 percent) and Bhiwani (3.55 percent). Among these seven district Sonipat, Panipat and Karnal are located on National Highway no.1 which connect these districts with other states and union territories of India hence these districts has fairly high percentage of female in-migration.

The remaining five districts were in the lowest category of female in-migration. These were Jhajjar, Kurukshetra, Kaithal, Rohtak and Jind. As observed from the map 2, all these district has central location. The level of development is less in these districts hence they does not provide any opportunities to the outsiders.

### **Conclusion-**

The census data of migration is available upto district level only hence district wise spatial pattern of males and females in-migrants has been analyzed in this paper. It is observed that the spatial pattern of in-migration follows the level of industrial and agriculture development. Because the level of development of any district is one of the deciding factor for employment opportunities to the migrants. The respective location of each district also decides the rate of in-migration. Hence, it is noticed that the districts which are in close proximity to the national and state capital has comparatively more rate of in-migration of both males and females and the districts which has peripheral and interior location has comparatively low rate of in-migration. The high contract of male-female in-migration is observed in district Mahendergarh. Mahendergarh has bottom location among male in-migrants while it is categorized among high rate of female in-migration districts. It is because of the fact that the Mahendergarh is one of the backward district of Haryana hence does not attracts male migrants but because of similar cultural setup with the border districts of Rajasthan it received more number of female as marriage migrants.

### **References-**

- i) Census of India (2001): Haryana census, data available on CD.
- ii) Census of India (2011): Haryana census, data available on CD.
- iii) Chandna R.C. (1996): "Development and Population Growth: The Indian Experience", Population Geography, Vol. 18, Nos. 1 & 2, June-December 1996, pp. 9-26.
- iv) Chandna, R.C. (2006): Geography of Population, Kalyani Publishers, New Delhi, p.253.
- v) Economic survey of Haryana (2014-15): Department of economic and statistical analysis, Haryana yojanabhawan, sector-4, Panchkula, p.3.

- vi) Ganguli, B.N.(1973): "Population and Development", p.54.
- vii) Ghosh, B. (1992): "Migration-Development Linkages: Some Specific Issues and Practical Policy Measures", International Migration, Vol. 30, pp. 423-56.
- viii) Ghosh, J. (2010): "Migration and Gender Empowerment: Emerging Issues", in Rajan S.I.(ed), Governance and Labour Migration, India Migration report 2010, Routledge, New Delhi, pp. 135-163.
- ix) Ghosh, S. (2007): The impact of immigration of West Bengal, 1947-1971, Unpublished Ph. D. Thesis, Centre for Historical Studies, Jawaharlal Nehru University, New Delhi.
- x) Gill, M.S. (1981): "Patterns of Migration in an under developed Tract: Hissar district of Haryana, 1951-71", Geographical Review of India, Vol. 43, No. 2, March, pp. 105 - 121.
- xi) Haryana Development Report (2005): Planning commission, New Delhi, p. 37, 130.
- xii) Haryana Development Report (2009): Planning commission, New Delhi, p. 131-32.
- xiii) Human Development Report (2005): "Human Development Report of Haryana", pp.40-44, and 57.
- xiv) Kaur, Ravinder. 2004. "Across-Region Marriages: Poverty, Female Migration and the Sex Ratio." Economic and Political Weekly 39 (25):pp. 2595-2603.
- xv) Ravenstein, E.G. (1885): "The Laws of Migration", Journal of the Royal Statistical Society, Vol. 48, pp. 167-227.
- xvi) Ravenstein, E.G. (1889): "The Laws of Migration", Journal of the Royal Statistical Society, Vol. 52, pp. 214.
- xvii) Singh M. and Kaur H. (2004): "Economic Development of Haryana-An Era of Prosperity", Deep & Deep Publication, New Delhi, pp. 105,143,145-150.
- xviii) Statistical Abstract of Haryana (2001-02): "State statistical abstract of Haryana" Department of Economic and statistical analysis, Haryana, pp. 42, 59, 64-65,149-150, 282, 385.

