

A Study to Assess Pattern of Migration across India Based on Census Data

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Research Article

Abstract: Introduction: Migration is an important demographic event and needs to be studied by Public Health Experts. As migration is a facet of population growth & development assessing patterns helps understand the dynamics of society. In this study, the pattern of interstate & international migration in different zones is compared and various socioeconomic factors influencing migration are assessed along with their reasons for migration. **Materials and Methods:** The study is based on the secondary data of 1991, 2001 Census of India. Zone wise comparison was studied for patterns & reasons for migration among interstate & international migrant (based on last place of residence, for all duration). The official census data was analyzed using SPSS version 17. **Results:** The study findings show that, North Zone of India has highest interstate migrants, amounting to 11 % of the total population as per Census 2001 data. The work & business have been found as main causes for interstate migration in Western zone while education as the major cause for interstate migration in southern zone of India, excluding marriage and other reasons for migration. Looking at data from 1971 to 2001, there is significant correlation (Pearson Correlation 0.752) between Gross National Income per capita and Internal Migration ($P < 0.01$). On Further analysis of Census 2001 data it was noted that there is significant correlation (Pearson Correlation 0.388) between literacy rate of states receiving in-migrants and education as a reason for migration ($P < 0.05$) among interstate migrants. Similarly 'work' as the reason for migration among International migrants was observed to be more in states with higher GDP (Pearson's Correlation 0.411) **Conclusion:** Higher the literacy rates, GDP, urbanization, all favors migration. More research is required to know the educational levels of migrants who mention education as reason for migration.

Keywords: Census, Migration, Demography, India.

Introduction

Migration is a process involving movement of people in a pre defined boundaries. The UN multilingual dictionary defines "Migration" as a form of spatial mobility between one geographical unit and another, involving a permanent change of residence".⁽¹⁾ It is an important facet of population growth and equally important for development in any country or region. By assessing migration patterns across India, helps understand the dynamics of society at large. Census of India provides information on migration region wise along with its reasons for migration. Migration patterns have been captured in census since 1872. However the reasons for migration were first

introduced in Census in India 1981. But in census 1991, "Business" as a reason for migration was added and in 2001 census "natural calamities "as reason of migration was dropped off and replaced by" moved after birth". With improved education and rapidly changing Indian economy, transportation with communication facilities, along with changing workforce has accelerated mobility across India. According to census 2001, there were 309 million migrants on place of last residence and accounts for about 30% of the total population of India.⁽²⁾

AIM

The main aim of this study is to assess the pattern of interstate and international migration (based on last place of residence, for all duration) zone wise in India along with its reasons for migration and to assess push and pull factors influencing migration.

OBJECTIVES

- To compare interstate & international migration among regional zones of India along with its reasons for migrations.
- To identify if any association between interstate & international migration with various socio demographic parameters like GNI per capita, literacy rate, population density and urbanization.
- To find relationship between interstate migrants coming to Mumbai with urbanization, population density & literacy rates of their respective states.

Materials & Methods

The present study was a descriptive, retrospective, study based on secondary data of Census of India. At the time of the study Census data on Migration of the year 2011 was not available, hence last two decade census data of 2001, 1991 was analyzed. Zone wise comparison of patterns & reasons for migration was studied based among interstate & international migrants. As per the States Reorganization Act, 1956, Indian states can be classified into 6 zones as –1. **Northern Zone** (Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, Delhi & Chandigarh)

2. **North-Eastern zone** (Assam, Arunachal Pradesh, Manipur, Tripura, Mizoram, Meghalaya & Nagaland),

3. **Central Zone** (Chhattisgarh, Uttarakhand, Uttar Pradesh and Madhya Pradesh),

4. **Eastern Zone** (Bihar, Jharkhand, Orissa, Sikkim and West Bengal)

5. **Western Zone** (Goa, Gujarat, Maharashtra and the Union Territories of Daman & Diu and Dadra & Nagar Haveli)

6. **Southern Zone** (Andhra Pradesh, Andaman Nicobar, Lakshadweep, Karnataka, Kerala, Tamil Nadu and the Union Territory of Pondicherry).

Migration patterns and their reasons for migration among interstate & international migration (of all duration, based on last place of residence) were correlated with socioeconomically factors like GNI per capita, literacy rate, population density and urbanization. For our study ‘Work’ and ‘Business’ as a reason for migration as classified in Census were clubbed together as they both suggest economical opportunities as the base for their migration. Further, we merged ‘Moved with household’ & ‘Moved since birth’ along with ‘Other’ categories as segregated in census data as one category as ‘Other’ for convenience. To identify various factors influencing migration in Mumbai, we analyzed relationship between population density, literacy rate and urbanization of the different states from where the migrants came from to Mumbai based on census data 1991.

Results

Zone wise Classification of Inter State Migrants in India as per census 2001

As per Census 2001, there were about 411,66,265 total interstate migrants (of all duration, & last place of residence). In this study, they were classified into six zones of India such as, northern, north eastern, central, western, eastern, southern zones. The northern zone had the maximum number of inter state migrants amounting to 31% of the total interstate migrants & 11.3% of the total population in the northern zone of India based on Census data of 2001. Reasons for migration were also analyzed zone wise. It was noted that “ education” as the reason for

migration was found in those migrating to Southern zones of India, where as “ work & business” as the reason was noted in most of those migrating to western zones of India.

Zone wise Classification of International Migrants in India as per census 2001

The total international migrants (in- migrants) as per census 2001 are 51,55,424. Out of this eastern zone of India had maximum international in migrants, accounting to 56% of the total international migrants. And the reasons for migration were similar to interstate migrants showing ‘education’ as reason for migration common among those migrating to Southern parts of India excluding marriage & other reasons for migrations. While “Work & business” as a reason for migration was common among those migrating to western zone of India suggesting more work & business opportunities in western parts of India other than marriage & other reasons for migrations.

Broad Patterns of Census 1971 To 2001

Looking at the broad patterns of Internal Migrants, it is seen that in 1971 internal migration was about 159.6 million and in 2001 it increased to 309.3 million. However unlike the internal migration International migration has decreased from 8.1 million in 1971 to 5.1 million in 2001 census. These broad patterns were correlated with population density, urbanization & GNI per capita⁽³⁾. There was a significant correlation between GNI per capita & total Internal Migrants with Pearson’s correlation 0.980 and p = 0.020.

Migration in Mumbai Based on Census 1991 Census Data

Fifteen states with more than 10,000 migrants coming to Mumbai in the census 1991 were taken into account in this study. Relationship between population density, literacy rate, urbanization and Interstate migrants in Mumbai from different states of India was assessed. Correlation of population density, literacy rate, Percentage of Urban population with total migrants (percentage of population) along with work & education as the reason for migration was assessed. (See table 1 and 2)

Table 1: Inter state Migrants in Mumbai from Different States* of India As per Census 1991.

State	Total Population	Population density	Literacy Rate	% urban population	Total migrants	‘Work ‘ as reason for Migration	‘Education’ as reason for Migration
Uttar Pradesh	139112000	548	40.71	19.84	795144	386584	27400
Gujarat	41309000	211	61.29	34.49	474600	126930	17360
Karnataka	44977000	235	56.04	30.92	275187	97536	9080
Tamil Nadu	55859000	429	62.22	34.15	139330	55960	2600
Rajasthan	44006000	129	38.55	22.88	135790	51400	5650
Kerla	29099000	235	89.81	26.40	127480	59120	3480

Andra Pradesh	66508000	242	40.08	26.89	98120	34380	2260
Bihar	64531000	685	39.49	10.40	59310	28900	1860
West Bengal	68078000	767	57.70	27.48	48020	19070	1060
Madhya Pradesh	66181000	158	44.67	23.18	44910	12890	1580
Goa	1170000	316	75.51	41.03	40390	11300	2600
Punjab	20282000	403	58.51	29.55	30840	9410	720
Delhi	9421000	6352	75.29	89.93	26060	7120	740
Orissa	31660000	203	49.09	13.38	15240	7560	520
Haryana	16463000	372	55.85	24.63	12020	3980	270

*Only states with more than 10000 migrants (In migrants – from the state) included

Table 2: Relationship between Population Density, Literacy Rate, Urbanization and Inter-state Migrants in Mumbai from different states* of India: Census 1991

Total Migrants (Percentage of Population)				
*	Population Density	-0.092	0.744	p > 0.05
	Literacy Rate	0.404	0.135	p > 0.05
	% Urban Population	0.476	0.100	p > 0.05
Work as a reason for Migration (Percentage of Total Migrants)				
	Population Density	-0.282	0.309	p > 0.05
	Literacy Rate	-0.252	0.365	p > 0.05
*	% Urban Population	-0.664	0.013	p < 0.05
Education as a reason for Migration (Percentage of Total Migrants)				
**	Population Density	-0.304	0.291	p > 0.05
*	Literacy Rate	0.087	0.787	p > 0.05
	% Urban Population	-0.349	0.242	p > 0.05

Association of ‘Work ‘as a reason for interstate migrants coming to Mumbai with the urbanization of their previous states from where they came shows statistical significance (Pearson Correlation - 0.664)suggesting more urbanization of the other respective states prevented interstate migrants coming to Mumbai.

Inter State & International Migration Census 2001

From the census data of 2001, relationship of work & business along with education as the reason for migration was correlated with literacy rate, GDP and population density of all states. There was significant correlation with literacy rate with education as the reason for migration. Between GDP with work & education also showed significant correlation. Along with this population density with work & business as a reason for migration. (See table 3)

Table 3: Correlation of reason’s for migration among Interstate Migrants of 2001 Census of all states with literacy rate, GDP and Population Density.

Variables	Reason for Interstate migration	Pearson’s correlation	P (2 tailed)	
Literacy Rate	Work & business	0.285	0.097	p > 0.05
	Education	0.388	0.021	p < 0.05
GDP	Work & business	0.669	0.000	p < 0.05
	Education	0.687	0.000	p < 0.05
Population density	Work & business	0.342	0.044	p < 0.05
	Education	0.330	0.053	p > 0.05

Similarly, association of international migrants of 2001 of all states was assessed with literacy rate, GDP and Population Density. It was observed that there existed a significant correlation between GDP and work & business as a reason for migration (Pearson’s correlation of 0.411 & p value of 0.020) (See table 4)

Table 4: Correlation of reason’s for migration among International Migrants of 2001 Census of all states with literacy rate, GDP and Population Density.

Variables	Reason for International migration	Pearson’s correlation	P(2 tailed)	
Literacy Rate	Work & business	0.183	0.294	p > 0.05
	Education	0.187	0.282	p > 0.05
GDP	Work & business	0.411	0.020	p < 0.05
	Education	0.434	0.013	p < 0.05
Population density	Work & business	0.126	0.469	p > 0.05
	Education	0.002	0.992	p > 0.05

Discussion

The study findings show that a major proportion of interstate migrants are present in northern states of India accounting to about 11% of the total population while eastern zones have maximum international migrants (1.26 % of the total population) as per census 2001. Looking at data on Internal migration from 1971 to 2001, there is significant correlation (Pearson Correlation

0.752) between Gross National Income per capita & Internal Migration ($p < 0.01$) This finding is comparable with the results observed by Bhagat R. B. ⁽⁴⁾ in a study on Internal migration in India, which also showed in and out migration rates has a positive association between per capita income, percentage of workforce and share of gross domestic product in non agricultural sector. Mumbai is the commercial capital of India. Mumbai has always been a favorite destination among migrants; however it has been argued that rising migrants in Mumbai have deprived native group from access to job opportunities & other amenities. In our study, association of “Work“ as a reason for migrants coming to Mumbai with the urbanization of their previous states from where they came shows statistical significance (Pearson Correlation - 0.664)suggesting more urbanization of the other respective states prevented interstate migrants coming to Mumbai. In a study done by D. P Singh, ⁽⁵⁾ based on National Sample Survey in the last two decades; suggest that the occupational patterns for both migrants & non migrants in Mumbai has largely remained unchanged over the last two decades. As per census 2001, states with high literacy rates expected more interstate migrants coming for education where as states with high GDP, also expected significant interstate migrants coming for work & business and education as a reason for migration, suggests that increased economical opportunities favors migrations. Another study by R. Lusome & R. B Bhagat pointed out that two third of the urban to rural male migrants have moved owing to employment or work.⁽⁶⁾ The study findings reveal that among international migrants with work as the reason for migration was more in states with higher GDP as per Census data of India 2001. Ronald Skeldon suggested that Internal Migration can lead to International Migration and vice versa. Once the supply of internal migration becomes exhausted a country will turn to an external source as a replacement area of origin. Their study on Migration patterns in Kerala suggested, internal Migration was primarily of better educated Hindus & Christians from southern parts of Kerala, while International migration was of less educated Muslims from Northern parts of Kerala. Thus two differences in migration appear to have evolved at different times, each dependent upon opportunities available to each group at particular time. ⁽⁷⁾ Another study on migration and urbanization in India, argued that the migration process has an in built screening system, which is picking up people from relatively higher economic and social strata. This was suggested as they found, there was decline in migrants in search of

employment and increase in business and study related mobility. ⁽⁸⁾ However in this study, business and work were not compared as separate reasons for migration, which needs further research.

Conclusions

There is considerable differential variation in different zones among International as well as interstate Migrants in India. These patterns of migration are associated with various factors like GDP, Literacy rate, Population density and Urbanization. The study is prone to observer bias as it is based on secondary data. The study has its own limitation, that it was conducted in limited data available and also the migrants were not classified on other characters like, gender, age, and caste wise in this study. Studies at community level, to know about their reasons for migration and from where they come with their socio demographic profile will give a more composite view actual effect of migration in the locality of interest in India. Migration is bound to increase in the years ahead with globalization and contribute to growth & development and shall never be a problem unless there is an appropriate policy to incorporate integrated development of cities like Mumbai.

References

1. International Institute of Population Studies. Master of Population Studies- Block 2, Migration: concepts, Measures, determinants and Consequences:7
2. Census of India. Series 1, soft copy, India D series Migration tables. Registrar General & census Commissioner India. 2001.
3. World Bank national accounts data: 1971 – 2001.
4. Bhagat, R.B. Internal migration in India: Are the Under Privileged Migrating More. Asia Pacific Migration Journal, vol.25, no.1: Positive association between per capita income with total migrants at state level.
5. D.P. Singh. Migration and Occupation in Mumbai: Issues and Implication. Paper presented on 35th International Conference of International Conference of International Union for study of population (France) July 18 -23, 2005.
6. R.Lusome & R. B. Bhagat. Trends and patterns of internal Migration in India, 1971 -2001 – Paper presented at annual Conference of Indian Association for study of population (IASP) during 7 – 9 June, 2006, Thiruvananthapuram.
7. Ronald Skeldon. Interlinkages between Internal & International Migration and development in the Asian region. Population, Space, & Place, 12, 2006:15-30.
8. Amitabh K.(2012) Migration & Exclusionary Urbanization in India. Economic & Political Weekly: Vol XLVII Nos 26 & 26. Pg 219 – 227: Migration less common among poor socio economy strata as seen with decreased migration in search of employment & increase in business & study related mobility in India