ANALYSIS OF ECONOMIC AND NON-ECONOMIC FACTORS OF MIGRATION IN DELHI

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Abstract: Migration refers to a change in individual usual place of residence from one defining area arising out of various social, political and economic reasons to another. In the metropolitan states like Delhi, the rate of migration has declined or at least stabilized and migrants are setting down in NCR (national capital region) with nominal property rates. However, Delhi continues to be a favorable destination for large number of people seeking livelihood due to better employment opportunities, education and many other reason. This suggests that socio-economic changes in the last decade have greatly affected the mobility of population. This paper makes an attempt to identify various reasons for migration in Delhi and their respective contribution over the last three decades and also identify factors leading to migration and their respective relation with the dependent variable migration. Factors are stratified into economic and non-economic. Economic factors include employment measured as Number of people employed in private sector. Non-economic factors include education measured as number of senior secondary school set up in Delhi. It was found that from period 2002-2009 when employment opportunities increased in private sector it worked as an opportunity cost for people to migrate to Delhi in order to earn enough to fulfill their basic needs which cannot be fulfilled while staying in their native region. It was also found that increase in number of senior secondary schools in Delhi taken as non-economic factor leads to an increase in migrants as studies shows that it acts as an opportunity for the people of other states to provide their children with better quality of education. There exists further scope to analyze quality education of different states with respect to migration.

Index Terms - Migration, Economic and non-economic factors, reasons for migration, employment, education

I. INTRODUCTION

Migration a spatial phenomenon of population which entail a change in individual usual place of residence from one defining area arising out of various social, political and economic reasons to another. It has a great influence on size, composition and distribution of population. According to 2017 International migration report released by government showed that during this century’s period of rapid globalization, the number of migrants doubled from 7.98 million in 2000.

There are different models in economics which explain some issues concerning migration such as Harris-Todaro model given by John R. Harris and Michael Todaro in 1970 assume that “Migration decision is based on expected income differentials between rural and urban area rather than just wage differentials. Thus, if expected urban income exceed rural income it leads to high urban unemployment.” Another model is Gravity model of migration which states that “With an increase in importance of one or both of location there will be increase in movement of one or both of location there will be increase in movement between them known as ‘distance decay’. It helps to determine the sphere of influence of each central place by estimating where the breaking point between two settlements will be.”

In Delhi, there is a significant decline of population growth in 2011 census. It was found that with the rapid pace of urbanization and growth of urban population while that of rural population area is continuously decreasing the reduction in population may be attributed to drop in fertility rate and increase in the population of other towns of national capital region (NCR). Thus, the rate of migration in Delhi has declined or at least stabilized and migrants are setting down in NCR due to nominal property rates. However, Delhi continues to be a favorable destination for large no. of people seeking people seeking livelihood due to better employment opportunities, education and many other reason including high cost of living (food, housing, transport etc.).

This paper focus on migration in Delhi, where there is a difference between migration and immigration, a migrant is a person who move from one place to another with in a country while immigrants are the one that move from one country to another. Thus it focusses on people migrated from India to Delhi with various reasons which influence them to migrate and its percentage contribution in Delhi and its changes over past few decades. It also focusses on the influence of various economic and non-economic factors on decision of people to migrate to Delhi from 2002-2009.

II. OBJECTIVES

1. To study various reason for migration and their effect in Delhi.
2. To study the relationship of migration with economic factor with special reference to Employment and Non-economic factor with special reference to Education.
III. METHODOLOGY

The study deals with both quantitative and qualitative method of analyzing the secondary data and concluding them to valuable findings. The qualitative aspect includes reviewing migration and finding out various reasons which influence people to migrate to Delhi and to identify which factor contributed the most.

The quantitative approach on the other hand is used to analyze and conclude the collected data using statistical tools. In India, the major source of data collection of migration in decadal census. Census data provide the detailed information about trend and pattern of migration in Delhi but in order to analyze the interdependency with economic and non-economic factor the data for migration is estimated based on birth and death rates and total increase in population from 2002-2009 and the data for education and employment is collected from Economic survey of Delhi 2014-15.

On the basis of available data, the relationship between migration and economic and non-economic factor with special reference to employment and education respectively are determined using multiple regression analysis and to find out which factor has major influence.

IV. LITERATURE REVIEW

Everett S. Lec (2007) gave a theory of migration in which he defines migration and gave different factors which enter into a decision to migrate. Thus a simple scheme of migration has been elaborated and from it certain hypothesis in regard to volume of migration, establishment of stream and counter stream and characteristics of migrants have been formulated and also recognized the importance of internal migration in social and economic development.

Dr. Dineshappa Singapur and sreenivasa K N (2014) studied the social impact of migration in India. According to them migration is an equilibrium process which reduces regional disparities at different stages of development. In this paper migration is considered as a social process in which human agency and social network play a major part and it was found that population mobility in India was decreasing up to 1991 after which it increase due to adaption of new economic policies by government.

R. Lusome and R.B. Bhagat (2006) studied about trends and pattern of Internal migration in India from 1971 to 2001. According to them Internal migration in India is an important factor influencing social and economic development in developing countries. According to Indian census 2001, migrants constitute of 30% of total population which is doubled from that in 1971 and the reason could be expansion of transport and communication. This paper also focusses on reasons for migration.

Nishikant Singh et al (2015) focused on gender dimension of migrants in urban India. According to them Urban India is well positioned to take advantage of migration. However, gender inequality come as hindrance. This paper focus that migration of men is low compare to women. It was found that the women migrants have increased on the share of non-working women by that of working women have declined. This reflect that along with marriage, high income, high literacy and social status are other critical factors associated with women migration in urban India.

S Chandra Shekhar and Aaya Sharma (2014) shed light on internal migration for education and employment among youth i.e. aged 15-32 yrs. in India. It focused on the problem of internal brain drain among different states of India where some states act as a feeder while other gain at their expertise. It was concluded that when examined that the problem of brain drain from all India perspective it is not a problem but state wise focused tell that moment can growth trajectories and potential development of some states.

Michael Lokshin and Elena Glinskiya (2009) studied the effect of male migration on employment pattern of women in Nepal for this maximum likelihood method is applied to data from 2004 Nepal household survey and it was found that male migration has negative impact on level of labor market participation by women in migrant sending household. Migration is already high in Nepal on account of economic incentive offered by neighboring countries. Thus the effect of predominant male migration on the work pattern of male migrant women highlights women social status and influence of other family members on it. Thus development strategies in Nepal should focus on gender accept of migration dynamics.

Christian Dustmann and Albercht Glitz (1962) viewed migration and education as an investment in human agent. According to them, education and skill play and important role at many stages of an individual migration. The economic success of migrant is dependent on educational background, transferability of skill acquired and further investment in enhancement of skills. Migration of some individual have consequences for educational decision of those who do not migrate thus acting as externality to them.

IV. DATA ANALYSIS AND INTERPRETATION

Reason for migration and their effect in Delhi

Migration is defined as “permanent or semi-permanent change of residence.” No restriction is placed on distance or voluntary or involuntary act. It is needed to be analyzed as a social process in which human agency and social network play major part and
leads to loss of control over a state. Migration has a major impact on human societies on both receiving and sending societies which is not generally nation or a country can be a state as well. People move from rural to urban area or with in different states of same country. In this paper we focus on number of migrants who come in Delhi from different states and countries and it is found that the number has increased from 6014458 in 2001 to 7663956 in 2011 (source - Population census 2001 and 2011).

<table>
<thead>
<tr>
<th>Description</th>
<th>1991</th>
<th>2001</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total migrants</td>
<td>3723462</td>
<td>6014458</td>
<td>7663956</td>
</tr>
<tr>
<td>Reasons for migrants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>29.1</td>
<td>33.4</td>
<td>28</td>
</tr>
<tr>
<td>Business</td>
<td>4.4</td>
<td>0.7</td>
<td>0.77</td>
</tr>
<tr>
<td>Education</td>
<td>1.4</td>
<td>1.4</td>
<td>1.73</td>
</tr>
<tr>
<td>Marriage</td>
<td>19</td>
<td>15.3</td>
<td>18.44</td>
</tr>
<tr>
<td>Moved after birth</td>
<td>-</td>
<td>2.1</td>
<td>4.78</td>
</tr>
<tr>
<td>Moved with household</td>
<td>38.3</td>
<td>33.7</td>
<td>34.81</td>
</tr>
<tr>
<td>Others</td>
<td>7.8</td>
<td>13.4</td>
<td>11.47</td>
</tr>
</tbody>
</table>

Table-1: Reason for migration in Delhi

Reasons for migration in Delhi and their contribution change in migration over last three decades are as follow:

- **Employment**
  
  Laborer face so many problems in his living conditions and these problems pull him from his native place and migrate to other place where he get better employment opportunity. Delhi continues to be a favorable destination for large number of people seeking livelihood, better employment opportunities. Although there is decline in percentage contribution of employment as a reason for migration from 33.4% in 2001 to 28% in 2011 (source - Population census 2001 and 2011) but still it remains one of the major reason for migration.

- **Business**
  
  Businessman migrate from one country in other or from one state to other within same countries along with their families in order to expand their business. In Delhi, percentage contribution of migrants for setting up their business have declined from 44% in 1991 to 0.77% in 2011 (source - Population census 2001 and 2011). Due to increase in number of competitive firms and stricter policies adopted by government to set up a business unit.

- **Education**
  
  People migrate from one place to another in order to grasp the better educational opportunity. In India, there are many areas and states that are deprived of better educational institute thus people migrate to state like Delhi that are facilitate with relatively better educational institute funded by government. Thus, the percentage contribution of education as a reason for migration is increasing from 1.14% in 2001 to 1.73% in 2011 (source - statistical abstract of Delhi 2014).

- **Marriage**
  
  Interregional marriages or the marriage between people from different state, country or region also lead to migration of one of the partner to other partner native place. Thus family’s situation leads to migration of people. The percentage contribution of marriage as a reason for migration is increasing from 15.3% in 2001 to 18.44% in 2011 (source - statistical abstract of Delhi 2014).

- **Moved after birth**
  
  Some children moved with parents after birth from their birth place to some other region due to the shift in parent’s job or some reason. Thus there is a shift from native place immediately after birth. In Delhi percentage contribution of people moved after birth although very less but has increased from 2.1% in 2001 to 4.78% in 2011 (source - statistical abstract of Delhi 2014).

- **Moved with household**
  
  It is one of the major reason for migration of many people as generally people move with their household whether they moved for education, employment or any other reason stated above such as female migrate with male husband or children with their families. Thus percentage contribution of these people is also increasing with very small amount that is from 33.7% in 2001 to 34.81% in 2011 (source - statistical abstract of Delhi 2014)
Relationship between migration and economic and non-economic factor

Migration and Employment

From the above analysis and literature review we can conclude Employment to be one of the major economic factor leading to migration. Thus, people migrate in order to seek better job opportunities.

Private sector in Delhi has started showing a sign of strength as their global competitors. Jobs in Delhi are available in almost all the prominent industry verticals including healthcare, pharmaceutical, media, information technology etc. Employment in private sector showed a positive growth over a last decade at 1.31 % per annum.

<table>
<thead>
<tr>
<th>2002-2009</th>
<th>Dependent variable: mig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>Std.Error</td>
</tr>
<tr>
<td>Const</td>
<td>-0.219903</td>
</tr>
<tr>
<td>Employ</td>
<td>0.389740</td>
</tr>
</tbody>
</table>

R² = 0.343921
corr(mig; employ) =0.5864.

Table-2: Annual data for Delhi on Migration and Employment

Source: Economic survey of Delhi 2014-15

- Year:2002-09.8 observations
- Mig= Estimates of migration in Delhi (in lakhs) is based on birth rates, death rates and total increase in population
- Migration= Increased population- Natural increase in population
- Natural increase in population= Birth rates - Death rates
- Employ= NO. of people getting employed in private sectors (in lakhs)

When analyzed 2002-2009 in Delhi it was found that migration and employment are positively moderately correlated with each other with correlation (mig; employ) =0.5864. However, in order to find the relationship between them we regress number of people getting employed in private sector to number of people migrated to Delhi and it was found that with an increase in employees in private sector by 1 unit the migration will increase by 0.389740 units. The p value of the variable is 0.08641 which depict that the variable is only statistically significant at 10% level of significance. R square which depict the percentage response of variable is 0.343921 showing that there is 34% variance. Thus a low r square value with statistically significant variable define that results are based on human behavior or psychology thus may be harder to predict and in this analysis the responsiveness of people action to migrate also depend on human behavior thus the results are not 100% accurate due to human predictions.

Thus it can be concluded that as employment opportunities increases it act as an opportunity cost for people to migrate to Delhi in order to earn enough to fulfill their basic needs which cannot be fulfilled while staying in their native region.

Migration and Education

From the above analysis and literature review we can conclude education to be one of the major non-economic factor leading to migration in Delhi. That is people migrate to more developed area where their children can get better education.

India is a country which is far from being 100% literate. States like Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh and Orissa have large concentration of poor having high level of literacy. These states have shortage of senior secondary school. Thus, in order to continue with their studies, they migrate to relatively more developed states like Delhi where there is access of these schools. Thus states like Delhi, Maharashtra, Karnataka become their main destination.

<table>
<thead>
<tr>
<th>2002-2009</th>
<th>Dependent variable: mig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>Std.Error</td>
</tr>
<tr>
<td>Const</td>
<td>-0.761994</td>
</tr>
<tr>
<td>Edu</td>
<td>0.000819037</td>
</tr>
</tbody>
</table>

R² = 0.330747
corr(mig; edu) =0.5751.

Table-3: Annual data for Delhi on Migration and Education

Source: Economic survey of Delhi 2014-15

- Year:2002-09.8 observations
- Mig= Estimates of migration in Delhi (in lakhs) is based on birth rates, death rates and total increase in population
- Migration= Increased population- Natural increase in population
- Natural increase in population= Birth rates - Death rates
- Edu= Total number of senior secondary school in Delhi
When analyzed the data from 2002-2009 in Delhi it was found that education and migration are positively weakly or negligibly correlated with each other with correlation \((\text{mig, edu}) = 0.330747\). However, in order to find the relationship between the factors we regressed education on migration and found that with an increase in number of senior secondary schools in an area the number of migrants to Delhi increase by 0.00081 units (approx.). The \(p\) value is 0.0193 which state that relation is statistically significant at both 5\% and 10\% level of significance. \(R\) square which depict the percentage of response of variable is 0.330747 showing 33\% variance. A low \(R\) square value with significance defines that the results being biased due to human behavior or psychology that is harder to predict.

Thus it can be concluded that number of senior secondary school in Delhi as non-economic factor leading to an increase in migrants in Delhi as it is an opportunity for the people from other states to make their children have better quality education and it will be more if these institute are financed by government.

V. CONCLUSION

This paper gave a basic overview of the complex phenomenon migration and tried to give various reasons for migration in Delhi and their contribution change in migration over the last decade. Employment and education was found to be the major reason for migration and thus their relationship was evaluated with respect to migration and it was analyzed that relation of migration with education is more statistically significant from 2002 to 2009 and thus it can be concluded that as more and more senior secondary school are set up in Delhi people from other states migrate whereas the relationship between employment and migration is statistically significant only at 10\% level of significance which is relatively lower than that of with education. Thus this paper focus on number of senior secondary school as a non-economic factor and number of people seeking employment in private sector as an economic factor affecting migration in Delhi.

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