CHAPTER - 1

INTRODUCTION

Delhi being the nation’s capital offers a unique diversity of cultural and social experiences. People, living in the remotest part of the country, dream to be a part of Delhi to see the many historical monuments, museums and religious places in the one hand and modern development of the National Capital on the other hand. It is a hub of cultural activity where people can enjoy a variety of music performances, shows, dances, plays, foods, textiles and crafts from all over India. Major national and international conferences, seminars, and cultural events provide a rich platform for intellectual discussions and exchanges. With many foreigners and people from all over India residing in Delhi, the city state is truly a modern and vibrant megapolis.

Delhi exudes an irresistible charm. Footprints of history and heritage mark every street and every corner of the city state. In many ways, Delhi captures the mystique and the contradictions of India. The co-existence of the past and present, the rich and the poor, so strikingly visible, make the ancient, medieval, and colourful Delhi a singularly distinct, highly multicultural and pluralistic society. Delhi as a city-state occupies a unique geopolitical place within India. It is both the capital city of the country as well as one of India’s states. It is home to the President of India, and it houses the nationally elected Parliament and the Central Government headed by the Prime Minister. It is simultaneously home to the State Legislative Assembly and the State
Government headed by the Chief Minister. It attracts hundreds of migrants every day who make Delhi their home.

1. ABOUT THE PROBLEM:

Population explosion, especially in a developing country like India, is giving rise to urbanization in most unplanned manner. The cities are sprawling at a very fast pace and urban population is growing in leaps and bounds. At the dawn of independence, Delhi had a population of a few lacs. Today it has 140 lac people living in the progressively growing city. The growth is not following any definite pattern and any infrastructure built for the needs of the people, soon become inadequate and out dated. The urban growth swallows the agricultural land and vegetation around and the city gets converted to a concrete jungle affecting the environment, landscape and the society.

Delhi, the home to 14 million people, many more join every day, is turning out to be a clumsy and unmanageable city. Unplanned development throws out of gear any planning efforts and hence Delhi had many master plans, failing to master the problems of Delhi. Any well meaning Delhi Master Plan prepared with much efforts and care is thrown haywire, the very next day it is proposed. Probably this may go on as well as the efforts to make Delhi a livable city. Problems of traffic and water are at the centre stage and viable solutions for them are to be found out for improving the quality of the life of Delhi citizens.

Urbanization causes changes in the living conditions under which people live and work. Especially in developing countries, this often
leads to adverse living conditions. In the particular setting of urbanizing villages, there are places where chaotic urbanization and industrialization causes hardship, particularly for local residents. This is not the whole story, however. There are also many positive effects of urbanization: improving housing conditions, better amenities and services, and higher living standards. Yet these benefits are often ignored in the literature on urban environmental issues in developing countries.

Transport infrastructure which includes parking also is very inadequate in the city and it may be difficult to cope up with the ever increasing numbers of motorized vehicles added every year. The wide roads are not possible in built up areas and the flyovers become inadequate soon after their construction. The newly introduced metro may wean away the Delhi motorist from his favorite vehicle.

Water is another problem of Delhi. Delhi has no source of its own except fast depleting groundwater. A large part is obtained through neighboring states, which may fulfill their commitments in future. It may be possible to store the flood waters of Yamuna below ground. The flood water is free from any interstate agreement and most unwelcome, and a potential flood threat to riparian states.

The availability of civic amenities are so much strained and deteriorated due to ever increasing population pressure that it might further deteriorate health-hygiene and environmental conditions in NCT-Delhi. It is generally noted that there is wide variation in the availability
of civic amenities and living conditions in NCT. This aspect is to be examined in the context of spatiotemporal frameworks. The infra-regional dimensions of these inequalities are also to be ascertained to level up if found at the lowest level of the development scale.

2. ABOUT THE STUDY AREA:

Delhi or the National Capital of India amalgamates Old Delhi, New Delhi and Delhi Cantonment Area. The city presents a stark contrast of the contemporary and the conventional. On one side it presents Old Delhi- an epitome of the Mughal Grandeur with crowded and narrow lanes beneath the Jama Masjid and Red Fort. On the other hand is New Delhi- a master creation of Edwin Lutyen- a leading British architect with wide and well-planned tree-lined avenues. The other part is Delhi Cantt. That houses Head Quarters of the Defence forces of the country.

Often referred to as Delhi NCR, the umbrella includes neighboring satellite cities of Gurgaon & Faridabad in Haryana and Noida and Ghaziabad in U.P. The city has served as the Capital to several rulers of India from the Muslims to the British. Each era left its signature architectural as well as cultural impact on Delhi. The city has become home to 14 million people from all walks of life.

The comfort and warmth of Delhi City has given shelter to the refugees of the infamous partition of 1947 as well as industrialists, entrepreneurs and migrant labor from all over India. Today New Delhi is cosmopolitan city with an interesting potpourri of culture, language,
people and their customs and traditions.

The city of Delhi lies in the fertile Northern Plains of India. The main features of Delhi are the Aravalli hill ranges and the Yamuna River. The Aravalli hill ranges are covered with forest called the Ridges. The Yamuna is the main source of drinking water for the citizens of Delhi. There is a forest cover of nearly 11.5% of the total area in Delhi. Delhi’s mineral sources are primarily sand and stone which are used for construction activities. The geology of Delhi features pre-Cambrian to Quaternary formations in age. The pre Cambrian formations are represented by the Alwar Quartzites. These are overlain by the Aeolian deposits, which are further overlain by the old and the new alluvial deposits. Delhi has a semi arid climate, with hot summers, average rainfall and moderate winters. Mean monthly temperatures range from 14.3°C in January to 34.5°C in June. However, the temperatures go up to 40-45°C in summers and 4-5°C in winters. The annual precipitation is about 711 mm falling largely during the monsoon months (July-September). Dust storms are frequent during the summer months leading to an immense build up of particulate matter in the atmosphere.

OBJECTIVES:

The present study has been undertaken to evaluate and highlight the following objectives:

* To investigate the trend of urban expansion and population growth in NCT Delhi.

* To ascertain the availability of urban civic amenities at spatio-
temporal framework.

* To analyse the Socio-Economic condition of the selected urban families along with the infrastructural facilities available in the locality where they live.

* To evaluate the level of living conditions by the quality of life index and the level of Pollution.

* To compare the present day living conditions of metropolitan Delhi with those of metropolitan cities of the developed and developing countries on sample basis.

* To diagnose the problem and submit a planning to minimize the disparities in the availability of civic amenities in those units which are reported below norms. This study is to be conducted on the basis of primary data to be collected and pursued on sample families.

**REVIEW OF LITERATURE:**

Many other authors have written about areas like NCT Delhi, commenting for instance that “sub-urbanization leads to problems in the older built-up area, urban decay, economic decline, pollution, neglect of conservation, traffic congestion and inadequate housing” (Ramchandran 1989, p.47). However, very few empirical studies have been done on the relation between environmental health and urbanization.

Hardoy et al. (1992) focus on living conditions and public health. When describing many different known situations, they identify many of
the environmental problems that occur in cities and that are also found in Delhi. Studying the environmentally sensitive activities in the rural urban fringe, they also consider pollution, congestion, solid wastes, water depletion and pressure on civic amenities.

Duglass (1991) identifies several policy challenges based on circumstances he observed in Jakarta: “It is already evident that land use management within the region must be dramatically improved if the negative impacts of land use changes and conflicts are to be reduced to allow for an environmentally sustainable development process.” (ibid, p.112)

Work on the concept of quality of life grew out of the social indicators movement of the 1960s and investigators started using a social indicator approach to define what QOL meant to them. However, subsequently, many researchers adopted both subjective and objective approaches to assess QOL, available on wide literature on the subject (Echevarria-Usher, 1999; Singh, 1989, 19999; Forget and Lebel, 2001; Noronha and Nairy, 2005; Sheyki, 2006).

Sheyki (2006) made an extensive sociological study of Quality of life by examining the fertility behaviour from a multidimensional perspective.

Echevarria-Usher (1999) equated health, in its fullest and multicultural connotation, with well being or quality of life. Understanding of QOL needs exploration of relationship between various components- economic, biophysical, socio-cultural and political- to
arrive at the priority determinants of health and wellbeing (Forget and Lebel, 2001).

Noronha and Nair (2005) adopted participation process, case histories, biomedical health analysis and spatial and environmental analysis in developing a Quality of Life.

The big cities attained inordinately large population size leading to virtual collapse in the urban services and followed by basic problems in the field of housing, slum, water, infrastructure, quality of life etc. (School of Planning and Architecture, New Delhi 2009).

QOL is seen as the product of the interaction of a number of different factors – social, health, economic, and environmental conditions – which cumulatively, and often in unknown ways, interact to affect both human and social development at the level of individuals and societies. It is “the notion of human welfare (well-being) measured by social indicators rather than by “quantitative” measures of income and production.” (United Nations Glossary, 2009).

The term “Quality of Life” relates to the description and evaluation of the nature or conditions of life of people in a certain country or region (ENVIS Centre on Human Settlement- Department of Environmental Planning, SPA, New Delhi (2009). One of the most popular aggregate measures of the quality of life is the individual estimation of one’s happiness.

The debates over quality of life and of what maximizes it started from the Antiquity; Aristotle in Etica nicomahica used for the first time
the term “eudaimonia”, Greek for “happiness”. Aristotle argues that the highest good for human beings is happiness. He insists that every action performed by humans is to pursue happiness. Aristotle also argues that human action is always aimed at some end or good. This “good” may not be viewed as a good action or any good by others, but for the doer of the good action, the activity will be perceived as good and that it will bring a favorable outcome (Aristotle’s Psychology, By Prof. Daniel N. Robinson (1999). Published by Daniel N. Robinson, ISBN-10:096720660X ISBN-13:978-0967206608).

Bertrand Russell (1930) in his celebrated book the conquest of happiness elaborated the concept of happiness as a relative sense of joy that varied from one culture to another and also from one individual to another.

The ecology state is influenced by the state of air and water sources (surface and ground), the level of chemical, radioactive, heavy metal pollution, etc. The list is far from being complete, and some items may be related to more than one category (A. Bowling. Measuring Health. Open University Press, 1991).

Various studies in India, indicated that unhygienic living conditions of the residents are the major cause of skin infection and gastric disorder (NIN, 1973; Pingale, 1973; Ali, 1978-79).

HYPOTHESES:

For the fulfillment of study it is necessary to hypothesize the problems of the study. To complete the study of NCT Delhi the follow-
ing hypotheses are to be tested about the variations of Urban Civic Amenities and Living Conditions in NCT Delhi.

* Higher the density and growth rate of population, lower the level of civic amenities and the level of living.

* Higher the politico-bureau strength, higher the investment and higher the level of civic amenities and quality of life.

* Lesser the availability of amenities, lower the quality of life of the people and vice-versa.

* Lower the civic amenities and lower the quality of life, higher the pollution and higher the incidence rate of urban diseases.

* Higher the distance from central place, lower the availability of civic amenities and lower the living conditions.

* The mushrooming growth of unauthorized colonies constrain to lowest level of civic amenities and diseases.

**RESEARCH METHODOLOGY AND DATA COLLECTION:**

The study entitled “Urban civic amenities and living conditions in NCT of Delhi: A geographical analysis”, is mainly based on the data related to the various aspects of population growth, density and urban expansion have been analyzed on the basis of the census data from 1941-2001. The sample study has been conducted on the basis of multi-stage stratified random sampling method taking into account 03% of the total families of the NCT Delhi i.e. 1000 families living in urban areas.

The data of different variables have been collected from primary
and secondary sources. The primary data includes the information collected through questionnaire schedule filled personally by visiting the families. The data of urban expansion, population growth, drinking water, drainage & sewerage, education, health, urban slums and disposal of solid waste etc. have been collected from secondary sources like Census of India (2001), Economic Survey of Delhi (2006), National Health Accounts India (2001-2002), Delhi Development Report (2008), Slum Department, MCD Delhi etc.

The Quality of Life has been based on the parameter indicates changes in the urban population of the National Capital Territory of Delhi. The number and rate of growth of population are examined. The study is an analysis, based on census data from 1941-2001 indicates change in the urban population of the National Capital Territory of Delhi.

Field survey for this study has been carried out from July 2008 to June 2009 in the urban area of NCT Delhi. The data for the present study has been collected from 1000 urban household families. The research design followed for this study is exploratory and descriptive in nature and the samples were selected purposively for collection of relevant data.

This study covers the three aspects:

(a) Socio-Economic profile of the people
(b) Assessment of the quality of life
(c) Assessment of the Level of Pollution and its effect on the people, with regard to demographic features, educational status,
occupational structure, facilities available in the area and living conditions, food intake pattern, asset ownership structure and income distribution. Health status of the people has been assessed pertaining to frequency of occurrence of various diseases. The study has sought to examine the incidence of various types of common diseases as well as chronic diseases.

The Quality of Life Index (QOL) has been computed for the study with broadly the methodology adopted in a study “Quality of life index of the Mining Areas” by Saxena et al. (1998) of Centre of Mining Environment, Indian School of Mines, Dhanbad. The various parameters have been used for the assessment of quality of life in present study. The result of quality of life have been explored with the help of given score to the parameters and sub-parameters and categorized the urban area on the total score.

To measure the level of pollution, the secondary data as well as primary data has been used, secondary data carried out from the selected locations monitored by CPCB and the methodology adopted for computation of level of pollution scores to collect the primary data carried out from the respondents were asked to rate their perfections about the overall quality of their area’s air and water keeping in mind whatever elements they perceived formed constituents of a good environment. It is based on a five point semantic differential scale of 1-5, whereas 5 indicating very good and 1 indicating very poor level.

Of course, to arrive at certain diagnostic conclusions as hypothesized, a related methodology has been adopted in the study. It is
noteworthy that each chapter has also been designed according to specific methodological measures.

**LAYOUT OF CHAPTERS:**

The study entitled “Urban Civic Amenities and Living Conditions in NCT Delhi” has been designed into nine chapters which deal the separate aspects of the study.

**First chapter** covers the introductory part of the study, particularly statement of the problem, the selection and appropriation of the area to be studied under given topic, objectives, review of the literature, hypothesizes, research methodology and data collection, tabulation classification and mapping of the study.

**Second chapter** has been divided into two parts. First part discussed the geographical features especially situation, physiographic features, geology, climate and adjacent states of the study area, and second part presents the historical aspects of the area especially evolution of Delhi, Ancient Delhi, Medieval Delhi, Mughal Delhi, The Imperial Delhi and the Modern Delhi.

**Third chapter** also divided into two parts. First part presents the trend of urban expansion in Delhi from 1872 to 2001 and the second part presents the different aspects of population resources i.e. trend of population growth from 1901 to 2001, districtwise distribution and growth of population, districtwise density, natural increase, and the trend of migration in NCT Delhi from 1981 to 2001.

**Fourth chapter** is an analytical study of the urban civic amenities
with spatio temporal framework and gives the detailed account of drinking water, electricity, drainage and sewerage, transport, education and health.

**Fifth chapter** covers an illustrated account of insects who born and developed in urban environment and categorized into two parts i.e. peridomistic and domistic, characterizing life in urban slums, location and distribution of JJ clusters, urban garbage grounds and existing landfill sites for waste management in the study area.

**Sixth chapter** is based on sample study which covers the socio-economic profile and the quality of life index on the basis of various indicators i.e. housing, source of drinking water, sanitary facilities, sewerage and garbage disposal, food nutrients intake, health, educational status, type of fuel and energy used by household, transportation, assets possessed and per capita income used to evaluate the level of living conditions. The various pollutants found in the environment of the area are studied to evaluate the level of pollution in the NCT Delhi.

The **Seventh chapter** comprises the detailed study of civic amenities and living conditions of NCT Delhi with other metropolitan cities of the developed countries i.e. London and developing world i.e. Beijing on the basis of selected parameters.

The **Eighth chapter** deals about the problems of the area and it covers the part of proposed planning for NCT Delhi.

The **Ninth chapter** concludes the chapter wise findings proposals of the area and find the result of the study.
LIMITATIONS OF THE STUDY:

Though the study has been deeply conducted to analyse the urban civic amenities and living conditions in NCT Delhi, yet certain limitations have, of course, been observed which have highly restricted the scope of the study. Obviously, availability of authentic data is a pre-requisite condition to highlight and ascertain the acuteness of the problems in social science studies. The natures of data vary according to the theme of the research work. Here it is marked that the data of urban expansion and demographic aspects like trend of urban growth, trend of population growth, population density and migration are available in census handbooks, but the data of urban civic amenities i.e. drinking water, electricity, drainage and sewerage, transport, education, health has also been observed that there is a controversy in the data recorded by different organisations. However, the limitations of the study may be briefly accounted as

(i) Unavailability of authentic data of certain aspects through secondary sources particularly, Govt. and other institutional records,

(ii) Collection of data through primary survey has its own problem like many respondents are not ready to answer or give information which are quite necessary to reach at certain diagnostic conclusions in the study,

(iii) Difficulty of data collection of each family on account of large extent of area, the sample survey cannot be conducted by one
person. It can be done by a team of researcher,

(iv) Complex nature of data,

(v) Limitation of the time to complete the work,

(vi) Imperfection of assistance to researcher,

(vii) Limitations of the officials to provide some important information. However, the study has been completed deeply and thoroughly. The secondary and primary data have been used to analyse different problems. But, it is true that these limitations, more or less, determine the scope of work to a certain extent.

REFERENCES:


