Chapter 1
1.1 Introduction

The National Commission on Urbanisation\(^1\) defines urbanisation in India as “a process whereby the surplus labour from rural areas resettle in urban centres, where non-agricultural job opportunities exist.” If job opportunities are productive and lead to gainful employment, urbanisation becomes a catalyst for economic development. If, however, urbanisation becomes merely a process of transfer of rural poverty to urban environment, it results in a concentration of misery. This is exactly what is happening in Indian cities and Delhi is not an exception. Urbanisation as well as urban growth has been quite rapid in Delhi since 1911 when the city became the capital of India. Acceleration of urbanisation started immediately after Independence in 1947 when the country was partitioned and refugees began settling in the city. Delhi’s population further increased due to distress migration from backward rural areas and neighbouring states. Rate of rural-urban migration have greatly exceeded the rate of urban job creation and therefore, migrants no longer find proper employment in the city. According to 2001 Census, Delhi has more than 2 lakh migrant population and a large section of them live in abject poverty. They earn their livelihood from various menial jobs like rickshaw pulling, street vending and other casual work.

The National Commission of Enterprises in the Unorganised Sector (NCEUS)\(^2\) declared that 836 million Indians remain economically marginalised. The Commission’s recent report entitled “Reports on the Conditions of Work and Promotion of Livelihood in the Unorganised Sector” puts forth that 86 percent working population belong to the unorganised sector and work under extremely deplorable conditions with scanty livelihood options. The Commission’s chairman Arjun Sengupta states that maximisation of profit should not be the sole aim of economic growth.

Rickshaw pullers are one of the worst victims of economic marginalisation, though they provide cheap and quicker transportation to those parts of the city where
bus service cannot be extended. Most of the rickshaw pullers in Delhi are seasonal migrants and they choose this occupation because it requires minimum resources and ensure an easy flow of income.

1.2 Rationale of the Study:

1) Delhi, besides being the National Capital plays a significant role in the national and regional economy. Since independence, the city has not only become a focal point of administration, political activities, culture, trade, commerce and services but has also experienced considerable growth in the industrial and transport sectors. The progressive development of metropolitan functions and diversification of socio-economic structure has resulted in a large expansion of employment opportunities.

2) In India, mass of the poor, landless, illiterate and unskilled agricultural labourers as well as petty farmers from backward states make quantum jump towards big metropolises like Kolkata, Bombay, Delhi, Chennai by passing local small towns and cities which fail to give them gainful employment.

3) In terms of proportion of in-migrants to total population in the Indian cities, Delhi ranks first; and therefore in-migrant population constitutes 16.4 percent of the total population of Delhi. Maximum number of migrants coming to Delhi have their origin in the states of Uttar Pradesh, Bihar, Haryana, Uttarakhand, Rajasthan and West Bengal, denoting an example generally of male selective in-migration.

4) Most of the migrants are not well educated and skilled, therefore they get employment in the informal sector as unskilled or semi-skilled workers.

5) As a result they are bound to be engaged in ill paid or low paid jobs like rickshaw pulling, street vending, petty trades, shoe polishing, small manufacturing, construction work, and so on.

6) Meager income compels these unfortunate migrants to reside in slums or informal housing in extremely deplorable condition. According to the estimate by the Planning Commission, in 1999-2000, Delhi had 8 percent population living below the poverty line. Poverty exists mainly in slums. Percentage of population living below the poverty line cannot capture the real picture as it is only a generalisation.
7) Rickshaws provide cheap and easily accessible public transport in Indian cities especially to the low and middle income group people. Due to low capital and skill requirements, it is the easiest occupation to enter for the urban poor.

8) The semi skilled and unskilled workers who take up rickshaw pulling often face risky health conditions leading to diseases like tuberculosis, malaria, respiratory problems and others due to insanitary conditions and lack of basic amenities and facilities.

9) Most of the rickshaw pullers do not enjoy benefits from any kind of the social security schemes available to the workers in India. Low income, unhygienic living and working conditions make them more vulnerable towards the vicious cycle of diseases and poverty.

1.3 Relevance for Selection of the Study Area and Study Group:

The occupation of rickshaw pulling adopted by many migrants opens the avenue of escaping from the abject poverty and leads the path of the exit from rural poverty in case of those who have migrated to the city. The number of rickshaw pullers has increased over the years due to the shrinkage of job opportunities in the formal sector and because of lack of gainful employment in the rural areas. The rural unemployed tend to move to the cities in search of employment, though they possess low skills and low levels of education. The following points give justification for the relevance of the study:

1. In Delhi thousands of workers work in the small scale industries involved in the manufacturing and assembling of various components used in rickshaws. The rickshaw not only provides livelihood to one person but on an average supports five to six individuals. Thus the livelihoods of many people are directly depending on this mode of transport.

2. Cycle rickshaws provide a much needed and valuable public service, especially for the middle and low middle class residents. Even today, a kilometer long ride in a cycle rickshaw does not cost more than five rupees.
3. The rickshaw is the only available means of public transport for short distances, and especially within the various colonies which are spread over large geographical areas.

4. Rickshaw operators are among the most visible groups of self-employed people in our country. They provide a vital service to the city life. Their entrepreneurial activities should have received all possible encouragement from the government; especially considering the fact that neither the government nor the organised sector generates enough jobs to absorb the existing workforce in our country.

5. The rickshaw pullers are not given adequate recognition within the transport system. This mode of transport is pollution free and provides cheap commutation for the common man as well as provides employment to large sections of the urban poor and seasonal migrants. A transport policy that recognises the rickshaw pullers in the transport hierarchy is therefore required. A left service lane for them to ply and special stands to park are the minimal infrastructural planning requirements needed for the rickshaw pullers.

6. The stressful life of the rickshaw pullers, with no rest or holidays coupled with unhygienic living conditions and limited food results in poor health of most of the workers.

7. The study therefore attempts to analyse the lifestyles and problems of these hard-working, ill-paid migrant and non-migrant workers residing in slums, resettlement colonies or simply on the footpaths.

1.4. Literature Review:

Although limited work has been conducted on rickshaw pullers in particular, but there are several sources that address their hardships and agonies along with other urban poor. Study on rickshaw pullers cannot be done in isolation without having a thorough understanding of urbanisation, migration, growth of informal sector and conditions of urban poor in Indian cities. The following literature survey has taken into account all these important aspects and on the basis of these broad aspects, several subthemes have been identified.
1.4.1 Micro-Level Studies on Migration, Employment and Living Condition of Urban Poor

1.4.1.1. Migration and Employment in Urban India:

Patil (1985) has pointed out that in the last three decades, urbanisation and industrialisation in India have given a fillip to the construction activities and the demand for construction materials such as bricks, cement, steel, wood, sandstone and others have shot up. Brick industry provides employment to large number of local people. A study has been conducted in Bangalore, which attracts many of migrant labourers from the surrounding areas. The author has found that in brick industry workers work for long hours but get very low wages and no holidays. He has identified a form of forced labour or slavery operating in this sector.

Mitra (1993) has discussed about the employment structure of urban India in his article. He has conducted a state level employment analysis of India and has also pointed out the changes between two decades (1981-91) of urban employment structure at the state level. Urban migrants do not come only from the rural areas but also from other small urban centres. The author has pointed out that the proportion of rural migrants to total migrants in urban areas was around 56 percent at all India level. The author also discussed about the different reasons of migration in this article.

Kulkarni (1993) stated in an article that in India only 10 percent of the total working populations are involved in the organised sector. Therefore, unorganised sector dominates with 90 percent share in total employment and this has remained almost constant during the last fifteen years. The unorganised sector provides employment to a large number of job seekers in urban areas thereby explaining the steady growth of this sector.

Biswarop Das (1994) has discussed the causes of the growth of slums in Surat city during the recent times, the condition of migrant population living there and various types of occupation pursued by the migrant workers in these localities within the broad context of activities in the informal sector and the urban labour market. The author points out that low income, underemployment in the native place and aspirations have encouraged people to struggle for a better life or to get hold of some good jobs in the city. It can be said that migrants keep entering the cities from rural as well as small urban settlements with the aim of survival, occupational benefits,
mobility and educational development. Those who possess capital and skill get absorbed in the industrial sector and the poor ones with very little or no capital have to undertake jobs in the informal sector. These informal jobs yield very low wages which is not sufficient for living a descent life style.

Santhapparaj (1996) has studied the pattern of job procurement and earning of the migrants in Madurai City of Tamilnadu. He has focused on the factors determining the probabilities of formal sector jobs and factors determining the earning of the migrants. The analysis has been carried out on the basis of the primary data collected from the Madurai city between October 1990 and May 1991. Multi stage sampling method has been applied for sample selection. An attempt has been made to find out the occupation of the respondents before the time of migration and the job expectation of the migrants. The author has pointed out that most of the migrants come from the surrounding rural areas to Madurai. Majority of them moved out of agricultural sector to urban informal sector. Probabilities of getting a formal sector job were more for those who had migrated with the expectation of getting a job in this sector. Migrants who were graduates or having higher level of education had greater chances of entering into formal sector occupation than those who with low level of education.

Despande and Deshpande (1997) in their paper have discussed the issue of gender discrimination in the urban labour market and have focused on four types of discrimination generally found in India. These are regarding employment; occupational segregation; wages and human capital that generally affect workers in the urban areas. Gender biasness and discrimination further accentuate inequalities in urban labour market in terms of wage rates and types of employment available to men and women workers. They have compared Mumbai city with the rest of urban India and using NSSO and the Census data. In the ultimate section, the authors have pointed out that government intervention is needed in the form of anti discrimination policies for removing this gender biasness.

Duraisamy and Narasimhan (1997) have studied the differential wage rates between migrants and non migrant male workers in the urban informal sector of Madurai city. This was the first attempt in the Indian context to study the wage differentials and discrimination against migrants in the informal sector using the familiar decomposition technique. The empirical findings indicate that the migrants
on an average earn 17 percent less than the non migrants when other factors such as education, experience, and training remain same for migrants and non migrants. The results bring to the fore that 38 percent of the migrants verses non-migrant wage differentials is attributed to labour market discriminations.

K. Sensarma. (1997), in his article has examined various issues related to migration of labour force in urban India. He has calculated migration rates and has analysed various factors that motivate people to migrate. Apart from the commonly studied rural to urban migration, he placed special emphasis on the policies of rural development especially for rural industrialisation.

Chadha. G. K (2000) has worked out the percentage of urban population living in slums in different states of India between the years of 1981-91. He has pointed out that most of the slum dwellers work in informal sector as domestic workers, petty hawkers, and daily wage employees, labourers in small industrial units or in construction sector. According to Census 1991, 15.4 percent of the total urban populations in India lived in slums under deplorable condition.

Bisht and Tiwari (1997) have studied the occupational pattern and trends of Himalayan rural out migration from Gomti watershed in Uttar Pradesh Himalaya. Out-migration from rural areas is generally guided by several factors in which the economic ones play an important role. They have pointed out that the tendencies of migrants with different educational level are almost similar. Generally in the case of extremely poor households, males out migrate at a very young age. Almost all the migrants out migrate due to poverty, growing burden of population on traditional agricultural activities and lack of economic opportunities in their native villages.

Srivastava (1998) has pointed out that uneven regional development and rural backwardness are the main reasons behind out migration of labourers from rural to urban areas. He has identified four types of mobility, e.g. permanent, semi permanent migration, labour circulation and commuting. Most of these migrant labourers get jobs in the informal sector and face hardship as well as discrimination in the work place. They often have to work longer, hardly get the benefit of any type of social security and receive lower wages than that of their non-migrant counterparts.

Bhattacharya (1998) has opined that, informal sector had played a significant role in the Indian economy during 1970s, when there was an occupational shift from agricultural sector to the manufacturing as well as to the service sectors. As
a result, the share of employment in the agricultural sector declined and that of the non agricultural sector increased. He has discussed the issue of urbanisation in the context of rural-urban migration and has pointed out that rural to urban migration has a remarkable contribution to urban growth. He also examined the role of informal sector in the ever increasing rural to urban migration in the context of changing occupations and livelihood opportunities in Indian cities.

Singh and Aggrawal (1998) have discussed the major push and pull factors behind the migration, based on the data provided by 1991 Census for 25 districts of north western Uttar Pradesh. They have applied the OLS regression model to examine the impact of different variables on rural-urban migration. It was observed that farm size and irrigation facilities, have significant role in rural out migration.

Mitra and Mukhopadhyay (1989) have studied the class I cities of India. They have identified the cities with high or rising rate of labour absorption in the construction sector and differentiated them from the cities with low or falling rates of such absorption. They have also studied the gender differentials in the labour force engaged in the construction work in urban India and tried to identify the relative importance of the extent of male female substitution within the construction sectors as such, as well as substitution between the construction sectors on the whole and other sectors in terms of employment generation. The results showed a significant percentage of change in the employment of female workers in this sector in a large majority of the cities that can be accounted for by changes in the male-female ratio within the construction workforce rather than change in the overall importance of the construction sector as such.

Kishor and Mishra (1998) have discussed the determinants of rural out migration of workers to the Talcher coal mine region of Orissa and distribution of income among workers engaged in informal sector. They have also identified three categories of workers in the informal sector, viz, informal workers in the coal mine which is a formal sector (IWFS), informal workers in the informal sectors (IWIS), and entrepreneurs in the informal sectors (ENIS). The distribution of income is more skewed towards the lower income groups among IWIS as compared to IWFS and ENIS. Further, the income distribution is positively associated with distance (in favour of inter-state migration), age (experience matters) and education (up to a threshold income level).
Bhowmik (2000)\textsuperscript{17} has discussed about the various issues related to hawkers, especially those of the civic authorities and hawkers themselves. His study is based on the preliminary results of a study on hawkers in eight cities conducted by the National Alliance of Street Vendors of India (NASVI). Samples were taken from Mumbai (200,000); Ahmadabad and Patna (80,000 each), Indore and Bangalore (30,000 hawkers each), Calcutta (100,000 hawkers) and so on. The author has critically reviewed the municipal laws, government policies which affect their livelihood and police atrocities towards the hawkers. He has emphasised on the proper study of urban plans, maximum usage of the public spaces, mapping of hawkers stalls and organisations and has conducted a thorough study of the socio-economic conditions of hawkers and perception of consumers.

Sundaram (2001)\textsuperscript{18} has discussed the sectoral change in employment in India. He discussed the changes of industrial workforce between two decades. The Census data of 1991 and 2001 as well as Employment Reports have been used for the study. He has also discussed the male female differential in different industrial categories.

Mukherjee, (2001)\textsuperscript{19}, has worked on distressed migration in India which according to the author arises out of abject poverty. Migration of illiterate and unskilled persons to metropolitan areas increases urban poverty. This section looks for employment in the urban informal sector. The author therefore has discussed the linkages between migration, urbanisation and regional disparities in India. The data of 1991 Census had been used for the study. He has also recommended the planning strategies for coping with poverty induced migration and urban involution in India.

Umma and Shylendra (2002)\textsuperscript{20} have suggested that widespread labour migration in India could be explained properly by structural factors like inequalities in land ownership, poverty and agricultural backwardness. They observed that rural-urban migration might help the rural poor to overcome their problem of survival, but this may not lead to their real economic consolidation.

Mitra (2002)\textsuperscript{21}, has discussed about the license and livelihood of rickshaw pullers in Nasik city. Most of the rickshaw pullers do not own the vehicles they ply. They rent it on a daily basis at rupees 25 per day from small or big contractors who own large fleets ranging from 25 to more than 500 rickshaws. The cycle rickshaw pullers pay taxes without getting access to any written documents. This is a reflective
of the level of corruption by the bureaucratic machinery. He has discussed that the Ministry of Labour, Government of India has provided many welfare schemes for the rickshaw pullers but the State Government has failed to act on these measures. The author has therefore pointed out that very few rickshaw pullers are satisfied with their profession as a whole and most of them would not like their children to continue in the same profession.

Kumar and Aggrawal (2003)\textsuperscript{22}, in their article have examined the extent of poverty in Delhi slums through consumption pattern, employment and educational status of the slum dwellers. The authors have studied socio-economic aspects of the people living in Delhi slums including low level of education of the migrants, gender disparity, economic status and the number of households living below the poverty line. The urban employment generation policy for urban slum dwellers has been critically reviewed. The authors also opine for the provision of basic amenities and facilities at the place of origin of the migrants.

Srivastava (2003)\textsuperscript{23}, has focussed on large scale internal and international migration and their impact on economic growth and poverty reduction in many regions. Labour migration is a complex process; streams differ in direction, origin, destination and migrant characteristics. At destination, migrations affect labour markets, lowering the wage rate; migration also affects the labour market at the place of origin. The author has pointed out that internal mobility depends on the livelihood of many; especially tribal people, socially deprived classes and people form resource poor areas. The author has also reflected that the laws and regulations concerning working conditions of migrants are largely ineffective; often legislation fails because regulatory authorities are over stretched. Also, migrants get a low priority in the state list. Most of the international migrants with professional expertise or technical persons emigrate to industrialised countries, while the semi-skilled and skilled workers immigrate to the Middle East.

Mohammed and Toran (2004)\textsuperscript{24} have conducted a study in the Gandhi Nagar slum of Andhra Pradesh. They have discussed various physical and social issues related to Gandhi Nagar slum. Migrants from different parts of the country reside there and overcrowding has made the living environment unfavourable for survival. The scholars have found that most of the slum dwellers have moved from the southern parts of the city and live in the Gandhi Nagar slum for generations. Their study has
depicted that this particular slum has various facilities unlike other slums that attract migrants. They have pointed out that income and expenditure pattern of the residents are better in Gandhi Nagar than in other slums.

Iyer, Singh, Arya et. al. (2004)\(^{25}\) have discussed the processes of migration basically in terms of two approaches. The first one is the individual decision making approach and second one is the Marxist approach. The Marxist perspective emphasises that historical, social and political forces act to determine the demand for labour. They have also discussed the report published by National Commission for Rural Labour (1996) which emphasises on migration arising out of distress situations and survival strategies. Several social scientists including Berman consider migration as a survival strategy of the poor people. He has considered the historical and structural perspectives, and has opined that uneven development as the basic cause for stimulating labour migration. The two main reasons for rural labour migration pointed out by him are migrating for survival and migrating for subsistence. The first one reflects the extreme conditions of social and economic problems faced by the labourers in the rural setting and for them migration becomes necessary for survival. The second reason for migration which stems from subsistence is to supplement the income so as to cover the subsistence needs which may arise from poverty and seasonal employment.

Sundari (2005)\(^{26}\) has made an attempt to measure the real earnings of female migrants in Tamil Nadu state based on the data collected from sample survey. The author has found that real earning of all female migrants has increased significantly after migration. There is a male-female gap in both formal and informal sectors. This depends on education and skill. Accessibility of basic amenities to all migrants has also been discussed. The author has traced that there is a direct linkage between employment, poverty, migration and informal sectors’ employment. Droughts in the rural areas create unemployment and poverty, which encourage rural labourers to migrate to urban areas in search of livelihoods.

Aggarwal, Siddharth, Satya, Rajeev et al (2007)\(^{27}\) have found that rapid urbanisation and the explosive growth of urban poor have created several challenges to policy makers and planners. According to the scholars, rapidly growing section of population in the cities live in slums under deplorable condition. Slum population are vulnerable towards various infectious diseases and malnutrition and hardly get access
to basic health care facilities like urban middle and high income groups. Their condition is not much better than their rural counterparts. Therefore the authors suggest arranging primary health care facilities for the urban poor. Public-private cooperation or partnership can make an effective improvement in this field.

Kundu and Sarangi (2007) have discussed the pattern of migration in urban areas and its socio-economic correlates. The paper is based on the National Sample Survey Report of Employment and Unemployment, which provide information on migration. They have found that economic deprivation is the most critical factor behind migration even for seasonal migration. The authors point out that rural-urban migrants have a greater risk for being below the poverty line than the urban-urban migrants. Migration is a means of escaping poverty for economic betterment.

Report on the National Commission for Enterprises in the Unorganised Sector (2007) has highlighted the plight of rickshaw pullers; they are mainly fresh migrants in cities. Most of them have migrated from the rural areas due to abject poverty and in other cases due to unemployment or lack of suitable jobs. Before migration they were mainly small farmers, landless or casual agricultural labourers. In Allahabad, 20 percent of the rickshaw pullers were previously cultivators and 1 percent was agricultural labourers. Survey report on Nashik city has revealed that 40 percent of them were illiterates. Various issues like license fee, the actual amount paid by them as bribes to officials and police, hiring charges of rickshaws, daily income of rickshaw pullers and so on have been highlighted in the study. As there is no reliable secondary data source, therefore the numbers of cycle rickshaws in Kolkata, Delhi, Kanpur, Patna, Allahabad and Nasik have been estimated. Rickshaw pullers mainly live in Jhuggi Jhopri or unauthorised colonies, rickshaw garages or below the staircases of houses, footpaths, under the hanging balconies of the big buildings on roadsides, on their rickshaws or in any open space like parks and so on. They lead a stressful life and live in utterly deplorable condition.

In the study by Satapthy (2007), the author has focused on the health status of the rickshaw pullers and has tried to find out various personal, social and environmental factors related to their health problems and has suggested measures for improvement of health status of the study population. Leading health problems among them were found to be musculoskeletal disorders, acid peptic diseases and impaired hearing. The author has recommended some measures, which should be implemented
to improve their health status such as regular health checkups should be carried out with the involvement of NGOs, youth organisations, social service agencies and others.

In a report by the Centre for Rural Development (2010)\textsuperscript{31} the information of the rickshaw bank in Varanasi has been provided. The rickshaw bank operates under Jan Mitra Nyas (JMN), a trust organisation found in 1999. This rickshaw bank works under the guidelines of the Centre for Rural Development (CRD) as part of CRD’s India-Wide Cycle Rickshaw initiative. CRD oversees JMN’s relationship with the local Punjab National Bank office as a lending partner, and has provided the initial 100 rickshaws distributed in Varanasi through a loan agreement with the PNB branch. The first 100 rickshaws distributed by the rickshaw bank followed a design developed by the CRD.

1.4.1.2. Social Security for the Urban Poor in India:

Social security essentially means security from socially acknowledged detrimental conditions such as old age, poverty, unemployment and other problems. It can be also termed as ‘basic security’ since it also ensures access to basic facilities such as food, clothing, education and medical care. This concept was officially introduced by ILO in 1919 and stress on the need and protection of workers against diseases, injuries arising out of their employment, old age and other adverse conditions. Although ‘social security’ is not a Fundamental Right in India, but it gets its strength from the ‘Directive Principles of State Policy’ mentioned in Article 41, 42 and 47. Unfortunately, in our country only 40 to 45 million workers out of the total of 458 million get the benefit from social security schemes and a large portion of workers engaged in unorganised sectors have no access to it at all. Because, they are often a scattered lot with low level of education and skill, this reduces their bargaining power and adversely affects their quality of life. Various researches and reports have addressed this issue and some of them provide critical reviews of government policies in this regard.

Unni and Uma (2001)\textsuperscript{32}, have also worked on social protection which includes basic security, such as income, food, health, shelter and economic security including income generating productive work. They have discussed the causes of insecurity of workers working in informal sector and have identified the core needs of
social protection like developing instruments and visualising the institutional mechanism to address those needs. Micro level analysis shows that insecurities of informal workers arise not only from random shocks, but also from the structural features of the households and the nature of work.

Saravanan (2002) has stated that the beedi manufacturing industry provides employment opportunities, particularly to the women in Tamil Nadu. The Government has enacted several acts and implemented various kinds of social security schemes including minimum wage, holidays, medical facilities, scholarship for their children, housing loans, allowances, bonus for beedi workers in general and women in particular. Most of the female workers also do not have direct contact with the agents. The authors have given appropriate emphasis for social security policy initiatives for the women beedi workers.

Dev.M.S (2002) has studied the ‘growth-mediated’ and ‘support led’ social security arrangements for the unorganised sector in India. On ‘support led programme’, the study has concentrated on preventive and protective schemes for the unorganised sector. The growth promoting policies provide social security to women working in the unorganised sector. The author has reviewed the ‘support led’ social security programme for the workers working in the unorganised sector at the state level as well as at the all India level. He has also pointed out that the substantial section of the society that does not have a resource power to enter into market operations can get benefits from these schemes. The government has the responsibility of providing social security for a large section of the unorganised workers and other vulnerable groups who are out of the market. There is an urgent need for public-private partnership in providing social and economic security to the unorganised workers.

Bhowmik (2006), in his article has discussed about the social security schemes available for the street vendors in India. Network of self-help groups (SHGs) have promoted SEWA to start a co-operative bank run exclusively by women and catering only to women workers. This has enabled street vendors’ access to institutional credit through their micro credit groups. National Alliance of Street Vendors of India has adopted a scheme that gives multiple benefits to its members. The scheme includes insurance coverage on health, house and property, deaths (accidental and natural) and coverage for permanent and partial disability. This
scheme was initiated by some of its member organisation in Bihar. The author has also expressed the need of legalising street vendors by issuing licenses to them. The municipal authorities would thus be able to keep a check on the number of vendors and could also earn revenue through license fees and other charges. Moreover, the author is also of the opinion that unionisation is necessary for organising social security scheme and for protecting workers rights.

The article published in ‘The Hindu’ on 16th December 2010, has provided a report on “labour conference and protection of workers right” held in New Delhi. The conference addressed that there is a huge deficit in the coverage of the unorganised sector workers in matters of labour protection and social security. The government has failed to provide social security to the all sections of the society. ‘The Unorganised Sector Social Security Act’ came into force in December, 2008. The basic idea behind this Act is that all those workers who are not entitled to a provident fund, should be able to avail themselves of the benefits similar to that of the organised sector. When it was passed, hundreds of workers pinned hopes on it for getting pensions, medical insurance, maternity benefits and other help. However even after more than two years of the enactment, the Act remained on paper and pen only.

1.4.1.3. Employment and Living Conditions of the Urban Poor in India:

Urban poverty has a close connection with migration, because in India, rural to urban migration means transfer of poverty from rural to urban environment. Urban poverty has many facets which have been discussed in detail through the following literature.

Tiwari, (1998)\textsuperscript{36} has reviewed the Bicycle Master Plan for Delhi. Generally lower income group use bicycles for daily commuting because they cannot afford to pay much for transportation. According to the author; mainly motorised vehicles are the main cause of environmental pollution. The author points out that in most of the European countries people use bicycles for short distance travel especially in the environmental friendly states like Holland, Denmark and West Germany. However, rickshaws and cycles are the most neglected sections of non motorised transportation in India. The study points out that urban congestion is caused primarily by the motorised traffic on Delhi’s roads and this can be solved by physical segregation of the different modes of transportation.
Kishwar (2001), in the article entitled “How the license quota raj impacts the urban poor” has firmly criticised the rickshaw licensing policy. According to the scholar, cycle rickshaws provide a much needed and valuable public service, especially for the low income groups or for the common man in our cities. According to the Commissioner-of-Traffic Police (2008), there are about ten lakh rickshaw pullers in Delhi. The rickshaw licensing policy was first formalised in 1960. Initially, six hundred rickshaw pullers had been given license. Thus the MCD has had to review the sanctioned quota every few years. In 1998, the MCD was compelled to raise the quota of sanctioned rickshaws to 99,000 because of the persistent demands of rickshaw operators, but only 73,000 licenses have been issued. After this, MCD has stopped issuing licenses altogether, even though the existing insufficient quota is not yet filled. The author has firmly protested against the tortures and harassments faced by the rickshaw pullers and has boldly criticised the police atrocities against these poor migrants. Rickshaw confiscation and crushing create adverse impact on the livelihoods of these people. The author runs a high profile NGO well known as ‘Manushi’ which is working on the plight of rickshaw pullers and street vendors. The article has been based on the LOK SUNWAYL of street vendors and rickshaw operators.

Mitra.S (2003) has attempted to examine the current and potential measures that can be used to regulate the road transport sector with the specific objective of removing congestion and improving the mobility of traffic. He has also discussed about the formal and informal transportation system. The author is suggestive of the metropolis being divided into ‘green’, ‘amber’ and ‘red zones’ signifying free access; secondary access and prohibited access for the cycle rickshaws. He also suggests that NGO’s should act as intermediaries between rickshaw pullers and the MCD authorities for the purpose of registration.

Gupta and Mitra (2002) have found that the employment structure of the migrant slum dwellers in Delhi was largely dominated by informal tertiary sector activities. They suggest that with the rise of the period of stay, migrants are able to improve their standard of living. Results from econometric analysis tend to support the hypothesis that with experience migrants moves from low productive jobs to high productive jobs. However, it has been found that short distance migrants are less
concerned about high income jobs in the beginning and continue their job search while pursuing work in the informal or unorganised sector.

Bhowmik (2003) in his paper have highlighted the National Policy on Street Vendors. Street vendors across several Indian cities have generally been regarded as a nuisance. Their presence has been seen as inimical to urban development. However, the range of goods and services they provide renders them useful to other sections of the urban poor and thus they form an important segment of the informal economy. The National Policy on Street Vendors argues that the needs of this section are vital for the purpose of urban planning. Regulation of vendors and hawking zones and granting vendors a voice in civic administration needs to become a definite element of urban development policy.

Kishwar (2003), has discussed about the importance of rickshaw pullers for urban community in the light of the ban imposed by Delhi Government on the rickshaw pullers. Rickshaw pulling is an important activity since a large part of the city’s goods has to be transported from the wholesale and retail markets to customers through pedal or trolley rickshaws. Delhi is one among the most polluted cities in the world, and in such a situation, the Government’s ban on non-polluting vehicles like cycle rickshaws is suicidal. The author also points out that if the city’s administration succeeds in banning the use of cycle rickshaws, then what kind of measure would they take in future regarding the lakhs of people using private bicycles?

Mitra (2004) has based his study on a micro-survey of around 800 slum households in Delhi. The author has discussed the role of networking in accessing jobs in the urban labour market. She has identified three types of networks that operate through kinship bonds, caste and ethnicity bonds, and formal channels like NGOs and employment exchange. The study is based on multinomial logistic model. The author has explored the differentials in the nature of economic activities performed in different parts of the city and factors like networking as large number of persons are found to reside near the contact persons and the work place that make the urban labour market highly segmented. The author also states that uniform policy for clusters in different zones may not be able to tackle the problem of slum dwellers in the city effectively.
In the article by Kishwar (2006) the perspectives of two NGOs regarding the liberalised regime for street vendors has been presented. The article contains the information of the action plan submitted to the Government by the NGOs Manushi and SEWA. If this action plan is accepted, Delhi could be the first city to become a model of a ‘people-friendly’ global city, which gives due respect to the requirements of all sections and categories of its residents or citizens. The Action plan envisages the following steps: Questions to be placed in the Census that will include information on street vendors; setting up of a task force for implementation of the National Policy on street vendors; creation of enabling conditions for authorisation and monitoring of vendors; designing of model vendor markets; framing of rights and duties and issuing I-cards; registration of new vendors and designing of pilot projects in each zone.

National Academy for Training and Research in Social Security (2007), one of the mandates of NATRSS (National Academy for Training and Research in Social Security) is to conduct research on all facts of social security including micro and macro level policy and implementation issues. Keeping in view the above mandate, the NATRSS has conducted a study on social security scheme for rickshaw pullers in Delhi in 2007 which was sponsored by the Ministry of Labour and Employment, Government of India. The Survey showed that most of the unlicensed rickshaws are also being operated by thekadars or contractors and actual number of rickshaw pullers is much higher than the demand for their services. This survey shows that many rickshaw pullers are not registered or placed under the security schemes due to the informal nature of their business. They have no financial resources to purchase rickshaws. There is also no active organisation or association to take up their cause.

1.4.1.4. Non-Motorised Transport and Rickshaw Pullers–World Review:

Begum and Sen (2004) have conducted a primary survey on 402 rickshaw pullers in the city of Dhaka in Bangladesh. According to the scholars, rickshaw pullers migrate mostly from those pockets of Bangladesh which are poverty stricken. Ninety percent of rickshaw pullers migrate to the city straight from the villages. The occupational background of rickshaw pullers, who are mostly engaged as casual labourers, marginal farmers, and petty businessmen prior to migration, have been also dealt with in this article. The working and living environment of rickshaw pullers,
their well being and various necessities have also been discussed. Morbidity pattern, prevalence of diseases, treatment seeking behaviour, relationship of ill health with poverty have been also presented and discussed by the authors.

Hodgkinson and Sandie (2004) have presented the problem of urbanisation in Bangladesh, characteristics and advantages of rickshaw as a form of Non Motorised Transport. The scholars have discussed about a proposal of sustainable transportation and its implementation across the country. According to them, 70 percent of Dhaka's population are concentrated in 20 percent of its surface area. Only the cities of Bombay and Mexico City have more slum dwellers than Dhaka. The scholars also reflect on the crucial links between transportation system and poverty. Non motorised transport, according to them offers significant benefits to the low income people. Moreover, the importance of rickshaws also lies in the fact that they are effective in congested areas, do not result in road accidents or pollution; particularly noise pollution is significantly reduced and accessibility is enhanced.

Bhowmik (2005) has conducted a research done on street vendors in Asia (Bangladesh, Sri Lanka, Bangkok, Cambodia, Seoul, Singapore, Malaysia, Manila and Hanoi), with the aim of assessing the magnitude of street vending in different countries and the composition of the vendors. The author has discussed that after 1991 when the policies related to structural adjustment and liberalisation were introduced in India, the traditional industries and cities such as Mumbai, Ahmedabad and Kolkata saw a decline in the formal sector as large factories closed down and started outsourcing to the small scale industries. A section of the workers in the formal sector or their wives took to street vending after they lost their jobs. Malaysia seems to be the only country which was sincere in implementing its policies towards licensing the street vendors and provided them with facilities for conducting their trade. The government also provided them credit facilities to carry out their activities.

Efroymson (2005) has highlighted that rickshaw banning creates an adverse impact on the livelihood of rickshaw pullers. In the city of Dhaka rickshaws are out of bound for a particular part of the city extending from Mirpur Road to Russell Square and Azimpur area. Due to ban on rickshaws in this area the average monthly income of the rickshaw pullers has declined sharply to 32 percent. The author also raised some critical questions in favour of rickshaws such as does rickshaw take up too much space? Do rickshaws move very slowly? What about pollution? Did the banning
help the poor? Finally the scholar has given some suggestions for the improvement of transport system of Dhaka like such as continuation of the usage of rickshaws as mode of transport.

M. Beri, and D. Efroyonson, (2005)\textsuperscript{49} have discussed about the Rickshaw ban in Dhaka City. The article provides the importance of non-motorised transport including rickshaws as a mode of transport in Dhaka city. According to them rickshaws have been considered as eco-friendly, energy efficient, economically viable mode requiring significantly less road space than other motorised vehicles in Dhaka. They have also discussed about the rickshaw ban in some parts of the city and its impact on the rickshaw puller’s income. Rickshaw pullers income have decreased due to the ban imposed on rickshaws in some places in Dhaka city. According to them rickshaws should not be considered as a cause of traffic congestion because they require less space than the motorised vehicles such as cars. According to them, rickshaw pulling should not be considered as an inhuman profession as it depends on the economic condition of the poor people as well as that of the concerned city depends on rickshaw pulling.

Rashid (2005)\textsuperscript{50} in his study has revealed that the rickshaw-pullers of Dhaka city are very poor and most of them have migrated to Dhaka from different parts of the country, majority of them are from the neighboring districts. These people work hard for more than 10 hours in a day on an average, but still have no scope to overcome their poverty stricken situation. The study has revealed that they are rather compelled to opt for this livelihood as there are no other jobs available for them. Most of them have shown their willingness to give up this occupation as soon as they get any alternative job. Many of them have shown an interest for small business enterprises for which micro credit programmes can be introduced.

Deshingkar and Farrington (2006)\textsuperscript{51} in their paper have reported that out migration of rural labour has a role in poverty reduction. They have found that in agriculture wages have remained relatively low, a few rural labour households have been able to break out of poverty through household diversification strategies that use the combination of two or more of the following: accessing regular work inside or outside the village, leasing of land being given by a patron for cultivation, and starting up a small business enterprise.
Timothy Sowula (2007)\textsuperscript{52} has discussed that many marginalised groups in Bangladesh, like indigenous people, farmers are affected by the Monga famines and HIV/AIDS, but they compromise a minority in a country of over 145 million population. This article has highlighted the importance of rickshaws; the need to put forward policies focused on rickshaw pullers as an extremely marginalised group, and have provided with various ways to improve their socio-economic condition so that they are able to live a dignified life.

Replogle (1991)\textsuperscript{53} has discussed about the current use of non motorised vehicles (NMVs) in Asian cities, their characteristics, facilities provided to them and policies that influence their use. This paper has brought to the fore that non motorised (NMV) vehicles should be encouraged for urban transport and the author highlights the obstacles to the development of NMVs and identifies desirable steps that might be taken to develop a non motorised transport strategy for a city or region, in Asia and other parts of the world. NMVs offer low cost private transport, that is pollution free, uses renewable energy, and emphasise the use of labour rather than capital for mobility, and are well suited for short trips in most cities regardless of income, they also provide an alternative to motorised transport for many short trips.

Whitelegg and Williams (2008)\textsuperscript{54} deal with the importance of non motorised transport with particular reference to developing countries. They have discussed about the links between environmental, non-motorised transport and poverty issues. This paper highlights the significance of non motorised transport in terms of pollution reduction; income generation or maintenance of the poor and providing transport for vulnerable groups within the general context of sustainable development. This paper also mentions about the rickshaws in Calcutta. The author is of the opinion that if rickshaws disappear from Calcutta’s streets there would not only be significant increase in air pollution but also a substantial increase in the number of people living below the poverty line.

Rahman, and Bunker (2008)\textsuperscript{55} have discussed about the non motorised public transport (NMPT), especially the three wheeler cycle rickshaw that have been viewed as a major transport planning problem in many developing cities. The authors provide a critical review of the policy measures that restrict or eliminate non motorised vehicles, especially NMPTs, from urban arterials and other feeder networks.
and many of them have already been implemented in the cities like Delhi, Bangkok, Jakarta, Manila, Surabaya, Beijing and Bogotá.

1.4.2. Macro-Level Studies on Migration

1.4.2.1. Definitions and Terminologies Used In Migration Studies:

This section provides the concepts and terminologies used in migration studies. The movement of population in space is a multifarious phenomenon in which the distance of moves may vary from a few yards to many miles, and in which the duration of stay at destination may vary from a few hours to many years. A considerable part of this movement is incidental to carrying on the activities of daily life i.e. commuting to and from the place of work, shopping, visiting, travel for business and pleasure, to name only a few. These types of mobility are of interest in their own right, and statistics concerning them are useful for many analytical purposes. They are, however, to be distinguished from the type of mobility that involves a sustained or permanent sojourn in the place of destination. It is this latter type of mobility that is envisaged by the concept, migration. The essential character of migration thus involves a change in place of abode, or place of “usual” residence - a taking-up of life in a new or different place.56

A worldwide phenomenon called ‘migration’ is defined as the relatively permanent movement of persons over a significant distance. The United Nations defines migration as a movement for one year or more as ‘permanent,’ while a stay for a shorter period is classified as a visit. Migration is a term which encompasses a wide range of patterns. From the geographical point of view it may involve the movement of people from one locality to another within the country or from one country to another.

Migration is then operationally defined as a change of residence from one civil division to another, and the volume of migration is to a considerable degree a function of the size of areas chosen for compilation.

The United Nations defines migration as: “A move from one migration defining area to another (or a move of some specified minimum distance) that was made during a given migration interval and that involved a change of residence.” 57
According to the *Census of India*, if a person was born at a place other than the place of enumeration, the movement of the person will be called as migration. Thus, a person who had migrated elsewhere for all practical purposes and happened to be at the place of birth during the period of enumeration, will be treated as a non-migrant by the Census.\(^{58}\)

A **migrant** is a person who has changed his usual place of residence from one migration defining area to another (or who moved some specified minimum distance) at least during the migration interval. Persons who moved during the interval and died before its end should strictly speaking, be counted as migrants and their moves should be counted as migration. Every move is an out-migration with respect to the area of origin and an in-migration with respect to the area of arrival.\(^{59}\) An **in-migrant** is thus a person who enters a migration defining area by crossing its boundary from some point outside the area, but within the same country. He is to be distinguished from an **immigrant** who is an international migrant entering the area from a place outside the country. An **out-migrant** is a person who departs from a migration defining area by crossing its boundary to a point outside it, but within the same country. He is to be distinguished from an **emigrant** who is an international migrant, departing to another country by crossing an international boundary.

For migration, the area (or place) from which a move is made is the area of origin. For migrants, the area of origin may be either (a) the area of residence at the beginning of the migration interval, or (b) the area of residence from which the last move was made. The particular way in which the area of origin is defined will depend upon the nature of information available to the analyst.\(^{60}\)

For migration, the area in which a move terminates is the area of destination. For migrants, the area of destination is the area of residence at the end of migration interval. Among the questions which have a direct bearing on migration, that on **place of birth** is perhaps the most widely used. This question is among those given first priority in United Nations' rounds of censuses. The place of birth may be recorded as the village, town or district in which the person was born, or perhaps a larger unit such as state, province or governorate.\(^{61}\) In India, the data on Place of Birth is provided at the State as well as District level.

One of the limitations of data on the place of birth is that, for persons who have migrated more than once, the place of birth gives no indications of residence at
that time of last move. In order to get information on direct moves it is necessary to ask for place of last residence rather than for birth place.\textsuperscript{62}

Migration can be of three types \textit{on the basis of distance}: (a) Short Distance (b) Medium Distance, and (c) Long Distance. In Census of India, it is represented as: (a) Intra district Migration (b) Inter- district Migration (c) Intra-state Migration (d) Inter-state Migration, and (e) International Migration.

\textit{Migration stream} is a group of migrants having a common origin and destination during a given migration period. Although strictly speaking a stream represents the movement between two geographic areas, by analogy, it may also be used to describe the movement between two types of residence areas, such as from non-metropolitan to metropolitan areas, where neither the origin nor the destination represents the contiguous territory.\textsuperscript{63} The movement in the opposite direction to a stream is called its counter stream. On the basis of streams of migration it can be divided into four major parts with reference to India:

1. Rural – Urban
2. Urban – Urban
3. Rural – Rural
4. Rural to Urban

Migration can also be classified on the basis of occupational selectivity, age selectivity, gender selectivity, educational selectivity and on many other factors.

According to Multilingual Demographic Dictionary, migration is a form of spatial mobility, which involves change in the usual place of residence and implies movement across an administrative boundary. The change in the usual place of residence can take place either on a permanent or semi permanent or on temporary basis. However, there is no standard source of data either internal or international.\textsuperscript{64} A recent survey shows that the Census that census is the largest source of information at the cross-country level.\textsuperscript{65}

Migration can be measured in number of ways with two most common forms of data being events and transitions. The former is normally associated with Population Registers that records the individual moves while the latter is generally derived from Censuses the compare place of residence at two points of time. Population Registers count the migrations, while the Census counts the migrants.\textsuperscript{66}
Migrants are not required to be registered in India either at the place of origin or at the place of destination, while in China, migrants are required to register themselves with the local authority. In the absence of registration of migrants, Census and National Sample Survey (NSS) are the two main sources of migration data in India.

In India, population Census has remained the basic source of information on internal migration. It however, covers only limited aspects of demographic and socio-economic factors of migrants and provides some information on causes of migration. Because of the problem of constant changes in the boundaries of the administrative units in India, the available data often pose difficulties for comparison. This may be the main reason for the lack of sufficient historical studies on internal migration.

1.4.2.2. Review of Migration Theories, Models and Definitions:

Many approaches developed in the past for analysing the factors of migration are in existence. This section provides a brief account of these approaches. Although, the genesis of migration as a significant development can be traced to the closing days of the Mercantilist era during the latter half of the 18th century, systematic analysis of migration is of recent origin. The Mercantilists who dominated the economic thinking for over a century had preached the utility of poverty and frowned upon migration of all categories. The Classical Economist who succeeded them did not favour external migration either. Further, they did not formulate any theory on migration though different patterns of migration took shape during the period of their intellectual domination. They were rather preoccupied with free trade and competition, unfettered by state interference. The implications of internal mobility on the factors of production as a concomitant of competition were the only themes which they could project as an analytical tool for migration. Even the so called free mobility was confined to the members within each stratum of society and not between “non competing groups”. Nevertheless, some among them advocated Colonialism as a remedy to the impending law of the diminishing returns. It became a handy weapon in the hands of Marx for his attack on Capitalism. The Neo-classical economists too did not formulate any theory on migration.

Ravenstein (1880s) was the first who started the ball rolling by providing a theoretical analysis of migration for the first time. According to him migration
between two points will inversely be related to the distance and migrants will move by stages from nearby towns to distant lands. Movement is mainly towards centres of commerce and trade which accelerates overtime as a result of “the increase in the means of locomotion”. Ravenstein mentioned that each stream of migration would produce a counter stream. The propensity to migrate would be more in case of inhabitants of rural areas than with those of towns. Among the different motives, the inherent desire in men “to better themselves in material respects” is the most important in influencing the decision to migrate.

W.J. Reilly had already postulated in 1909 (The Gravity Model) which states that the movement of persons between two urban centres would be proportional to the product of their population and inversely proportional to the square of the distance between them.\(^7\)

\[
M_I = K \times \frac{P_1 \times P_2}{d}
\]

Where \(M_I\) is the Migration Index, \(K\) is the proportionality constant, \(P_1\) is the population size of the settlement 1, \(P_2\) is the population size of settlement 2 and \(d\) is the distance between the two settlements.

Several attempts have been made in migration research regarding a specific population size and distance relationship. In 1940, George K. Zipf regarded the movement of goods, information and people within the social system as an expression of his ‘Principle of Least Effort’, whereby inter-community movement is such as to minimize the total work of the system. According to Zipf, the magnitude of migration between the two cities is the function of distance separating them, greater distance required greater effort to overcome the hurdles, and hence reduced the number of migrants.\(^7\)

It was in 1940, that S.A. Stouffer introduced his Theory of intervening opportunities in an attempt to improve upon Zipf’s Principle of Least Effort. According to him, linear distance was less important a determinant of migration than the nature of space, the distance therefore should be considered in socio-economic rather than geometric terms. Thus, distance per se was not as important as the number of opportunities available. His basic hypotheses was that the number of persons moving for a given distance was directly proportional to the number of opportunities at that distance and inversely proportional to the number of intervening opportunities
i.e. the number of opportunities offered by places located in between the two places in question. It may be expressed as under:

Where $Y$ is the expected number of migrants from a place to a particular concentric zone or distance band around the place, $X^*$ is the number of opportunities within this band and $X$ is the number of opportunities intervening between origin and mid-way into the band in question and $K$ is the proportionality constant.

The famous Sociologist Everett Lee propounded another theory of migration in 1965. He generalized four factors that influence the decisions of a migrant. The factors are:

1. Factors operating in the area of origin.
2. Factors operating at the destination.
3. Factors that act as intervening obstacles.
4. Personal factors those are specific to individuals.

The potential migrant is influenced by positive and negative factors associated with both the place of origin and the possible destination. Lee suggested that the potential migrant weighs the known and expected advantages and disadvantages of the destination in comparison with the situation at the place of origin. For a move to result, the attraction of the destination must be great enough to outweigh the advantages of staying and to overcome any intervening obstacles, such as distance, cost of relocation, and the disruption of established pattern of life. Personal factors also affect the evaluation process. For example, a family with children in school, college or a couple without children, may not consider the quality of public schools, colleges and universities at either the point of origin or destination, but these educational institutions may be an important factor in the balance sheet of a family with children who are in the education stage.

Fig.1.1 Origin and Destination Factors and Intervening Obstacles in Migration

(Source: Lee 1966)
Zelinsky (1971) proposed that changes in migration behaviour have been paralleled by the stages of the demographic transition model. In the first stage of transition mobility, when population growth was negligible because of high death rates that canceled out high birth rates, little migration occurred at any scale. In the second stage, when population increased rapidly because the death rate dropped while the birth rate remained high was a time of great migration. Mounting population pressure on the land, better transportation system, and a widening sphere of exploration and trade, and bringing in knowledge from other places gave rise in the past to increased population movements at all scales. Zelinsky’s third stage is transitional, matching the third stage of the demographic transition model when the birth rate began to fall and population growth declined. During this stage international migration lessened and agricultural frontiers closed. But at the same time, rural to urban migration and movements within natural boundaries and between cities became more important. Finally, during the fourth and fifth stages, when low birth and death rates brought little population growth to the newly developed society, migration was predominantly inter-urban and intra-urban. The rural to urban movement virtually ceased because the low percentage of farming population, and hence potential movers was very low.76

The first comprehensive theory of development related to the process of rural-urban labour transfer was the one developed by W.A. Lewis (1954)77 and later extended by John Fei and Gustav Ranis78. The combined theory is known as L.F.R. Model. It is based on a concept of dual economy, comprising a subsistence agricultural sector (rural) characterized by unemployment and under employment and a modern industrial sector (urban) characterised by full employment where capitalists reinvest the full amount of their profit. This concept considers migration as an equilibrium mechanism, which through transfer of labour from the traditional labour surplus sector to modern labour deficient sector, eventually brings about wage equality in the two sectors. The marginal productivity of labour in the subsistence sector is zero or very low and the wages paid to the workers are equal to their cost of subsistence, so wage rates exceeds marginal products. Contrary to this, wage rates in the modern urban sector are much higher mainly due to the high productivity oriented activities. Migration of workers from rural to urban areas is caused by differences in these wage rates. This in turn increases the industrial production and profits as well as
possibilities of reinvestment, which in turn increases the demand for labour in the subsistence sector. This process will continue as long as surplus labour exists in rural areas.

In spite of the simplicity of theory, many scholars have difference of opinions from the viewpoint of analysing the causes and consequences of migration in developing countries. Firstly, migration is not induced solely by unemployment or under employment in the rural areas although there is no doubt that this is an important factor influencing the decision to migrate. Secondly, the assumption of zero marginal productivity in agriculture has not been confirmed empirically. Thirdly, the rate of growth of modern industrial sector has been lately too low in many developing countries to permit such development as formulated by Lewis-Fei-Ranis.

Sjaastad (1962) postulates in his theory that decision to migrate is an investment decision which incorporates costs and returns distributed over time. He says that the returns are divided into financial and non-financial components. Non-financial returns include changes in “psychic benefit” as a result of location preferences. In the same way, cost includes cost of transport of disposal movables and immovable property and shift of a residence. There are psychic costs too like leaving familiar environment, giving up one’s language and culture, adopting new habits and social customs and so on. He assumes that in deciding to move, migrants tend to maximize their natural life span incomes and they have at least a range idea of what their life span income streams would be in the present place of residence as well as in the destination area and of the cost involved in migration.

Todaro’s (1976) model of rural urban migration assumes that migration is based primarily on private rationale of economic calculations for the individual migrants despite the existence of high urban unemployment. He postulates that migration proceeds in response to urban-rural differences in expected rather than actual earnings. Expected earnings are measured by “the differences in real income between rural and urban job opportunities” and “the probability of a new migrant obtaining an urban job”. Todaro’s (1985) model has four basic characteristics:

1) Migration is stimulated primarily by rational economic consideration of relative benefits and costs, mostly financial but also psychological.
2) Decision to migrate depends on “expected” rather than actual urban rural real wage differential. Expected gain on differential is determined by the interaction of two variables, the actual urban rural wage differential and probability of successfully obtaining employment in the urban sector.

3) The Probability of obtaining an urban job is inversely related to the urban unemployment rate.

4) Migration rates in excess of urban job opportunity growth rates are not only possible but rational and even likely in the face wide urban rural expected income differentials.  

Harris and Todaro in the article “Migration, Unemployment and Development: A Two Sector Analysis” (1970) presented a model on rural urban migration in underdeveloped countries. The main idea of the Harris – Todaro model is that labour migration in underdeveloped countries is due to rural urban differences in average expected wages rather than actual wages. Migrants consider the various opportunities of employment available to them in rural and urban sectors and choose the one that maximises their expected wages from migration. The minimum urban wage is substantially higher than the rural wage. If more employment opportunities are created in the urban sector at the minimum wage, rural urban migration will increase. Expected wages are measured by the difference in real urban income and rural agricultural income and the probability of migrants getting an urban job. Infact, a migrant compares his expected income for a given time horizon in the urban sector with his prevailing average rural income and migrates if the former is more than the latter. Thus migration in the Harris – Todaro modal is viewed as the wage or income gap between the urban and rural sectors. But all migrants cannot be absorbed in the urban sector at high wages. Many fail to find a job and get employment in the informal urban sector at wages which are even lower than in the rural sector. Thus they join the queue of the underemployed or disguised unemployed in the urban sector. 

The neoclassical theories (e.g. Lewis, Ranis and Fei, Harris, Todaro and Sjaastad) have certain implicit propositions and assumptions. According to them, the migration of people is caused by differences in the wage rates that varies across
regions. Aggregate migration flows between regions are simple sums of individual moves undertaken on the basis of individual cost benefit calculations. Migration will not occur in the absence of differences in earnings and employment rates between regions and will occur until expected earnings have been equalized. Migration decisions start from disequilibrium or discontinuities between labour markets, other markets do not directly influence the decision to migrate. The way for governments to control migration flows is to regulate or influence labour markets in the sending and the receiving regions.\textsuperscript{85}

\textit{Julian Wolpert (1975)} proposed a model of migration based upon behaviour theory. A migratory pattern is a composite expression of human aspirations, needs and perceptions. Wolpert saw human mobility behaviour as one of the several means by which the individual can seek maximization of utility or well being. He suggested that migration models, should focus should be on the behaviour of individuals rather than on the characteristics of places and population. Thus he shifted his emphasis from distance and economic motives to human behaviour.\textsuperscript{86}

Different migration theories have stressed on different aspects of migration economics (wages, vacancies, and unemployment), social (social mobility, social status), environmental (residential satisfaction) among others. Despite the many different approaches to the analysis of migration there is a common consensus; all researchers seem to agree that people or households migrate to improve their situation, or, more precisely, to be better off in the new location in the future, than they would be in the old place of residence.

1.5. Gaps in Literature:

Though much research have been conducted on the socio-economic conditions of the workers engaged in the unorganised sector, but large avenues are yet to be explored. Secondary sources of data on rickshaw pullers are also meagre. Census only gives the data of migrant workers under 10 broad occupational groups, but further sub-division of migrant workers is not available. NSSO data also do not provide detailed information about the rickshaw pullers. It provides data only on employment and unemployment situation in terms three broad categories e.g. self employed, regular employed and casual labour.
Most of the literature review focus on the necessity of non-motorised transport as it is both eco-friendly and people-friendly. Some studies however have reflected on social security and legal issues of rickshaw pullers and street vendors. Studies have been done also on the living conditions and work environment of the rickshaw pullers by some researchers as well as NGOs, but researches covering their place of origin, reasons for migration to Delhi have not been discussed in detail. These people usually belong to the marginalised sections of the society and in a country like India where usually occupation is determined by one's social status and ethnicity, they are considered as the low-paid or unskilled labourers. It is under such situations that a holistic as well as in-depth study needs to be done which can try to examine the nature, behaviour and socio-cultural background of such migrant or non-migrant workers in Delhi. Thus, questions like, why these people enter into such professions? Or what forces encourage them to take up these occupations and their resultant demographic and socio-economic profile need to be addressed. Also there is a need to study their personal income and expenditure patterns and other indicators of well-being like their living and working conditions, since these have a direct bearing on their health. Focus should be given on the perceived health status, morbidity, occurrence of diseases, treatment opportunities and treatment seeking behaviour of these rickshaw pullers. A comparative study between the migrant and non-migrant rickshaw pullers also needs to be done to see the resultant differences between the two and how far they contribute in the economy and formation of groups. In this context the rural-urban linkages between the rickshaw pullers and their family and native place also needs to be examined. Apart from the study of the socio-economic characteristics of rickshaw pullers, the vast gaps and loopholes in the policies and programmes related to them and their social security needs to be scrutinized in order to have a glimpse of what is available on pen and paper and their actual implementation.

1.6. Conceptual Framework:

The vicious cycle of deprivation that compels urban poor to remain in the menial jobs like rickshaw pulling has been explained elaborately through the flow diagram of conceptual framework. The first component of the flow diagram is 'Out Migration of Youth from Rural areas' which is generated by various push-factors like 'lean season
of agriculture' when no job is available for agricultural labourers, low wage, unemployment, irregular income and landlessness. These push factors are further accentuated by natural calamities. Flood and drought are the common form of catastrophe in rural India where rainfall is highly dependent on the 'vagaries of the Monsoon'. All these factors altogether generate a large influx of rural to urban migration, where migrants are mainly unskilled and less educated. Big cities like Delhi appears to them as the 'city of aspiration' but very soon their utopian concept about the city evaporates when they find hard luck in the urban job market. Population pressure in cities creates pressure on urban infrastructure as well as job market. Formal sector requires certain skills and in the era of automation the need for unskilled workers have reduced remarkably. Therefore, most of the rural migrants find their luck in the urban informal sector.

Rickshaw pulling is one of such urban informal activity which lures many young rural migrants. Therefore, the second component shows why rural migrants are choosing rickshaw pulling as an occupation. It has been found that rickshaw pulling initially gives satisfaction to these poor migrants because it ensures a steady flow of income and job security. Rickshaw pulling saves them from abject poverty and starvation. Many people take this occupation due to peer influence. Unfortunately very soon they face the adverse side of the occupation. Hard physical work deteriorates their health. Rickshaw pulling is such an occupation where one’s earning is directly dependent on his physical fitness and availability of passengers. Therefore, these poor rickshaw pullers work for longer duration and take little rest. Dull routine leads them towards ‘risky behaviour’ like taking of addictive substances and reckless sexual enjoyment without proper precaution. Moreover, rickshaw pullers do not get proper respect from the society and often become the victim of verbal assaults by other fellow human beings. As they are less educated and unaware of their rights, police and government officials often harass them for licenses and other petty issues. Therefore, most of them try to find out other alternative jobs after a certain period of time, but unavailability of suitable jobs compels them to continue this menial job.

Therefore, a vicious cycle of deprivation and exploitation operates in such a manner which offers no escape route. Though the occupation initially rescue them from abject poverty and complete starvation but later on push them into other form of socio-economic deprivation.
Out Migration of Youth from Rural Areas
- Lean Agricultural Seasons
- Low wage / No regular income
- Unemployment
- Natural Calamities
- No Land / Small Landholdings

Influences Further Migration through Networking

Rural To Urban Migration

Creates Pressure on Urban Formal Sector

Taking Rickshaw Pulling as an Occupation
- Livelihood Security
- Better Earning
- Easy Entry, Minimum Requirement of Skills and Capital
- Peer influence

Job Availability in Informal Sector

Pressure on urban formal Sector

Adversities faced by Rickshaw Pullers
- Arduous Labour
- Hazards and Risks (Health Hazard, Occupational Hazard, Risky Behaviour)
- Atrocities (Police/ MCD officers)
- Non-Availability of Licence
- Social Stigma

Looking for Other Alternative Jobs

Need For Social Security Among Rickshaw Pullers
Burden of remittances force them to live on a meagre portion of their earning and therefore they live like the poorest of the poor segment of the society. Their grievances are further accentuated by social injustice in form of stigmatisation of menial jobs and exploitation of poor rickshaw pullers by the people in power. Though this occupation is considered as one of the modern forms of exploitation or human suffering and humanists to policy makers all are in favour of the abolishment of this job but one should remember that extinction of rickshaw pulling will not solve the problem, it will only snatch the right to livelihood from many millions of urban poor. Only proper and wilful implementation of social security schemes will help in the upliftment of these rickshaw pullers.

A reluctant attitude towards this occupation motivates policy makers as well as urban planners to draw policies against rickshaw pulling, but in reality rickshaw pulling ensures food to many hungry mouths and it does not create congestion in the city roads. As it is a rightful occupation therefore, rickshaw pullers have right to claim their space in the modern and globalised cities of India. Many government policies have been formulated in favour of workers engaged in unorganised sector, some are directly related to rickshaw pullers, but stubborn attitude of officials towards these rickshaw pullers prevent proper implementation of these policies. Easy financial support, awareness campaign and training of rickshaw pullers will no doubt rescue them from the vicious cycle of poverty and exploitation.

1.7. Objectives:

1) To identify the factors of out migration of rickshaw pullers from their place of origin to Delhi.
2) To analyse the socio-economic and demographic profile of Rickshaw pullers.
3) To identify and study the factors governing their choice of this occupation and to measure the level of job satisfaction.
4) To identify the nature of relationships of migrant rickshaw pullers with their place of origin.
5) To trace and analyse morbidity and health care seeking behaviour of rickshaw pullers.
6) To critically appraise the various policies and social security programmes and their role in improving the plight of the rickshaw pullers.

1.8. Research Questions:

1) Does the decision of rickshaw pullers to migrate exhibit a reflection of compelling/push factors at the place of their origin?
2) Do rickshaw pullers exhibit regional concentration in terms of their place of origin (source region) as well as within Delhi?
3) What kind of linkages/networking are developed between the respondents and families at the place of origin?
4) What are the specific reasons for choosing rickshaw pulling as an occupation?
5) Are there variations in socio-economic, demographic, health seeking factors and occupational morbidity among rickshaw pullers?
6) What are the work related problems and constraints faced by the rickshaw pullers in Delhi?
7) What social security schemes can be adopted towards ameliorating their conditions/deprivations of the rickshaw pullers?

1.9. Data Sources: Data have been collected from the following sources:

Secondary Sources: The following secondary sources have been used for the study:

- Census of India 2001, Migration tables, D1, D2, D3, D4, Office of The Registrar General and Census Commissioner, India.
- National Sample Survey Organization (NSSO, 61st Round Employment and Unemployment Schedule)
- Right to Information Act (RTI, 2005) (To get the Information on Bye-laws of MCD, Zone-wise License issued to the rickshaw pullers and list of Rickshaw stands). This Act has helped in collecting secondary information without which it would not have been possible to collect zone-wise information.
Limitation of secondary sources of data: Census of India does not provide detailed information on the occupation of rickshaw pulling. Data on occupational structure in the Indian Census is classified under broad groups that are further divided into nine categories. The Indian Census also does not provide detailed data on the occupation of migrants. The NSSO provides more detailed data on the non motorised transport in India, but this too has limitations. Socio-economic aspects of the workers in the Non-Motorised Transport sector has been neglected. Not only that, neither the urban local bodies (ULBs) nor any welfare organisations could provide reliable secondary data on rickshaw pullers, because their actual number is far higher than what is recorded in official documents. Therefore, this study is solely dependent on data generated from the primary survey.

Primary Sources: The survey was conducted with the help of structured questionnaires. The total number of respondents was 450. Data was collected through the interviews with the respondents (i.e. rickshaw pullers in particular). The scheduled was divided into different heads. Each division was designed in a way as to give a clear idea of the respondent’s views on individual and social issues. The divisions were made to obtain the following data:

- Socio-economic background of respondents
- Socio-Economic profile of the respondent
- Migration
- Health status of the respondent
- Social Security and Government Policies and Programmes
- Observed behavioural details
- Interviews with rickshaw owners.

Socio-demographic background of respondents: Questions were asked to the respondents related to name, religion i.e. Hindu, Muslim and other. Besides caste, family size, educational qualification, marital status, fathers occupation, rickshaw pullers’ family status and family type were also inquired.

Economic Profile of the Respondent: Questions were asked to the respondent on particulars of ownership of rickshaws, rickshaw maintenance cost, age of the vehicle, source of finance for purchasing the rickshaws, present value of it, daily rent paid for the rickshaws (in case of a hired one), desire to buy own rickshaw, status in this profession, subsidiary occupation if any, apart from rickshaw pulling, parking
place of rickshaws, years spent in rickshaw pulling, previous occupations of the respondent, reasons for entering into this occupation, hours and number of days spent in rickshaw pulling, daily and monthly income, monthly expenditure of self and family, yearly savings, remittances sent to native place, rickshaw licenses and related fees, license numbers, attitude towards rickshaw pulling (either the respondent is satisfied or not with his job), immovable and movable property owned by the rickshaw pullers and other such queries.

**Migration:** Detailed information has been collected on the migration status of the respondents. Questions were asked on ‘place of birth’, ‘place of last residence’ and ‘duration of stay in Delhi’. Those who have reported that either their ‘place of birth’ or their ‘place of last residence’ was outside Delhi, they have been considered as ‘migrant rickshaw pullers’ and others have been treated as ‘non migrant rickshaw pullers’. In case of migrant rickshaw pullers, several additional questions were asked on their place of origin (state, district, rural /urban status etc) and reasons for migration has been given special emphasis. Questions like how frequently rickshaw pullers visit their homes and how much remittances they send have been asked to trace their link to the ‘place of origin’. Family composition of migrant and non migrant rickshaw pullers highlight their demographic characteristics.

**Health Status of the Respondents:** Questions have been asked on the respondents’ health status and living environment, because these two are closely associated. Therefore, data have been gathered on the respondents’ dwelling place, family structure, per capita availability of room, accessibility to basic amenities (sanitation, potable drinking water, electricity etc), type of cooking fuel used and availability of separate kitchen, bathroom, toilet etc. Information on health remains incomplete as long as one is not collecting data on ‘diet’ or ‘food intake’. Therefore; detailed information has been collected on dietary intake. Addictions to alcohol, narcotics, tobacco and frequency of smoking have been chosen as the indicators of health. Apart from these, questions on sexual health like frequency of visits to commercial sex workers and awareness regarding HIV/AIDS, TB and Sexually Transmitted Diseases etc have also been asked.

**Awareness towards Social Security Schemes and Government Policies:** Data have been collected on awareness of the respondents about government policies, welfare schemes and social security schemes. Indicators like ‘license holding’,
'possession of ration card/ identity proof or voter cards' 'accessibility to formal credits', 'possession of bank account, insurance' and 'membership of rickshaw unions' indicate the level of awareness of the respondents towards laws and regulations. Detailed information has been collected on their experience of police atrocities, amount paid as bribes, indebtedness, sources of loans and other categories.

1.10. Methodologies:

Quantitative as well as qualitative methods have been used to show the socio-economic and demographic characteristics of the rickshaw pullers. Quantitative techniques like 'percentage distribution' 'cross tabulation' and 'logistic regression' have been applied. Pictorial depiction of data through bar and pie diagram have also been undertaken.

1.10.1 Quantitative Methods:

1.10.1.1 Cross tabulation is often used to record and analyse the relationships between two or more categorical variables. It helps to understand how two different survey items are interrelated. For example, in this study, ‘migrants’ and ‘non migrant’ rickshaw pullers are two different survey items and through the cross tabulation technique one can show their inter relationship in terms of various socio-economic and demographic parameters.

1.10.1.2 Logistic Regression: This is one that specifies a functional relationship between a basically dichotomous dependent variable and categorical or metric scaled independent variables. In fact, it is a method of multivariate analysis of the multiple regression model, designed to deal with the situation when we have only the measurement of presence or absence, occurrence or non-occurrence of some factors. Logistic regression is concerned with modeling the odds of dependent variable and the parameters for logistic are most easily interpreted if they are expressed as odds ratio. The basic form of logistic function is:

\[ P = \frac{1}{1 + e^{-z}} \]

When numerator and denominator of the right side of the above equation are multiplied by \( e^z \), the logistic function can be expressed in the following manner:

\[ p = \frac{\exp(Z)}{1 + \exp(z)} \]
Where \( z \) is the predictor variable and \( e \) is the base of natural logarithm is equal to 2.71828. The above equation is bivariate, if \( z \) is a linear function of a set of predictor variable then,

\[
Z = b_0 + b_1x_1 + b_2x_2 + \ldots + b_k x_k
\]

This expression is substituted in the formula for logistic function in the above equation.

\[
P = \frac{1}{1+e^{(b_0 + b_1x_1 + b_2x_2 + \ldots + b_k x_k)}}
\]

In this analysis, both logistic regression coefficient and odds are used. Odds ratio is the ratio of the probability of the event occurring to the probability of event not occurring.

It can be denoted as,

\[
\log \left( \frac{P}{1-P} \right) = b_0 + b_1x_1 + b_2x_2 + \ldots + b_k x_k + e
\]

Where \( p_i \) = Probability of the event occurring

\( b_0 = \) is the Constant term representing the value of \( \log \left( \frac{P}{1-P} \right) \) with the base line value of cell value \( x_1 \) to \( x_k \) in the model

\( x_1 \) to \( x_k \) = independent variables associated with the process of outmigration

\( b_1 \) to \( b_k \) = unknown regression coefficient associated with the independent \( x_1 \) to \( x_k \)

\( E \) = Error term representing unobserved variables that influences dependent variables.

The quantity of \( \left( \frac{P}{1-P} \right) \) is called the odds; hence, the quality in \( \left( \frac{P}{1-P} \right) \) is called the log odds of the digit of \( P \).

The coefficient is estimated using the method of maximum likelihood. The predictor variables should be numeric on a scale. If a predictor variable is in a
categorized variable as such and not the reference category, in such cases, the ratio
term exp (b_k) for a particular category k is the odds ratio i.e. the ratio of odds for
category k is the odds for reference category.

1.10.1.3 Chi-square Test: Chi-square test has been used to see the significance
level among the different cross tabulation variables. This test is one of the simplest
and most widely used non parametric tests in statistical techniques. This method is
used to test the correspondence between certain observed and estimated frequencies.
In generalized notation, its formula is:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where ‘O’ refers to the observed frequencies and ‘E’ refers to the expected
frequencies.

1.10.1.4 Deprivation Index: Deprivation index has been also constructed based
on background characteristics of the Rickshaw Pullers through Composite Scoring-
Scaling Method. Twenty six variables have been used to construct this index (details
in appendix no 7.3).

1.10.2 Qualitative Methods: Qualitative Methodologies has been also taken
recourse to. These include Focus group Discussion, Key Informants Interviews and
Case Stories or Studies.

1.10.2.1 Focus Group Discussion (FGD): Focus Group Discussion (FGD) is a
participatory research tool which enables on to avail data at community level while
they share and analyse their knowledge and experiences about their situations. Five
FGDs have been organised with the involvement of around 8 to 10 rickshaw pullers
each time in five survey areas. In these discussions, rickshaw pullers from all the age
groups, caste and religion have willingly participated. Young rickshaw pullers have
shown more interest in the discussion than the older ones. It has been realised during
the FGDs at different zones that the overall situation is more or less similar
everywhere, but some location specific issues vary.

Objectives: The FGDs have been conducted on the following aspects:

- Zone wise concentration of various sub groups of rickshaw pullers
- Specific reasons behind migration to Delhi and choosing rickshaw as
  an occupation.
- Zone wise income variations among rickshaw pullers.
- Specific health related issues and living environment related challenges faced by the respondents in various survey zones.
- Variations in the access to license and other related information across the five survey zones.
- Variations in the level of awareness about HIV/AIDS and Tuberculosis.

1.10.2.2 Key Informants Interviews: Key informant interviews are qualitative in-depth interviews with people who know what is going on in the community. The purpose of key informant interviews is to collect information from a wide range of people— including community leaders, professionals, or residents—who have first hand knowledge about the community. These community experts, with their particular knowledge and understanding, can provide insight on the nature of problems and give recommendations for solutions. Here the key informants are Rickshaw Owners, NGOs, Hackney Carriage Department officers of MCD, Rickshaw union Leaders.

1.10.2.3 Case Studies: Case study research excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships. Researchers have used the case study research method for many years across a variety of disciplines. Social scientists, in particular, have made wide use of this qualitative research method to examine contemporary real-life situations and provide the basis for the application of ideas and extension of methods. Researcher Robert K. Yin defines the case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used. 87
1.11. Research Design:

Research design provides the bond that holds the research project together. It structures the entire research work into various parts like ‘observation’, ‘samples’, ‘measurement’, ‘treatments or programmes’, ‘methods of assignments’ etc and under the research design all these parts work together to answer the central research question. In this study ‘descriptive’ as well as ‘explanatory’ research designs have been used to address the central research question. Though in this study explanatory research design has received special attention because it answers ‘why’ one event has occurred rather than simply dealing with ‘how’ things are happening in the field. Due to lack of proper available research work on rickshaw pullers, explanatory research design is made to investigate the minimum acquaintance about these rickshaw pullers. On the other hand, descriptive research design is made to describe the socio-economic and health conditions and major problems associated with them. Through the descriptive research design the causes pertaining to the recent situation or problems has been brought to the fore.

**Different Types of Research Designs Applied In The Thesis:**

In this study four types of research designs have been applied. They are as follows:

1) Literature Review is an essential part of academic oriented literature or thesis which aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Well structured literature review with logical flow of ideas helps to delineate short comings of the previous studies and highlights the areas to be focused.

2) Pilot survey has been conducted to test the questionnaire and to ascertain the time taken by field procedure and to determine the most effective size of the sampling units.

3) Descriptive Research Design aims to observe and describe phenomena in the field. It includes descriptive research, case studies, naturalistic observation and survey through questionnaires in the field.

4) Quasi-experimental Research Design determines causes and consequences of an event that has occurred in the field. This method is an useful tool in social sciences; it helps to bring a comparison between two groups.
5) Observational Research Design draws conclusions by comparing a subject against a control group. It is used where researchers have no control over the control group. As for example, here non-migrant rickshaw pullers can be termed as the control group, because most of them enjoy legitimacy but the migrant rickshaw pullers face more stringent conditions in Delhi. The main problem of this research design is that we have no control over the control group and therefore, it may lead to biasness.

1.12 Research Tools:

1. As this topic falls within the broad category of social science, therefore some social research tools have been applied here to collect data from the field. Secondary data analyses should be the first and foremost research tool of any social research but it has been found that there is no reliable secondary data available on the rickshaw pullers. Apart from the area under the jurisdiction of New Delhi Municipal Council and the Cantonment areas where rickshaw plying is not allowed, Delhi has 9 administrative districts and 134 municipal wards. These districts and areas are further subdivided into 12 MCD zones. Rickshaw pullers generally get permission for plying rickshaws within a particular MCD zone.
2. Scarcity of secondary data leaves only one option open to the researcher that is field survey and conducting interviews of the study group or focus group with the help of structured questionnaires. This includes observation, interview and self analysis of primary data. Structured questionnaire or researcher-administered questionnaires have been used to collect data for statistical analysis. From the 12 MCD zones, five zones have been selected geographically where rickshaw plying is allowed. These zones are Shahdra North, West Zone, Civil Line Zone, City Zone and Central Zone. These zones have different colour coding. From the each zone, 90 respondents have been selected and the total number of respondents is 450. Purposive sampling has been chosen for the primary survey.

3. Structured questionnaires have been used for interviewing the rickshaw pullers. Separate questionnaires have been prepared for individual rickshaw pullers and rickshaw contractors.

4. It is not possible to know everything about the respondents through structured questionnaires and formal interviews. Therefore, friendly and informal relationship has been developed with the respondents.

5. Case studies and Non-participatory Observation Methods are very useful to reach to the depth of the problem. The case-study method has helped to trace the background of the rickshaw pullers and the reasons that made them to adopt such occupation, far from their native place. In this regard, case studies have been conducted to get more reliable information about the rickshaw
pullers regarding their past and present. To know more details about their attitudes, behaviour, actual conditions, wages, and family environment and so on, the non-participatory observation methods had been taken also into consideration.

1.13 Sampling Framework:

<table>
<thead>
<tr>
<th>Delhi MCD Zones</th>
<th>Geographical Location</th>
<th>Surveyed Rickshaw Stand of The Rickshaw Pullers</th>
<th>Colour Code of The Rickshaw</th>
<th>Sample Size in the Respective Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shahdara North</td>
<td>East</td>
<td>Khujari Pusta, Bhajanpura, Gokulpur, Shyam Lal College, Sunder Nagar, Dilshad Garden Metro Station, Gagan Cinema, Seema Puri Bus stand, Bhopra Boarder, Guru Teg Bahdur Hospital</td>
<td>Pink</td>
<td>90</td>
</tr>
<tr>
<td>West Zone</td>
<td>West</td>
<td>Janakpuri Metro Station, Satya Petrol Pump, Tagore Garden, Vishal Cinema, Opposite, Uttam Nagar Bus Terminal, Vikaspuri, Raghubir Nagar, Pera Garhi.</td>
<td>Violet</td>
<td>90</td>
</tr>
<tr>
<td>Civil line Zone</td>
<td>North</td>
<td>Corporation office, Azad Pur Metro Station, Balak Ram Hospital, Majnu Ka Teela, Nichelson Road, T-point Jahangirpuri, Teerath Ram Hospital, Babu Jag Jeewan Ram Hospital, Batra Cinema etc</td>
<td>Green</td>
<td>90</td>
</tr>
<tr>
<td>City Zone</td>
<td>Central</td>
<td>Chandni Chowk, New Delhi and old Delhi Railway Station, Ajmeri gate, LNGP Hospital, Asaf Ali Road, Lal Quila Near Police Chowki, Khari Bawali etc</td>
<td>Red</td>
<td>90</td>
</tr>
<tr>
<td>Central zone</td>
<td>South</td>
<td>Jakir Nagar T. Point, Sukhdev Bihar Bus stand, Sahin Bagh T.Point, Tamoor Nagar, Lajpat Nagar Market, Kalindi Kunj Park, Holy Family Hospital, Near Village Jesola etc</td>
<td>White</td>
<td>90</td>
</tr>
<tr>
<td>Total Respondents</td>
<td></td>
<td>N</td>
<td></td>
<td>450</td>
</tr>
</tbody>
</table>
1.14 Chapterisation Scheme:

1. **Introduction**

The first chapter provides a general discussion about the problem. It includes the statement of problem, literature review, rationale of the study, objectives, methodologies, data base, research questions, conceptual framework, research design and chapter arrangement scheme.

2. **Background Characteristics of Rickshaw Pullers**

The second chapter is based on secondary data analysis. Though there is scarcity of secondary data on rickshaw pullers in Delhi, but other sources like NSSO and various literature provide some data in this regard. This chapter provides an overview on the origin and development of rickshaws, socio-demographic aspects of rickshaw pullers, world distribution of cycle rickshaws and various policies and laws related to rickshaw pulling with particular reference to Delhi.

3. **Socio-demographic Profile of Rickshaw Pullers**

This chapter is primarily based on the secondary sources of data which deals with the socio-demographic profile of the rickshaw pullers in Delhi. This chapter also provides a detailed account on religion, caste, age, marital status, number of family members, educational level, and social interaction of rickshaw pullers and family structure of rickshaw pullers living in Delhi in particular. These factors directly influence the living style and awareness level of the surveyed rickshaw pullers.

4. **Regional Pattern of Migrant Rickshaw Pullers and their Interlinkages and Networking**

This chapter provides the regional aspects of the rickshaw pullers in Delhi. Here an attempt has been made to study about the rickshaw pullers and their residences. Data collected on their place of birth, last residence, duration of stay in Delhi, reasons of out-migration etc. have been analysed to find out from which region most of them have come and why do they come to the city. Their residential segregation in Delhi and connection with the native places have been also studied in this chapter.
5. Economic Profile and Work Status of the Rickshaw Pullers

This chapter deals with economic data related to rickshaw pullers in Delhi. Data collected on the ownership of the vehicle, average cost and maintenance of rickshaws, sources of finance at the time of buying the vehicle, daily rent of rickshaws (if the vehicle is hired), daily duration of work, years spent in this job, monthly income, expenditure, amount of remittances sent home, savings, ownership of movable and immovable properties have been analysed here. Apart from their economic condition, attitude survey has also been conducted. Questions have been asked on their previous occupation, attitude towards rickshaw pulling and the nature of indebtedness. In a nutshell, this chapter depicts the economic conditions of the rickshaw pullers in Delhi.

6. Living Environment, Morbidity and Health Seeking Behaviour of Rickshaw Pullers

This chapter provides an analysis of primary data related to health aspects of the rickshaw pullers in Delhi. Primary data have been collected on the place of residence of rickshaw pullers; Zone-wise accommodation of rickshaw pullers; room facilities; sources of drinking water; types of toilet facility; type of fuel used for cooking purpose; food consumption and health conditions. Besides, certain information related to health like addictions to alcohol, narcotics and tobacco, attitude toward these items, morbidity, accessibility to health care facility, visit to commercial sex workers, knowledge and attitude towards HIV/AIDS and tuberculosis have also been analysed. In this chapter occupational health and related hazards faced by the rickshaw pullers in Delhi have also been analysed. Binary logistic regressions have been computed to show the relationship between these variables.

7. Public Attitude towards Rickshaw Pullers: Polices, Programmes and Social Security

This chapter is based on the review of the government policies and programmes related to rickshaw pullers and through primary survey it has been inquired that how far these policies remain in paper and pen or have they been implemented in the field. On the basis of the interviews with government officials, NGOs officials and union leaders a critical appraisal of government policies has been added to the thesis. Along with this critical note, alternative suggestions and loopholes of the present policies
have been highlighted. A deprivation index has also been constructed to gauge the condition of the rickshaw pullers on a comparative scale.

8. Summary and Conclusions

The Eighth chapter is the last, but not the least important one, because it carries the essence of the entire thesis in a nutshell. It provides the main findings of all the chapters followed by conclusions emanating from the entire study.
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