

Population Dynamics In A Capital State: A Case Of Ranchi City

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ABSTRACT: The study of population of a city, with respect to time and space, forms an integral part in urban analysis. The study of the population dynamics is essential for the planning and development of a city. A state capital often exhibits a peculiar form of dynamics in population, particularly due to its administrative importance and the associated factors adding to its significance. Ranchi, a Capital of a relatively newly formed state of Jharkhand, has been of remarkable importance as an administrative town and later as an industrial town. The urbanisation and subsequent development has been an old phenomenon in this region but this has been unbridled after it getting the status of State Capital. This paper attempts to investigate into the dynamics of population particularly in the scenario of the new administrative setup and resultant urbanisation and development, which is imperative in order to take adequate policy measures for developmental activities.

Keywords: Urbanisation, Population Growth, Migration

I. INTRODUCTION

There has been a continuous increase in population in Ranchi city. However this rate of increase in population has become more rampant with the increasing importance of the city as the capital city and subsequent increase in employment opportunities and strengthening of social and physical infrastructure. There has been a huge influx of people in the city, after the formation of the capital, owing to rising employment opportunities and opening up of numerous regional and state level offices, banks and private organizations in the town.

II. OBJECTIVES:

The main objectives of the paper are as follows:

i) To study the trend of population growth in Ranchi City, the study area, particularly after it getting the status of a Capital City;

ii) To look into the spatial characteristics of population change;

iii) To have an overview of the factors responsible for the resultant dynamics of population.

III. DATABASE AND METHODOLOGY

The paper is primarily based on empirical study backed up with Census of India reports. A ward-wise primary and secondary survey has been carried out in order to collect the data. Three points of time have been taken into consideration viz. 1991, 2001 and 2011 to have a clear picture of the status before and after the formation of the state.

IV. STUDY AREA

The study area includes Ranchi city, comprising of the municipal area of Ranchi. The Study area, Ranchi city lies at the intersection of 23° 22'N latitude and 85°20'E longitude in the Chhotanagpur plateau in India. This city is situated at an altitude of 2128 ft (618 m) above the mean sea level. The area of Ranchi city is 177.19 sq. kms. This includes 55 municipal wards, having a population of 10,73,427 (Census 2011) and a population density of 6058 persons per sq.km.



Figure 1: Study Area: Ranchi City

Ranchi has been the capital of the mineral rich state of Jharkhand, experiencing rapid industrialisation and urbanisation. It has had administrative importance ever since the British period and also it has been an important centre for education with the finest schools and colleges, including professional colleges. These have been an attraction for the migrants, since long. The city experienced a remarkable urban growth after 1958 with the establishment of HEC and its associated township, set up with consequent development of infrastructure and basic amenities. This gave rise to other allied industrial areas along with their respective townships viz. Kokar, Tupudana and Tatisilwai. With this the infrastructure was strengthened further.

Another breakthrough was the year 2000, when it received the status of state capital. Thereafter in order to cater to the needs of the city basic amenities and infrastructure have been strengthened. There has been a remarkable increase in educational facilities and employment opportunities, resulting in the influx of people in the city. With the increase in its administrative importance it became the hub of headquarters and organizations. There has been incredible increase in public facilities absorbing the rapidly increasing population in the city.

4.1. Decadal Growth of Population

Ranchi received the status of a town in the 1872 census. Ranchi as a town recorded a growth

rate of 52.59 percent in 1881, 10.10 percent in 1891 and 7.89 percent in 1901. Census years of 1911, 1921 and 1931 again recorded a gradual increase in the growth rate of 20.05, 20.11 and 27.48 percent, respectively. In the 1941 there was a slight decrease in the growth rate of 23.84 percent, which may be due to out-migration of the tribals to the tea gardens of Assam. In 1951 Ranchi was upgraded as a city and recorded a high growth rate of 70.79 percent. Due to enhanced importance of the city and its environment, people are attracted towards the city, and occupy land for businesses and residential purposes. A remarkable number of Rajasthani business class people settled their business in the city, giving rise to wholesale and retail activities. The decade 1961-1981 saw the highest growth of population due to migration and attraction of people towards the old summer capital of Bihar and establishment of the Heavy Engineering Corporation. Population increased with 82 percent in 1961-71 and 92 percent in 1971-81. Obviously, people occupied the area where they felt secure in terms of education, hospital, infrastructure, employment, etc. During the 1991 census the city recorded a growth rate of 22.40 percent, which increased to 41.23 percent in 2001, after the formation of the capital and consequent increase in public facilities. After a decade of formation of the capital the population has increased to 1073427 (Figure 2).

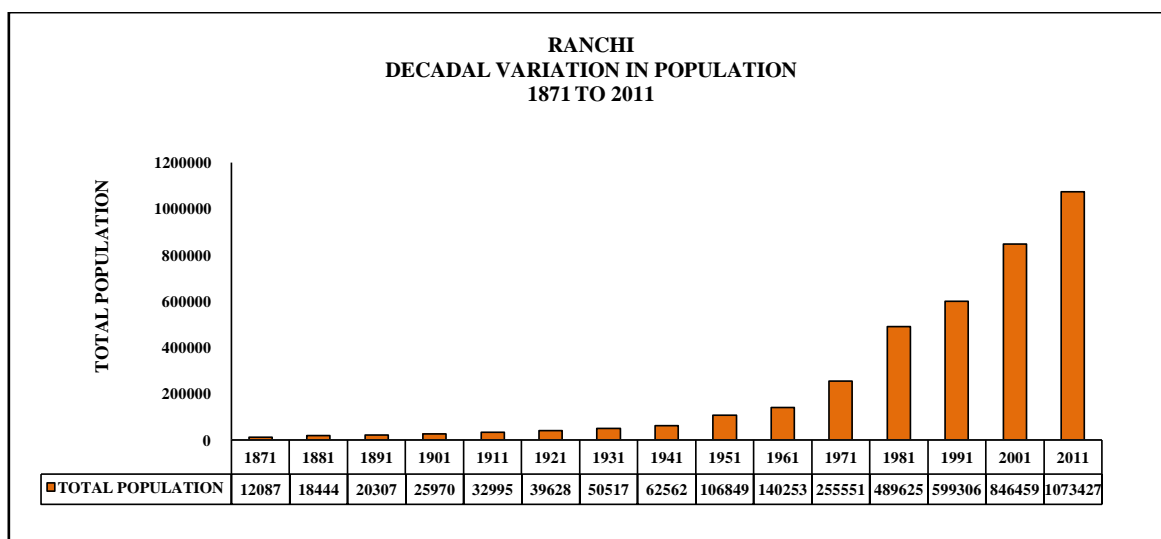


Figure: 2. Decadal Variation in Population, 1871 to 2011

Source: Census of India Reports

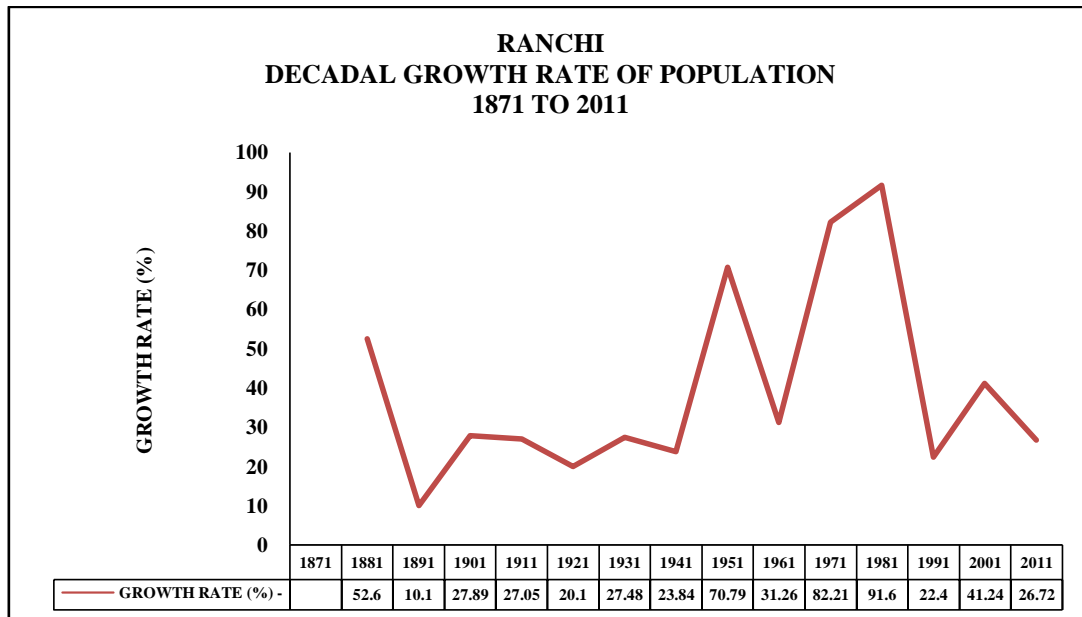


Figure 3: Decadal Growth Rate of Population, 1871 to 2011

Source: Census of India Reports

4.2. Decadal Growth Rate of Population

During the 1991 census the city recorded a growth rate of 22.40 percent, which increased to 41.23 percent in 2001, after the formation of the capital, with increased rate of urbanisation and consequent increase in public facilities. After a decade of formation of the capital the population has increased to 1073427 in 2011 at a growth rate of 26.72 percent. Although there has been changes in the growth rate of population, but there has been a continuous increase in population, as shown in Figure 3.

4.3. Change in the Distribution and Density of Population

There has been a significant change in the distribution of population in the city as represented in Figure 4. The pattern of distribution of population in 1991 shows that the population was more or less evenly distributed in the wards, with some concentration in the commercial core of the city. In 2001 the concentration of population further increased at the core of the city and expanded along the wards along the main roads. Further in the year 2011 the population expanded in almost all the direction radially, and the core became more concentrated with population.

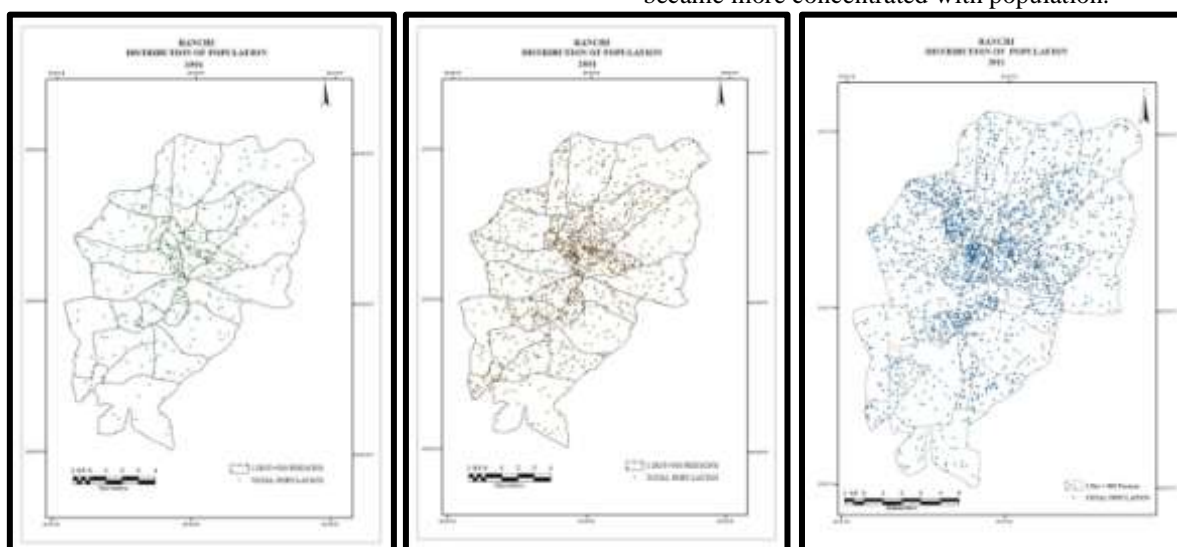


Figure 4: Change in the Distribution of Population in Ranchi

Source: Census of India, 1991, 2001, 2011

The Density of Population has increased from 3382 in 1991 to 4777 in 2001 and 6058 in 2011 (Figure 5) The areas with higher density of population include those around institutions, workplaces, shopping areas and areas with access

to roads. The wards lying mainly adjacent to the commercial areas and administrative areas also have gained importance due to their location and have experienced increase in the population and the population density.



Figure 5: Change in Density of Population, 1991-2011

Source: Census of India, 1991, 2001, 2011

The expansion of the population has taken place from the core towards the outer boundary of the City, alike any other urban area, in a radial pattern. The concentration of population is more around the commercial core and the population becomes relatively sparse towards the outer boundary. The areas that have experienced an increase in population may be classified as follows:

4.3.1. Areas with Further Increase in Concentration of Population

These include areas which earlier had high concentration of population but according to the 2011 census have become denser in terms of population. These mainly include the commercial core and the old residential areas.

a. Commercial Core of the City

These include ward numbers 23, 24, 25, 26, 27, 30 and 31. These are the commercial area and the increase in the population in these areas has been mainly due to the increasing accessibility to public facilities and also because these are most preferred area for business. These are also the areas which lie adjacent to the administrative area of the City.

b. Old Residential Areas

With the passage of time the initially settled areas have been strengthened with public facilities. These are primarily the individually owned areas and the households which have sufficient land have gone for extension of their houses or have even gone for building apartments, which has been a pull factor for population. Such areas include ward numbers 13, 14, 15, 16, 17 and 18. Ward number 19 also is one of such areas, which has become commercialized along the Circular Road and has been experiencing vertical expansion towards the off-road areas. Ward number 11 along the Purulia Road also has experience increase in the concentration of population.

c. Newly Emerged Areas with High Concentration of Population

These are the areas the significance of which has increased due to their on-road location. These areas have been important for commercial development mainly in the form of retail activities and public facilities. These include ward numbers 32, 33, 34 and 35 along the Ratu Road of NH 75. With the construction of the Harmu By-Pass Road the significance of ward numbers 28 and 29 has

increased. Their significance has also increased due to their proximity to the new administrative area in Doranda Region. Population has also expanded along the Kanke Road in ward number 2. This area has also experienced the spill-over of commercial activities. Other areas which have emerged as areas of high concentration of population are ward numbers 3 and 4 along the Tagore Hill Road. Ward numbers 21, 6, 8 and 9 have gained significance due to their proximity to the medical facilities along Bariatu Road. Ward numbers 6, 8, 7 and 10 along the Hazaribagh Road of NH 33, with small and medium scale industrial and commercial activities also have emerged as significant areas of high concentration of population. Other significant areas which have emerged with high concentration of population are ward numbers 43, 44 and 46 along the Hinoo-Dhurwa Road and ward number 53 along the Khunti Road.

4.4.In- Migration

The increase in population has been a consequence of natural increase in population due to decrease in death rate due to increasing literacy and medical facilities in the city. But the extraordinary increase in population especially after the formation of the capital has been due to the increase in immigration in the city. That is to say migration has been the dominant factor in determining the growth of population in the city. Nearly 4.28 percent of the total population of the City comprises of migrant population. This comprises of 1.49 percent of migrants from other states and 2.79 percent of them from within the states, especially from other districts of Jharkhand and adjoining rural areas. There has been increase in the migration with the growing significance of the City (Figure 5).

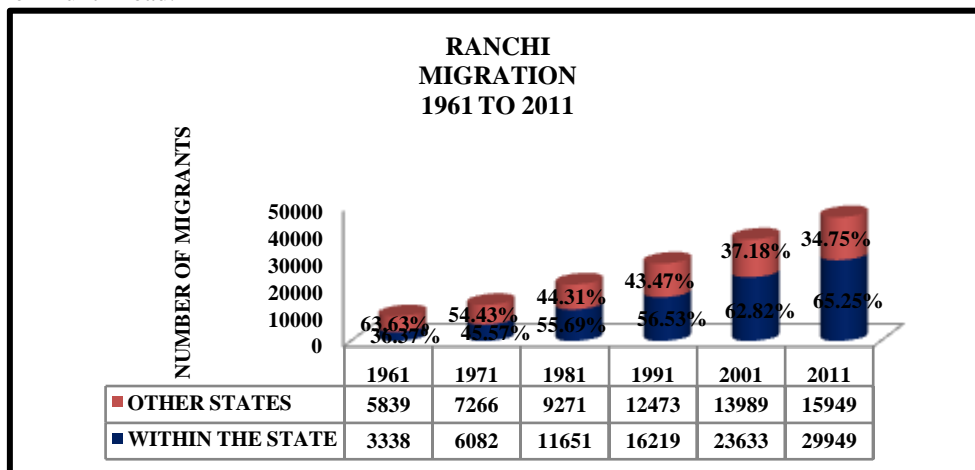


Figure 5: Migration in Ranchi, 1960-2011

Source: Jharkhand Development Report, 2012

Formerly the migrants were mainly from other states. This is because the City lacked people with technical skill, so people especially from West Bengal and Southern India Migrated to the city. In the recent years the proportion of migrants from rural areas and different districts of the State has increased. The picture would be clearer if investigations are made at the household level.

4.4.1.Composition of Migrant Population

The sample comprises of a majority (57.7percent) natives of Ranchi, who have been residing here since birth and have their roots in the city. It has been the district headquarter and an important administrative center apart from being the summer capital of Bihar. As a result of this it has migrants from adjoining rural areas, other parts of the district and state and other states of India, including Bihar (Figure 6)

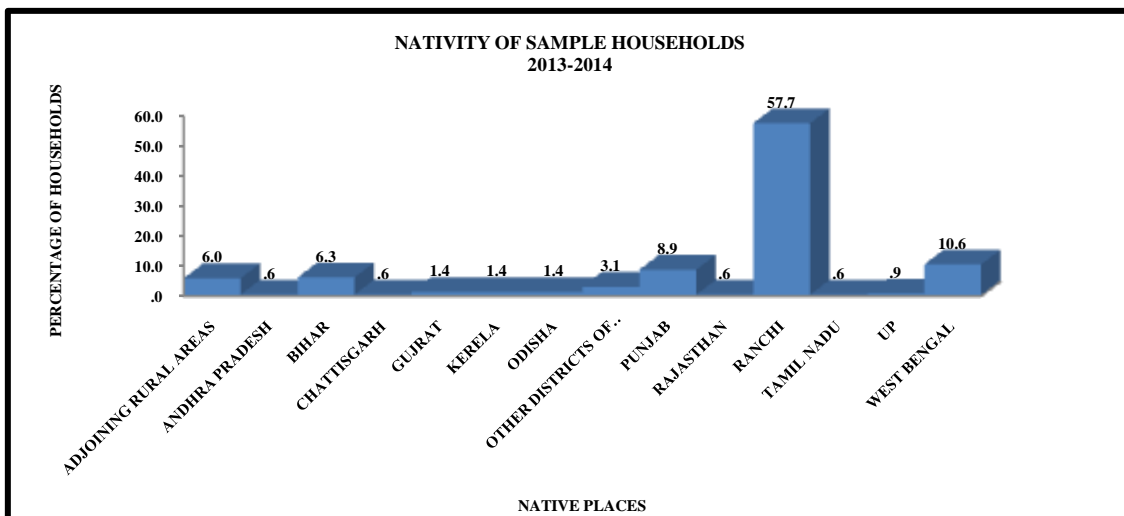


Figure 6: Nativity of Sample Households, 2013-2014

Source: Field Survey

Initially the region was dominated by not so administratively and technically skilled population. Therefore people especially from West Bengal and South India were employed to carry out the administrative activities. With the establishment of H.E.C., units of Coal India., MECON and other technical organizations, technical personnel were taken from West Bengal. Population especially from South India, Kerela specifically, migrated to the educational institutions as education started developing in this region. The sample also comprises of migrants from Bangladesh, residing mainly in Netaji Nagar.

The city also has Nepali migrants, from Nepal, who have not been incorporated in the sample. Migrants from West Bengal have a major share of 10.6 percent of the total population of the sample.

After the agitation in Punjab the Mona Punjabis migrated in this region and contribute to 8.9 percent of the total households surveyed. Few Punjabis also came to the city for trade purposes.

Having been a part of Bihar it has a significant population from Bihar, which has been

here for education, trade, employment and other reasons of attraction of an urban place. The Rajasthanis and the Gujratis came to the city to carry on their trade as the urbanization process began in the city.

4.4.2. Pull Factors for Migration in the City

With the increase in facilities in the city and education and job opportunities people from adjoining rural areas and districts of Jharkhand have migrated to the city and contribute 6 percent and 3.1 percent, respectively of the total surveyed households (Figure 7). A total of 69.59 percent of the non natives of the total sample households have migrated to the city for employment in different sectors. Among these 21 percent comprises of Mona Punjabis and Bangladeshis, who have migrated from their native places due to communal disturbances therein. With the educational development in the city with urbanization 6 percent of them came to the city for education, while 3 percent of them migrated to the city for business purposes (Figure 8)

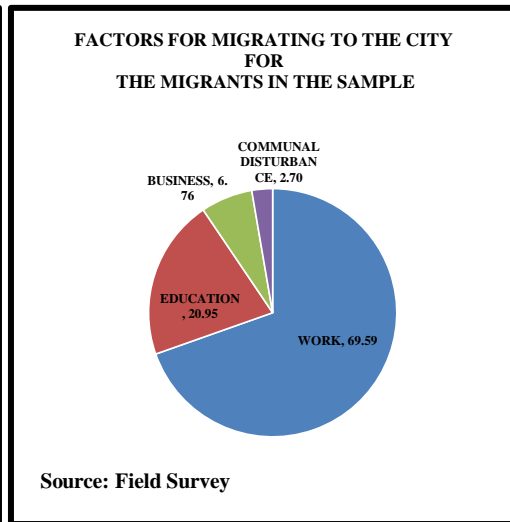
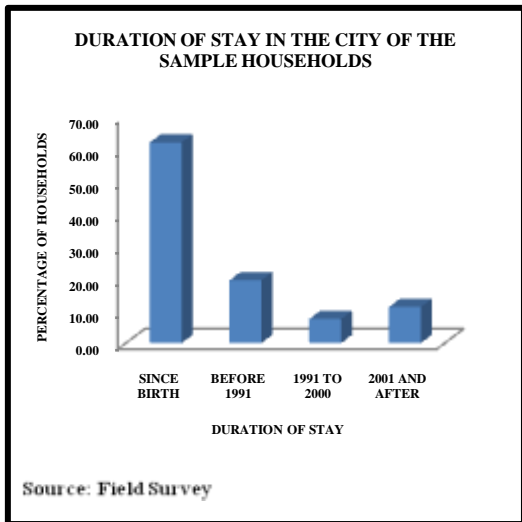


Figure 4.7: Duration of Stay in the City of the Sample Households Figure 4.8: Factors for In-Migration in the City

4.4.3. Increase of Migrant Residents after Formation of Capital

There has been an increase in the number of migrants specifically after formation of Capital, after the year 2000. The sample comprises of 19.43 percent of households residing in the city before 1991 (Figure 9).

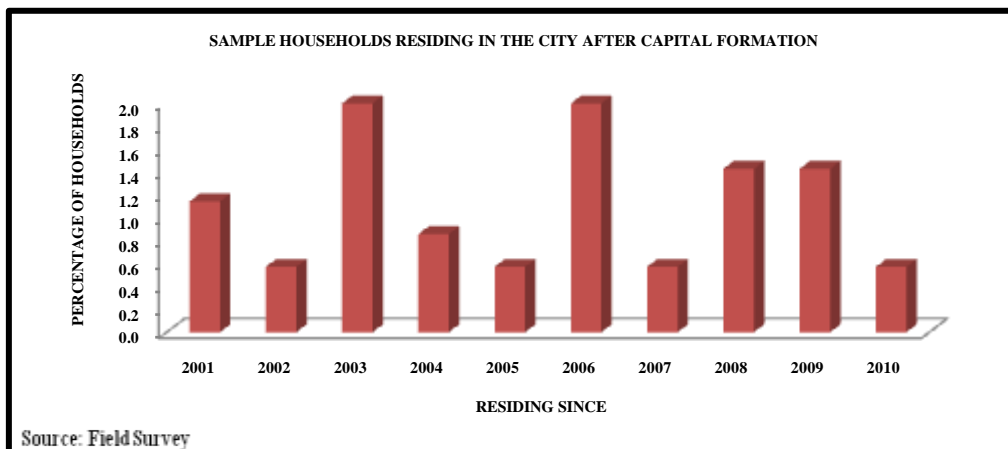


Figure 9: Sample Households Residing in the City after Formation of the Capital

It is noteworthy that, 62 percent of the total sample households have been staying in the city since birth and are the natives of the region. With the increase in new policies of trade and other policies there has been an increase in population in the city with households (7.43 percent) migrated to the city to take up new economic ventures. There was a remarkable increase on the number of households after the formation of the Capital and this contributes to 11.14 percent of households staying in the city since 2001 and after. There has been a continuous increase in number of households after the formation of the city.

4.4.4. Nature of Settlement of the Migrant Households

If the nature of household is looked into, it comprises such household which have settled permanently in the City after migrating to the City, while few are temporary in nature. A remarkable 89.71 percent of the households are permanently settled in the city with their houses of their own and only 10.29 percent are such that is not yet settled permanently and are residing in the city primarily for the employment and education (Figure 10).

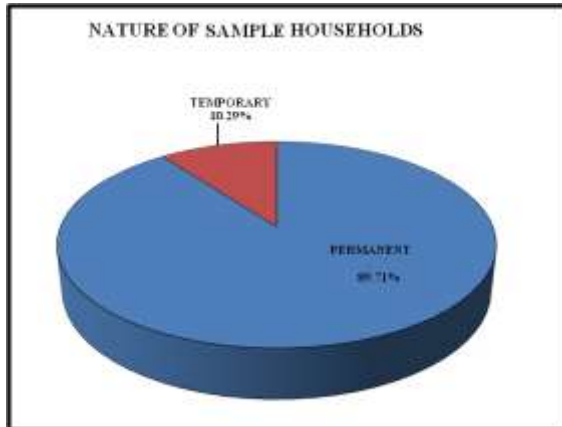


Figure 10: Nature of Sample Households
 Source: Field Survey

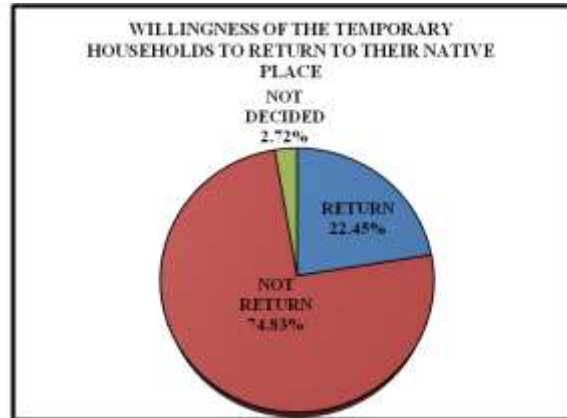


Figure 11: Willingness of Temporary Households to
 Source: Field Survey

Return to Their Native Place

It is apparent from Figure 11, out of the households that are temporarily settled in the city, 74.83 percent of the population wishes to settle in the city owing to the available civic facilities and economic opportunities. Among them 22.45 percent have the willingness to return to their native places after their retirement and the completion of the education of their children, while

2.72 percent of the households have not yet decided about settling in the city permanently.

4.5.Out-Migration

Out of the surveyed households, 47 percent of them have shown out-migration of some family members or the other, in spite of increasing amenities and opportunities in the city (Figure 12)

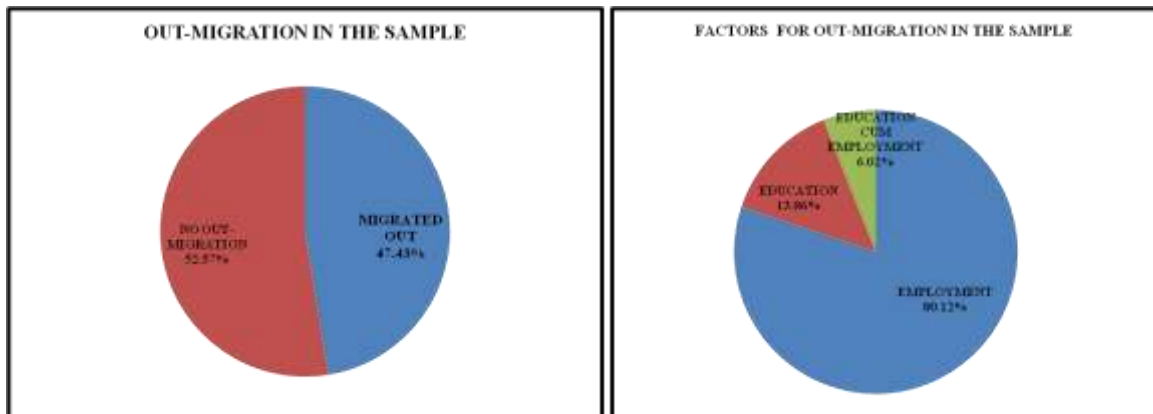


Figure 12: Outmigration in the Sample

Source: Field Survey

It is apparent from the above figure (Figure12) that, out of this 80 percent of the households have reported an out-migration for employment and 13.86 percent for the purpose of education primarily in cities like Delhi, Mumbai, Kolkata, Chennai, Bangalore, Pune, Allahabad, Hyderabad, Roorkee, Cuttack, Coimbatore, Vishakhapattanam, Patna and also London. There are households that have reported migration of the members initially for education and later remained out for employment.

There are also business households that have reported migration for the extension of their business. The main attraction for work has been the metropolitan cities of the country.

It has been observed that, 9.63 percent of the out-migrated population have reported migration abroad specifically, Unites States, London, Quwait, Qatar, Dubai and Canada.

The result of such migration has been that most of the working young population have settled out and have no particular plans to return. As a result of this the parents are left alone and have

engaged their residences for rent, lodges or other non residential uses.

V. CONCLUSION

The natural increase in the population coupled with migration has caused the population to grow manifold. The population seems to have expanded from the core towards the outskirts in all directions in the wards along the roads. However the presence of defence land towards the east and HEC towards the south have restricted these areas to be populated much. The growth in the population is indeed a result of the upgradation of the City to a State Capital along with socio-economic development creating economic opportunities and ideal conditions for social development and a high standard of living. Remarkable percentage of the population which has in-migrated to the City seek to permanently settle here with no intension to return back. With the continuous rise in the rate of development in such a scenario is bound to increase the population with a much faster rate. Moreover, in order to cater to the demands of the increasing population structural changes are inevitable which if not planned and managed efficiently might have serious physical, socio-economical and enviromental implications. Therefore it is essential to take into consideration the detailed nature of population dynamics for formulation of policies for a sustainable development.

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