

## **INTRODUCTION**

### **Study Area:**

Barasat is a district head quarter (Uttar 24 Parganas) since 1<sup>st</sup> March 1986. Physically it is 21 kms. N.E. of Calcutta and it is spread along the two sides of Jessore Road (N.H 35) and Krishnagar Road (N.H 34). It is situated in 22 43' N. latitude and 88 29' E. longitude surrounded by Barrackpore, Habra, Basirhat, Dum Dum and Madhyamgram Municipality (Fig-1). The Municipality comprises an area of 34.50 square kilometre and 1,77,147 total population in 1999. Since 1869 (1<sup>st</sup> of April ) the date of establishment of the municipality had 5 wards only but now with the addition of 4 adjacent panchayat area consists of 30 wards (Fig-2).

For a considerable period, Barasat was either a District Headquarter or a Sub-Division. By the Government order dated 30<sup>th</sup> July, 1823, the Jt. Magistrate of Bagendi in Basirhat was directed to reside in Barasat, where a separate Magistracy was created. For about 40 years Barasat continued to be one of the two fiscal divisions of the 24-Parganas. In 1834 some parts of Nadia and Jessore were transferred to the 24 Parganas. It was then divided into two divisions - Alipur and Barasat. But in February 6<sup>th</sup> 1861 it was reduced to a Sub-division (Chatterjee, M. 1999). During the end of the British rule, it was proposed to divide the district. But the plan did not materialise, though some of the works were conducted through the Addl. District Magistrate, Addl. Superintendent of Police, Addl. Session Court etc. At last through the recommendation of the Administrative Reforms Commission formed by the Left Front Govt., the district was settled to be bifurcated into two separate units with Barasat as the headquarter of Uttar 24 parganas. It was effected on 1<sup>st</sup> March, 1986.

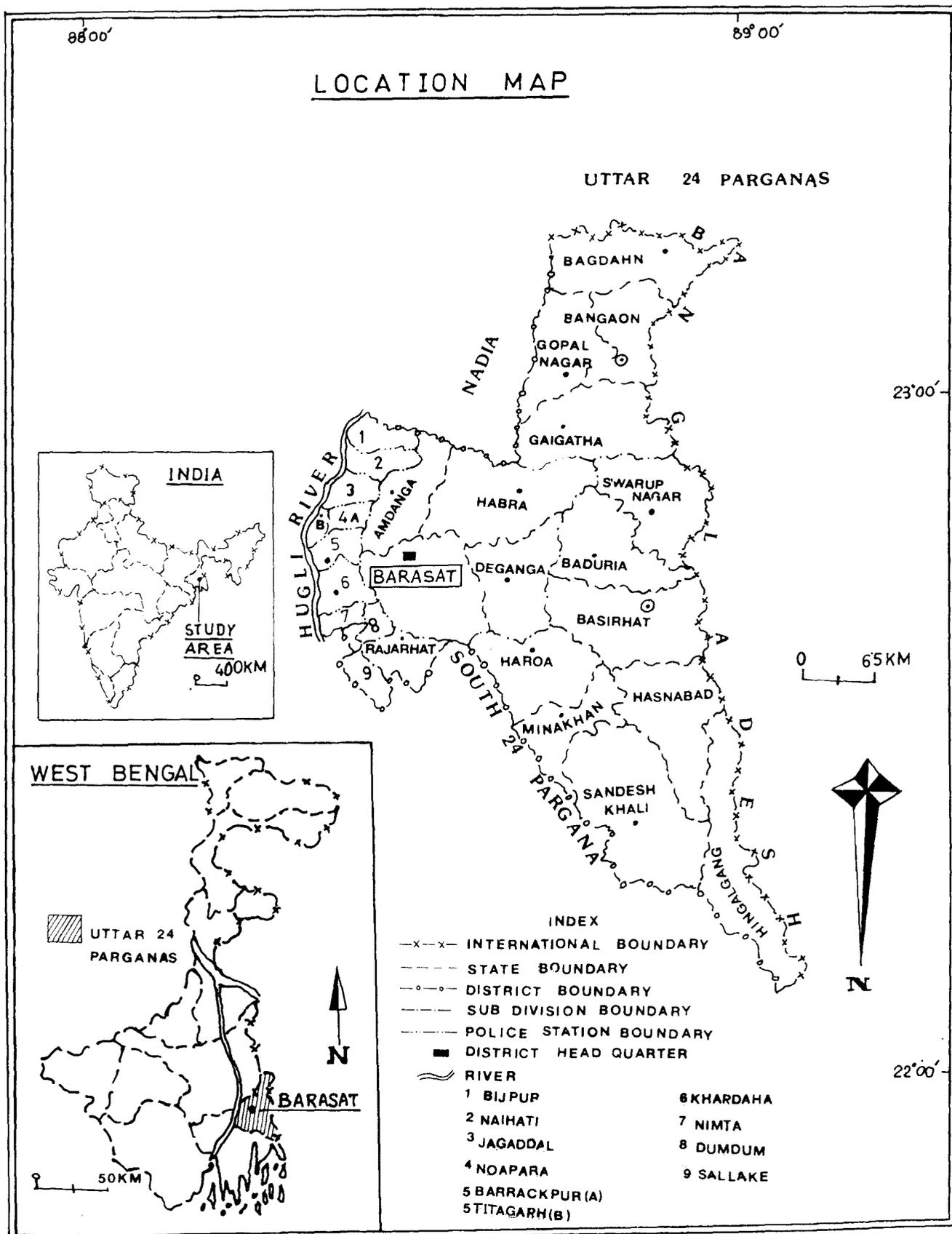


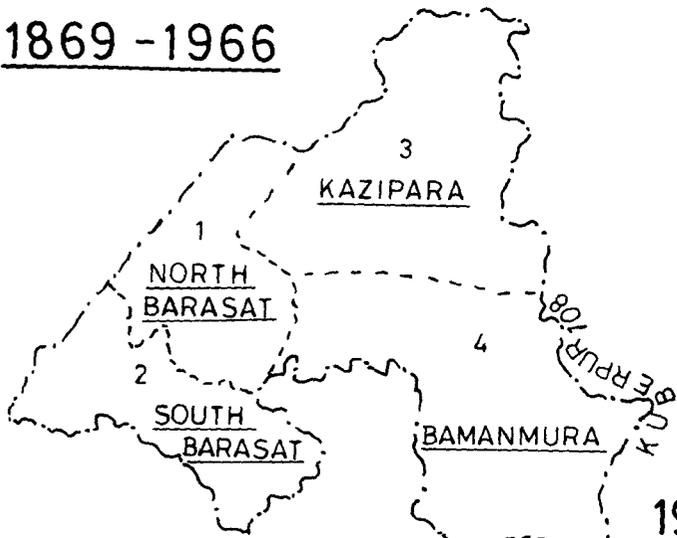
Fig-1

Studied from geographical point of view, the topography and climate do not offer any distinguishing feature. One can not mark off anything which can divide the study area on geographical lines excepting the gradual slope of the land towards the south as is shown in the river course. Physiographically, the entire study area is composed of a part of "Moribund" delta of the lower Gangetic plain. The conditions of the river provided key to this. The part is characterised by dead rivers, dead in the sense that they have lost connection with the main channel, is no longer navigable, nor is there any perennial source of water. It may be considered as a moribund delta. (Bagchi, 1944).

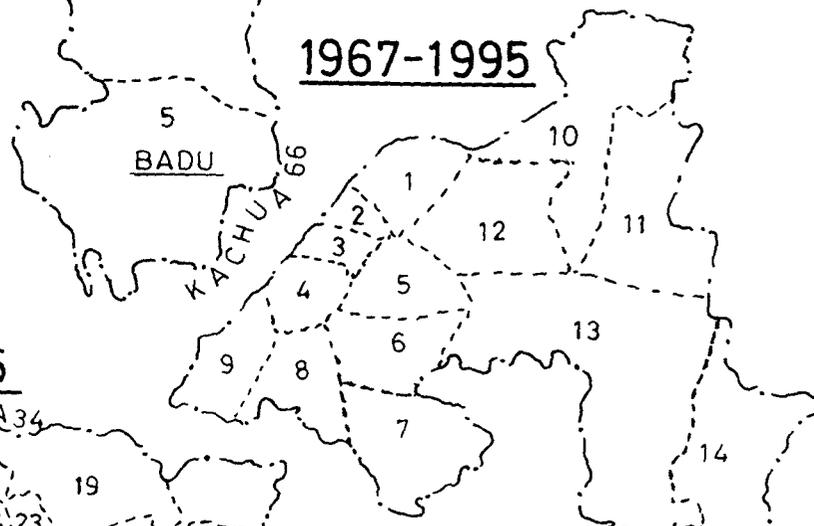
The river *Sunti* is the only river passing through Barasat Municipality and it flows towards the north and has become a mere shadow of its former size. It joins the Nowikhal finally leading to the Haroagang which is the tributary to the Kultigang and flows southwards very sluggishly until it enters in the Bhubanpur marshes. In the fifteenth century, the river Jumuna threw off a few spill channels, namely Nowi, Sunti, Nongang, etc. After the drying of Jumuna, these spill channels did not get supply of water and these channels started functioning as local drainage only. These channels now have connections with the Kultigang and a series of rivers further south. Among these channels, Nowi and Sunti run through Barasat and adjoining areas. Nowi meets the Sunti river on the southern reach beyond the study area. Kulti river is the tidal one and receives upland water through the already mentioned spill channels. Nowi basin covers the southern to northern part of the Barasat Municipal area. Nowi and Sunti at present are badly silted up (Plate 1 and 2) due to non availability of upland water (Bagchi, 1944). It has been observed that, "all lands to the north of a line joining Calcutta and Khulna (Bangladesh) proceeding due east up to the Madhumati, bounded on the west by the Bhagirathi and on the east of the Madhumati is characterised by the rivers

# BARASAT MUNICIPAL TOWN

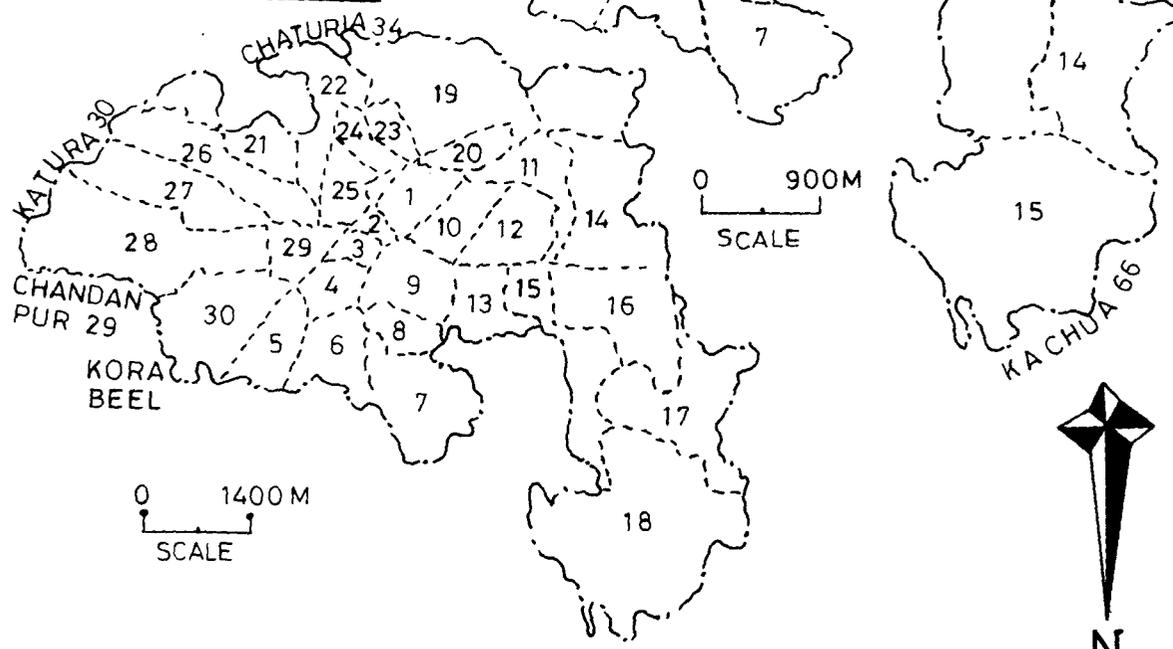
1869 - 1966



1967-1995



AFTER 1995



0 900 M  
SCALE

0 900 M  
SCALE

0 1400 M  
SCALE

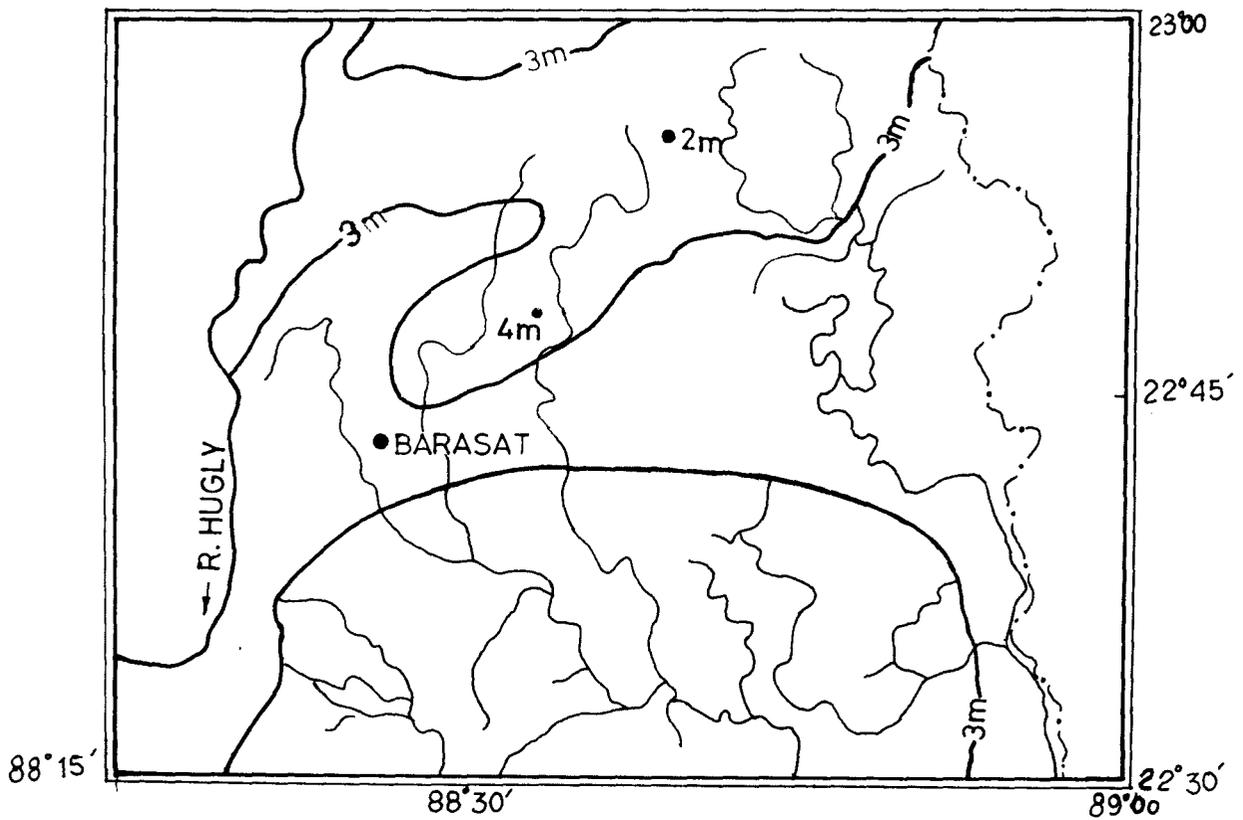


FIGURES INDICATE THE WARD NUMBERS

SOURCE - BARASAT (M)

Fig-2

DRAINAGE AND CONTOUR OF THE SURROUNDING REGIONS  
OF BARASAT TOWN



INDEX

	DRAINAGE
	CONTOUR
	DIST. BOUNDARY

0 5 KM.  
SCALE



Fig-3



**Plate - 1. Sunti River**



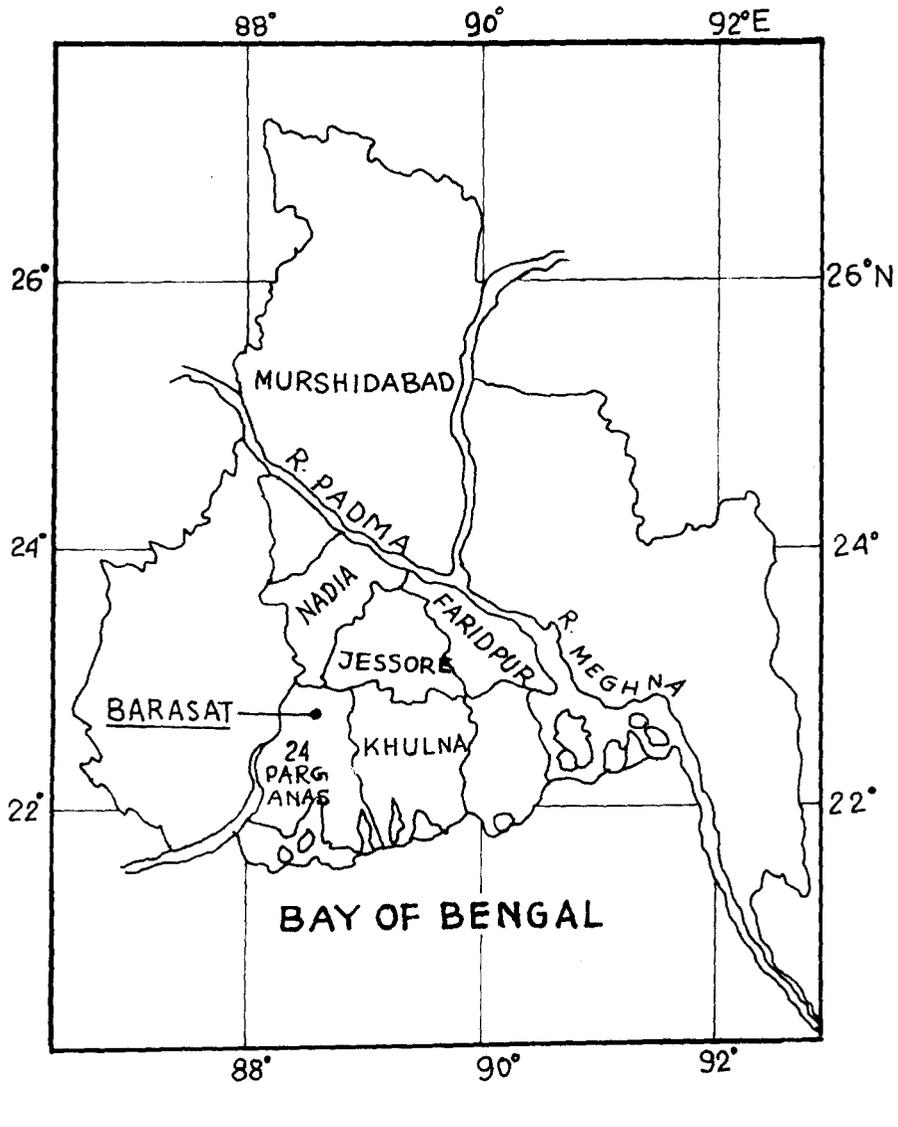
**Plate - 2. Nowi khal**

that are all in them present streams". The districts of the Murshidabad (eastern half), Nadia, Jessore (Bangladesh) and a portion of 24 Parganas. and Khulna (Bangladesh) come within this region (Fig-4). This is the portion designated as Moribund delta (Bagchi,1944). A detailed contour map of the district is not available but the contour map with spot height prepared by the Diagnostic Survey of India has revealed that in between 3 - metre contour lines the study area lies. The surface spot height of the railway embankment is between 8 metres in the west and 7 metres in the east. The general elevation of the landscape shows a dull uniformity of the entire district (Fig-3).

Temperature is one of the important elements of a region. Its influence on plant and human life is considerable. Temperature is 20°C in winter and summer temperature is 29°C with rainy season temperature falling bellow 20° C. The distribution of rainfall and temperature indicates that the year can be divided into four seasons (a) . A very mild winter (Dec. to Feb) , (b) Early summer moderate rainfall and high temperature (March to May), (c) A late summer with heavy rainfall and high temperature rainy season (June to Sep.) and (d) Fine autumn with some rainfall and falling temperature (Oct. to Nov.).

It is already stated that the study area geographically falls under "Moribund" deltaic region. Soil of the region is derived mainly from the fine sands, silt and clay deposited by the rivers partly by water and partly by flood plains. Results of mechanical analysis of soil samples taken from different localities show that 50% is fine sands and 20% to 40% is silt and clay and about 4% is organic matters. It can be concluded that fine sands or sandy loams predominate the Barasat plain. The P<sup>H</sup> value of the soil is 6.5. Soils are mostly derived from alluvial deposits with little or no development.

DELTAIC REGION OF BENGAL  
1881 - 1931



0 52 KM.  
SCALE

SOURCE - THE GANGES DELTA

Fig-4

## **Objectives of the Present Study:**

Main objectives the present study

- I) To study a geographical account of the study area : Its location (latitudes and longitudes) area in terms of wards, relief and rivers , the climate, soils etc.
- II) To study the historical growth of the town since the Pre-British days, till the declaration of the study area as district town, through the period of the Company days - the days of the Raj and the post independence period.
- III) To study the conceptual frame of location of study area.
- IV) To study the indentification, character and the role of the fringe area in urbanisation.
- V) To study the population through years in terms of distribution of population - population as a whole and ward-wise, and the consequent changes in the density of population.
- VI) To study the population composition in different parameters : sex, caste, literacy, religion, migration, occupation pattern, income etc.
- VII) To examine the land use pattern : its classification, Past land use, present land use pattern and changes in land use pattern 1971-1998.
- VIII) To study and examine the existing urban amenities.
- IX) To study the assessment of the existing socio-economic function.
- X) To make a review of the earlier plans, the present plan since, 1997.
- XI) To suggest plan for future development.
- XII) Conclusion.

### **Methodology:**

- I) Collection of data through questionnaire from random sampling (up to 30%), supplemented by interviews.
- II) Collection of primary data collected from intensive field survey for compilation and drawing of different types of maps.
- III) Collection of secondary data from Municipality and other Government and non Government agencies.
- IV) Analysis of survey of India map and cadastral map.
- V) Processing of data with the help of computer centre for analysing and information.
- VI) Drawing of maps and diagrams using different cartographical techniques for the analysis of the data and information.

### **Scope of the Study:**

Mainly the nature of urban growth of Barasat from a tiny sleeping hamlet to a district town with its associated demographic problem is the principal scope of the study. The growth rate of population of Barasat has been high. Various factors are responsible for this high rate of growth. The adjacent other municipalities have industrial base but Barasat is purely urban in character. A detailed study of the demographic structure and the growth of educational institutions and its associated problems are made. The pressure of population has been excessive which led to various environmental problems. A proper study of land use and analysis of the different factors for the growth of urbanisation has been made for future planning and development of the area.

### **Design of the thesis:**

The present work concentrates around the study area of Barasat based upon field and survey reports. The break up of the study is as follows :

The first chapter deals with the historical growth of the town. The chapter mainly deals with Historical growth on pre- British period, and in the post Independence period.

The second chapter deals with the conceptual frame of location of the town. The chapter also deals with identification, character and role of fringe areas in urbanisation.

The third chapter deals with the population and its growth since 1901. The first part in this chapter deals with distribution, growth and density of population. With the help of data the last part discussed population composition in different aspects like literacy, religion, migration, occupational patterns, etc. The data are collected from field investigations.

The fourth chapter deals with the classification of land use. This chapter also deals with past and present land use pattern changes in the land use pattern from 1971 to 1998. The data is collected from field investigations.

The fifth chapter deals with the identification and assesment of the existing socio-economic functions like education, health care, transport and communication, other infrastructural facilities i.e. water supply, sanitation, electricity, entertainment facilities etc.

The sixth chapter deals with the review of existing urban amenities in Barasat town in respect of education, housing, sanitation, sewage, drinking water, roads, electricity and fuel, environment and other community problems.

The seventh chapter deals with the review of earlier plans formulated by the different agencies and organisations with the help of expert bodies of specialists (engineers, architects, geographers). This chapter also deals with several proposed transport projects under C.U.D.P; categorisation of this existing land by the Government of West Bengal and creating development control zones and guide lines.

The eighth chapter deals with the development aspects as regards total planning of the town in future; various suggestions have been made in the field of education, sanitation, water supply, health, roads and transport, employment and environmental stability of the town.

#### **Limitations of the study :**

Barasat is a district town. There are many houses and number of population is very large. So it is not possible to cover all the houses of entire populations of the town for study. But for convenience random sampling (30% to 40%) of the house holds and the population were taken to analyse the study. Since 1869, the date of establishment of the municipality, it had 5 wards only. But it is now extended to 30 wards. So land use is studied as far as possible. Similarly, socio-economic functions and civic amenities are studied in detail, in both linear method and random sampling method.