

CHAPTER – VI

REVIEW OF THE EXISTING URBAN AMENITIES

INTRODUCTION:

The area and population of the urban centre increase with the increasing urbanisation of the region. But population increases at a faster rate than expansion of the area. This means the depletion of resources of available amenities. In migration, not the resourceful people alone, but men of smaller means also move to cities and demand a share of urban civic facilities. The gap between need and supply generates problems and tensions. The concept of satellite town or the remodelling of city planning or the dispersal of administrative and other centres are some of the ways to control these problems. This is a global phenomenon and tackling this problem has identical approach. Due to higher density of population most of the under developed countries are suffering from urbanisation problems. Those countries always try to check growth of population on one hand and try to improve style of living on the other. But this is a separate area of study. For smooth urban civic life, the minimum essentials need to be isolated. The essentials are always depending upon the geography of the area, the age of the settlement, the dominant culture of the study area etc. The pressure of urbanisation in the area need to be accommodated in view of the location of the town and that several other developmental projects are likely to be taken up in and around the area.

Hundred years have been passed (1869) since the town is declared as a municipality. It developed from a tiny hamlet of historical reference and it

has witnessed the vicissitudes of various shades of urbanisation. Urban facilities in terms of sanitation, housing, sewage, water supply, electricity, education, roads etc. emerged and behind these the attendant problems raised their ugly heads. The history of municipal services is the history of this challenge and response. The chapter deals with review of existing urban amenities which are very much essential at the time of study of the area.

6.1 EDUCATION:

The municipality has 61 primary schools till 1998. Taking 300 students per school, we can have a little more than 18,000 students. The picture is not bleak – but in municipality managed schools or government management school the pupil figure is dwindling and in privately managed schools the pupils flock in swelling number. Again, the infrastructures of Government/Municipal schools are never satisfactory (plate-41). The guardians have resentment over several policies regarding curriculum and evaluation system made by the government. These are the reasons for the private schools to flourish. Although the town was noted for good number of educated middle class people who had tried to establish schools. But this is not sufficient due to rural urban migration and huge influx of people from neighboring country side since partition.

There are 28 secondary/higher secondary schools and 2 colleges. Since, it is a district town people from adjacent areas make heavy demands for admission in these schools and colleges. This picture is not different from other mofussil towns. Schools can not accommodate all who demand admission. It is seen that schools are not evenly distributed in wards or in a cluster of wards. The absence of vocational and technical schools in the town signify shortage of skilled workers. There are two colleges in the town, but

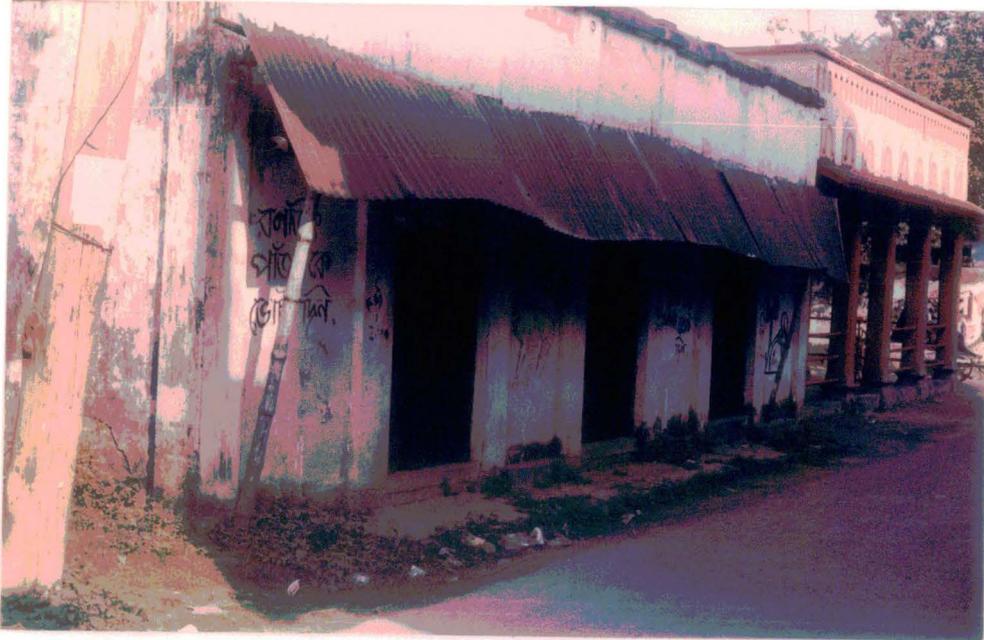


Plate - 41. Bad Infrastructure of a Primary School

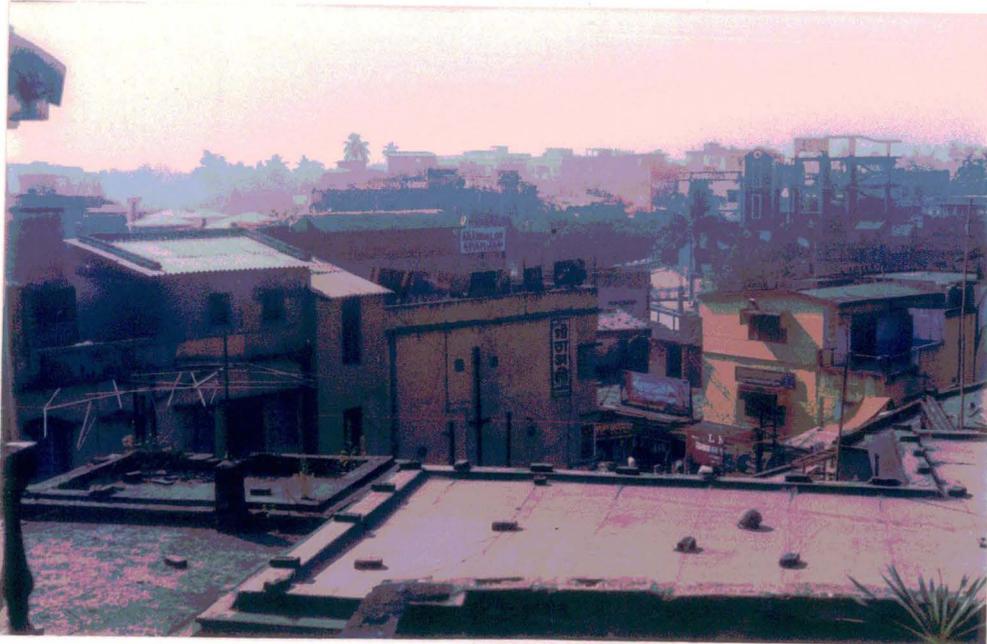


Plate - 42. Congested building in the central part of the Barasat town

absence of separate girls' college create problem. The town will expand in area and in population, so education will demand attention.

6.2 HOUSING:

To cope with the problem of population growth, new areas are added, old wards are re-arranged but the movement from rural to urban areas, immigration problems of Bangladesh off-set all the plans. While the number of household was 20,607 in (1991) to it became 45,000 in (1997). Accommodated thus more people and more household settlements are within the limited area. Open spaces might have been acquired to build high rise buildings (plate-42). From the field survey it is revealed that the percentages of own houses is 92.55 and that of rented house is 7.45 percent. Agricultural lands are being squeezed and are being depleted in areas and people have to fall back upon their own resources for housing. According to census of 1971, number of households was 7,657 and in 1981 the figure was 12,009 but the figure is nearly double between 1981 and 1991, it is 20,607 respectively (Appendix no. X).

The core sector of the town is towards the eastern side of the railways. A road stretches from the '*Duck Banglow More*' to '*Champadalir More*' from where Taki Road and Jessore road are originating. Between these areas from the early days many house holds developed in absence of stringent municipal laws. After the declaration of district town (1986) many settlements were carelessly constructed on both sides of Krishnagar road (NH 34) and Barrackpore Barasat road. Mud-hut cottages have their own problems and congested houses which are mainly developed in the slum areas face serious problems regarding lack of air passage, natural lighting, scope of renovation, even at the time of demolition. These slums are poor mens

house and eyesore to the travellers. This is the onslaught of rural poors to town and cities. Unless the economic problem of the villagers is solved this slum problem will recur.

The space is limited, it can not be created by will but people can add increasing demands upon it. The last few years have seen two types of immigrant people-some white collar job workers and self-employed or job seekers of low occupation. The later group has no time or means for looking out for hygienic living, or are living in areas where minimum civic demands are available. This has given rise to slums. These slums are mostly in low lying areas. They create water logging. The absence of any industrial activity worth the name has brought untold miseries to the job seekers. Even small scale industry is absent. Only transport operation has created some job. So, absence of adequate housing facilities, poor wages for the workers using basic skills, soaring prices of land. Unemployment and high density of population are the principal causes for problems in living condition.

6.3 SANITATION :

Water logging, congestion of buildings, in adequate drainage system, the co-existence of sanitary privies and the pit and soak latrines aggravate the urban problems. Heaps of garbage which accumulate on the side of the roads for a long time create nuisance of civic life (plate 43). Most of the effluents, which are discharged from the septic tank find their way in the drainage system and also receives industrial effluents, which come from various small industries of the town. During rainy season low lying water logged areas create a precarious condition due to mix-up with septic tank effluents, industrial wastes and night soils. It is observed that some remote places of the town sanitation is the traditional problem due to lack of cultural

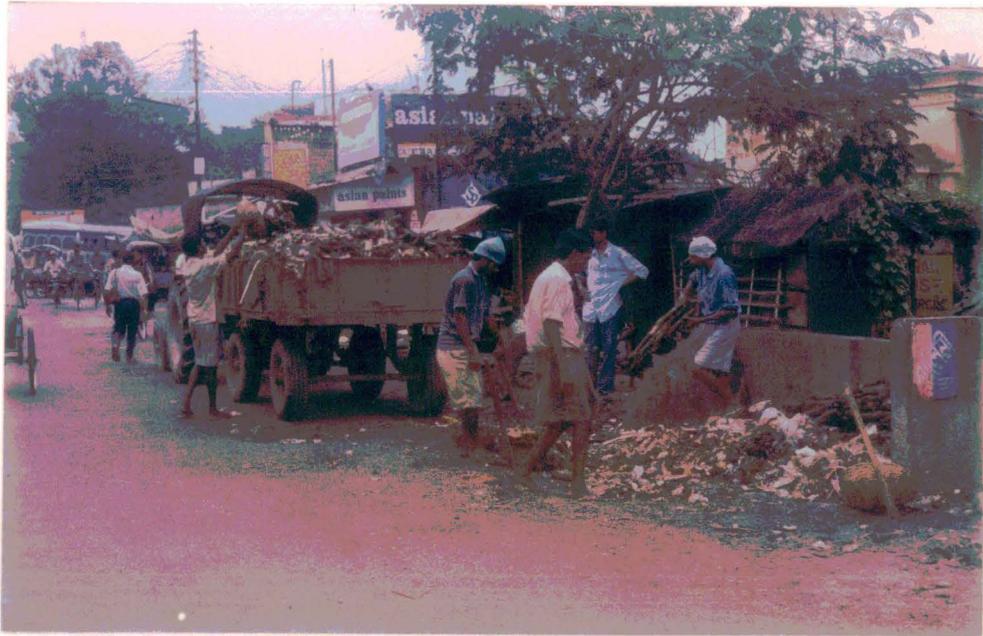


Plate - 43. Heaps of garbage which accumulate on the side of a road



Plate - 44. Road side cow and buffalo sheds

sense and prevailing socio-economic condition of the residents. Social awareness and education of hygiene is the only way to dissolve the problem of defecation in the open space. The service latrines have given way to sanitary type of latrines during the sixties. The plan started by the government level at the town, where all the service latrines had to be converted in the septic tank system within a time frame. No house scheme was permitted without any provision of sanitary latrine. C.M.D.A. (Calcutta Metropolitan Development Authority) itself prepared some sanitary latrines in the town for public uses and provided subsidies for remodelling or replacement.

TABLE 6.1 TYPES OF LAVATORY IN BARASAT TOWN

Ranks	Types of Lavatory	Percentage
1	Septic tank	68.83
2	Pit and Soak	27.38
3	Open space	3.79
Total		100.00

Source-Field survey, 1998.

From the above data, it is revealed that septic tank system of night soil disposal is most accepted method in the town and it contains 68.83%. Pit and soak is the next, which contains 27.38%. Though it is desirable for urban life but in some fringe areas open space type of defecation i.e. 3.79% still exists. The municipality shows admirable progress. The volume of open space type of defecation can be tackled by making more community lavatory. Pit and soak system is to be gradually replaced. The septic tanks are mostly constructed by the civic population at their own cost. If necessary subsidy can be offered to replace pit and soak tank. CMDA in Calcutta area has subsidised such conversion. CMDA has also constructed with the

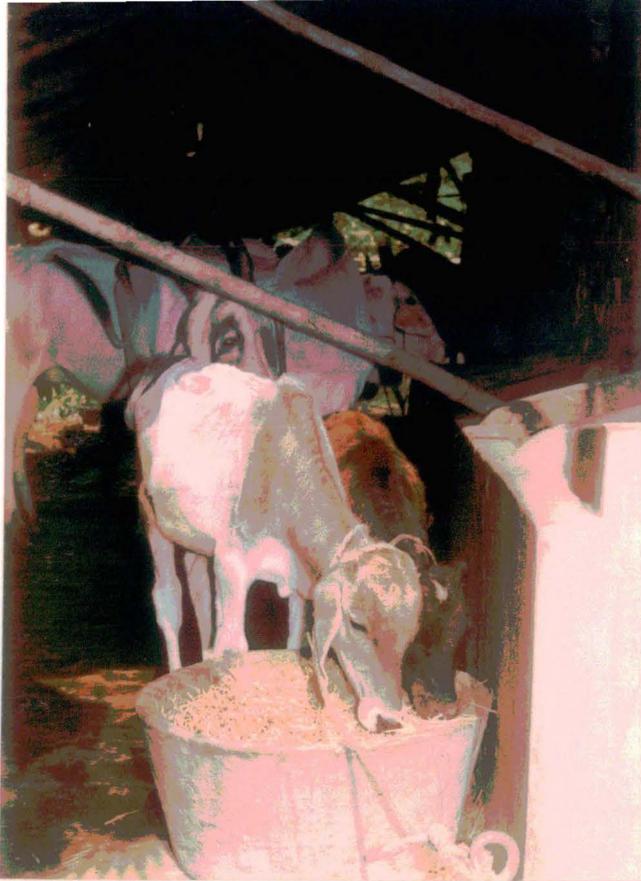


Plate - 45. Cow and buffalo sheds in the town



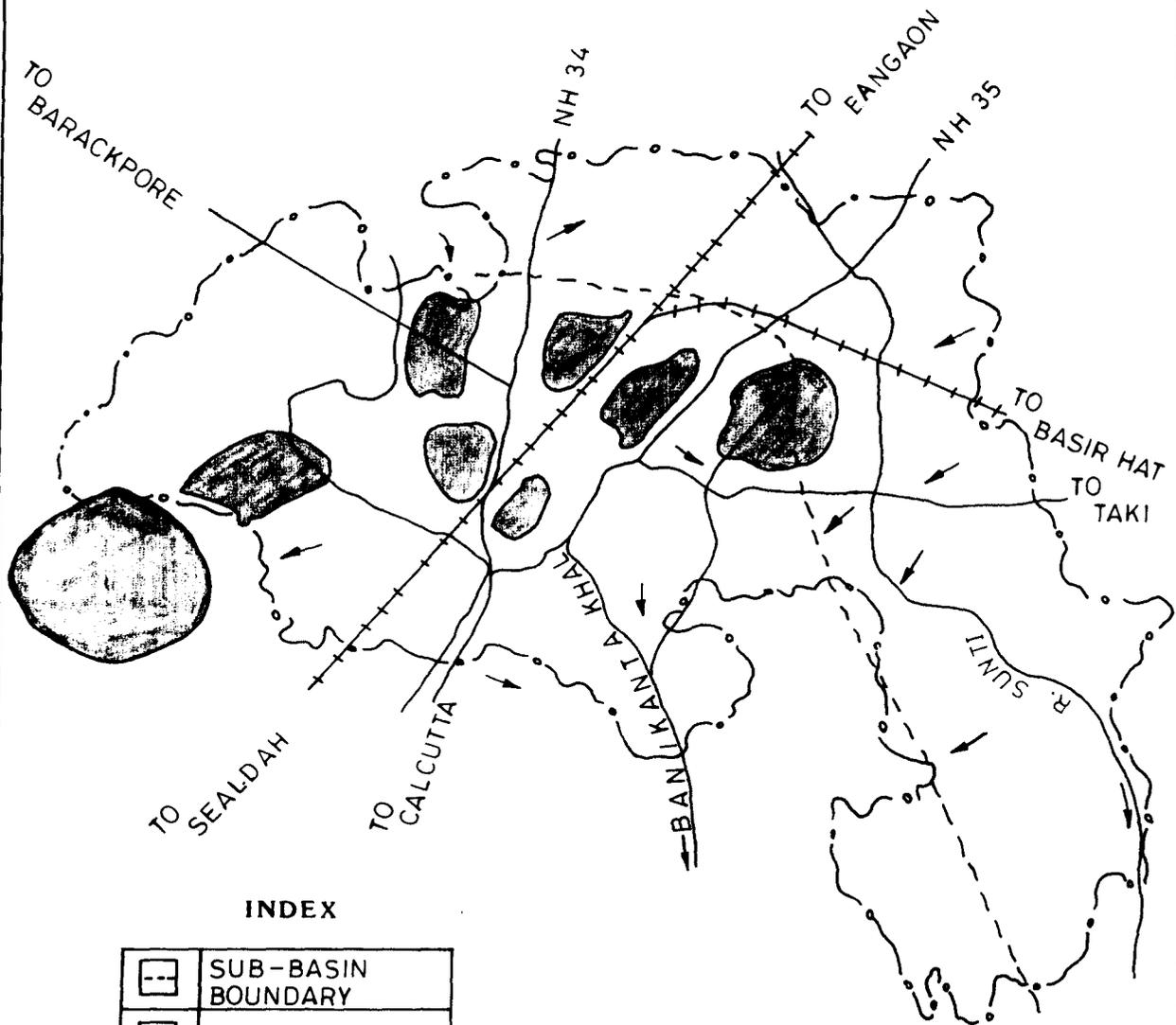
Plate - 46. Open bath which is the common in the slum areas

collaboration of Calcutta corporation public lavatories for commuters. With declaration of district town (1986) a few thousand additional people daily commute between Barasat and out lying areas. Improper arrangement of public urinal/latrines create problem in the core area of the town. Dearth of sufficient supply of drinking water and only a few dustbins create another hindrance to attempt the better sanitary system of the town. Cow and buffalo shades in some pockets of the town show dirty atmosphere, and are breeding ground of mosquitoes and different diseases (plate-44). The municipal authority has arranged for the disposal of night soil through tanks. The existence of trenching ground emits stench. Unauthorised slaughter house in the residential area is creating foul smell and pollute environment.

6.4 SEWAGE:

The river Sunti and the Banikanta canal are the two principal drainage systems, there is a Haroa Gang to the south west. These three elements somehow absorb the excess water. The accumulation of garbage something choke the municipal drains (plate 48). Again the banks of river and the canal are gradually being encroached upon by landless or homeless people, making the water channel narrower. As the town and out lying areas were not under planned landuse. These houses were built with minimum regard for the norms laid down by the municipality. Due to inadequate drainage system, sometimes create serious problem in the rainy season. Poor maintenance of sewage canal during dry periods is the prime cause for water logging of several parts of the localities in the town shown in (Fig 6.1). The water logged areas, that are mostly effected are the wards I, IV, part of X, XII, XXI, XXIV part of XXV, part of XXVI and part of XXVIII. Road side unmettled or cemented drains functioning as the carrier of rain and waste water to the sewage canal throughout the year, are not maintained

EXISTING DRAINAGE FACILITIES



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	BASIN BOUNDARY
	WATER LOGGED AREA
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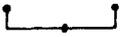
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 SCALE



Fig-6.1



Plate - 47. Poor condition of the Banikantha khal which is the main sewage of the town



Plate - 48. Accumulation of garbage which has choked the drain



Plate - 49. Agricultural land occupied by residential houses



Plate - 50. A view of encroachment of fertile agricultural land

according to the PHE (Public Health Engineering) standard. Municipality has not prepared drainage map of the town. Most of the drains in the added areas cut to no specification in shape or gradients. Encroachment of agricultural land by housing plots creates another problem during rainy season (plate 49). The sewage problem in the town gradually increased due to i) improper maintenance during dry periods, ii) capacity of discharge has not increased iii) encroachment of sewage basin etc.

6.5 DRINKING WATER:

The supply of pure drinking water is a perennial problem of Indian towns. Previously many towns and cities located at the banks of the Ganges, the Jamuna etc. were dependent on the everflowing waters of these rivers. But more and more towns raised their heads, the demands of river water increased. Hence, cities and towns could not depend upon flowing water as the permanent source, had to fall back upon mainly on the under ground sources of water. Now a days underground water table will be disturbed and a vacuum will be created. Subsidence occurs in future. Calcutta is in a threat of subsidence. The arsenic content has assumed a menacing problem. In some parts of our town arsenic content in the water has exceeded the permissible level. Iron contents in water are visible in many areas. Barasat municipality is depending more and more on ground water through deep tube well and hand pumps. The enormity of the pressure for drinking water is revealed (Table 5.5) that from a total of 3 deep tube wells (1986) has increased to 9 (1999). The out lying areas of the town also depend upon under ground water. The pipe line (length) that carries water measure 103 kilometers. Excessive dependence on under ground water will spell doom on the township. Filling of tanks or ponds for construction plots create shortage of water in the residential areas of the town. Though the town falls under the



Plate - 51. A hydrant without stop-cock broken tubewell, those supply water to the neighbours



Plate - 52. Poor condition of the road

Palta water works but the question of supply of pipe water is a remote possibility as Palta water works is busy for Calcutta alone. A thorough hydrological survey of underground water table should be taken up. The water available to the citizens is not satisfactory. There are considerable leakage from the old distribution mains, wastage by the consumers, constant flow of water from street hydrants etc. In addition because of hydraulic deficiency distribution of water is unequal in different wards. Moreover, some street hydrants are devoid of stop-cocks and water flows unnecessarily during supply time (plate 51). No serious study has been made to determine the amount of loss.

6.6 ROADS:

The study area, since its inception is behaving like a magnet to attract people from all around. It is situated at a nodal point. Since, 1947 there is a ceaseless flow of Bangladeshi immigrants. The town already possesses a number of arterial roads Barrackpore-Barasat road. Krishnanagar road (N.H-34), Taki Road, (N.H-35). The total length within the municipal area is 191.70 kms. for metalled roads and 69.10 kms. for nonmetalled roads. The national highways possess a road surface of 9 metres in width plus the foot-path width is 5 metres. But pressure of population and the lack of employment avenues have caused encroachment upon the roads, Creating tremendous problem for the traffic (Plate-59).

The traffic pressure is very high and this makes serious damage of the road surface. Both sides of the roads are broken and numerous potholes are there. The surface of the roads are uneven and broken (Plate-53). Though a railway route runs from Bangaon to Barasat and another section runs to Basirhat, the principal burden is borne by roadways. Widening all the



Plate - 53. Pathetic condition of the main road

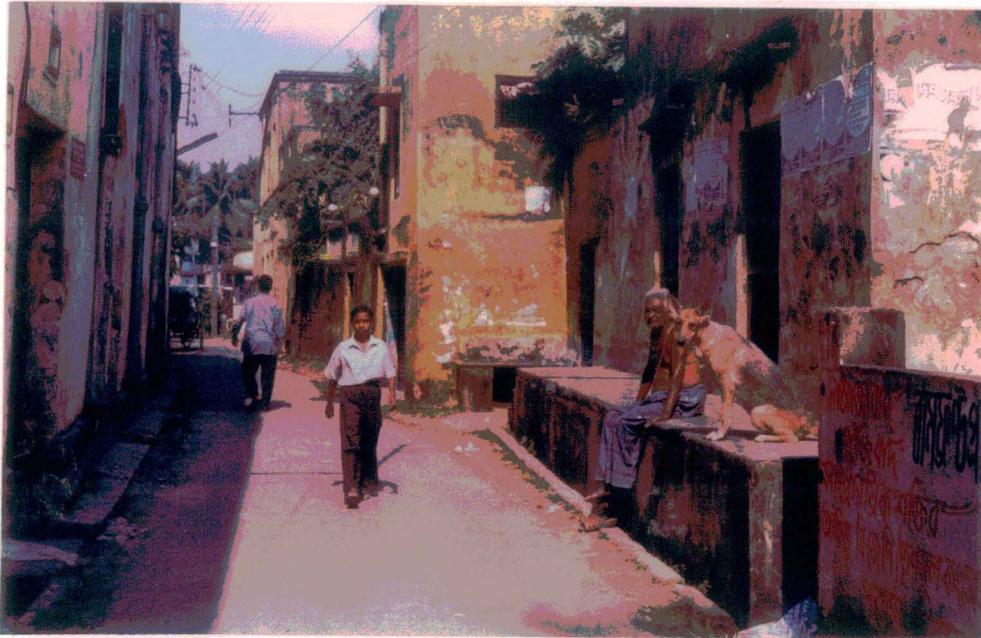


Plate - 54. A narrow lane in the town

important roads in the urban areas would hardly be possible without large scale demolition on the both sides of the road. Apart from the principal road, roads within the municipal town are worse. No repair works are done in appropriate time. There are numerous lanes and by-lanes which are either narrow or broken and sometimes meandering renders traffic movement difficult (Plate-54).

Scavenging work is not praise worthy. Heaps of garbage line scattered on the roads. A number of bus routes ply through the roads, for same routes, Barasat is the terminal points. One of the private and public routes terminates near Chapadalir More but shortage of space creates major problem of traffic congestion. During office hours pressure on the road is high between Haritala to Colony More. The rickshaws and van aggravate the problem (Plate-61). The municipality has no control over them. Traffic movement has become slow, due to unauthorised shops, car-parking, movement of way side vendors and hawkers, illegal bazars etc. (Plate-56 and 58). Every point of the crossing of roads is an illustration of this. “*Chapadalir More*”, the junction of Barassat-Barrackpore Road is the constant source of traffic jam. Road passengers face problems of detention. N.H 34 (Krishnagar) crosses the rail line (Plate-57). There is no fly-over. The rail-route is busy hence road traffic experiences non scheduled waiting for unlimited period. So far as railways are concerned the two stations are located within the study area but during office hours congestion is created due to encroachment of feeder road and platform areas by the unauthorised vendors or hawkers (Plate-59). Barasat – Hasnabad branch line bifurcate from Barasat but there is no railway station after six kilometers within the limit of the town.



Plate - 55. Stagnation of water on a main thoroughfare



Plate - 56. Unauthorised car parking near the main business centre (Colony More)

6.7 ELECTRICITY AND FUEL:

Since the core sector of the town was a municipal area and later on wards are added gradually, The entire municipal limit enjoys the benefit of electricity. Now a days with the coming of West Bengal State Electricity Board even rural areas enjoy the benefits of electricity. With the commissioning of Titagarh generating station Calcutta Electricity Supply Corporation can offer services to more customers. The town has no heavy industry, Hence no great demand beyond the supply is encountered. But load shadding is a regular feature, the problem is more administrative than production. Low voltage is another problem, being a district town the civic population demands well lit streets, lanes and bye-lanes. Pupils night colleges have heavy demands of electricity. Calcutta, the capital city being 25 kms. away, this town is kept busy with activities till late hours of night. The uninterrupted supply of electricity has become a headache.

Almost all the households are connected with electricity. With the introduction of Kutir/Lokdeep by the West Bengal State Electricity Board even low income group families can enjoy electricity with virtually no cost. The per capita consumption of electricity in an index of advanced living, in this sense the town is no its progress because all households are electrified. A problem is now plaguing the authority. This is a problem regarding law and order. It is the problem of unauthorised connection, in public vocabulary 'Hooking'. The street lamps are poorly maintained. Voltage fluctuation damage street bulbs with can not be immediately replaced. Shortage of staff, nonavailability of repairing or replacement materials aggravate the problem. The unconventional sources of electricity like bio-gas, solar-electricity are not popular so far in the town.



Plate - 57. Traffic jam due to a rail crossing



Plate - 58. Transaction of daily commodities along road side, making congestion to the traffic



Plate - 59. Unauthorized shops on the side of a major road



Plate - 60. Office goes facing traffic jam for the plying of rickshaw and open air van from Haritala to Colony More

For domestic energy consumption coal is the principal source but it is a pollutant. Only two L. P. G distributing centers operate in the town but due to short supply waiting list piles up. Kerosene oil is an essential commodity for the people who belong to low income group. In this regard the town enjoys only three kerosene dealers, which are not sufficient for the town.

6.8 ENVIRONMENT AND ITS LEVEL:

Towns are made by mankind, forcibly changing the natural setting. Mankind changes the landscape and alters the land use pattern. Modern civilization destroys the lush green vegetation and replace it by concrete jungles. It again concentrates the scattered settlements, upsets what nature has made for men, defiles the atmosphere and creates more problems which were unheard of previously. In this respect all the urban agglomeration has the same character with some variations depending upon the slope of the land, the climate, the presence of water bodies and extensive or short forest cover etc. The town is conspicuous by the presence of the following problems.

6.8.1 SOLID WASTE:

The combination of elements of environment are directly affecting the living of the good lives. With the population in the cities and various activities by the people. The environment becomes gradually crippled due to the non availability of renewal resources and starved with inadequate elements of environment. "Solid waste" a term used internationally, arises from domestic, trade, commercial, industrial and construction activities, It comprises countless different materials in relation to the physical characteristics of the city refuse. This problem is aggravated by the rag-pickers who collect



Plate - 61. Daily traffic jam for the plying of a large number of rickshaws



Plate - 62. Wholesale and retail fish markets near the Champadalir More

marketable elements from these which include needles, plastic materials, cloths, metals. These again come to the users thus spreading virus, contagious diseases etc. while searching for these in the garbages, the rag-pickers throw the refuse all around creating further pollution.

Though municipalities make plans for the disposal of these, the plans are never efficiently carried out for want of disposal space. The city of Calcutta has a very extended fellow area outside the city limit (Dhaper meadows), the other municipalities are not that much fortunate.

The improper tackling of solid waste is the source of health hazards. First, it directly affects the workers through physical contact, second, this is the breeding ground of mosquitos, flies and other worms who spread different types of diseases. Third, being wind blown it moves to every corner of the city, transferring the polluted materials to every corner of the city. The polythene bags remain as they are ; they undergo no change thus accumulating every bit of the waste. River water and sub surface water are easily polluted by materials left behind, when the water is directly or indirectly consumed (bathing, washing, cleaning domestic utensils etc.), waterborne diseases result, e.g. enteric diseases, intestinal disorder etc.

The town is a flat land, no slope is meaningful enough to help steady drainage with speedy flow of rainwater, the result is that the garbage chokes the drains. Added to this, is the problem of wholesale and retail fish market at '*Chapadalir More*' (plate-62). The rotten fish materials not only emit obnoxious smell but create eye-sore. The vegetable markets are located in other area where leafs move in the air, pollute the environment. The disposal of these wastes usually has only one way, i.e. dumping them in open spaces. But waste materials are dumped in the low lying areas and

create environmental hazards. Of late arsenic pollution throughout West Bengal has become a headache. School of Environment Studies (Jadavpur University) has reported that the tube well water contains 300 times of arsenic more than the tolerable limit. The amount being 3 p.p.m. per liter. This is the case of Kazipara a locality of the town. The existence of a number of brick fields which are mostly situated in the outlying areas disturb the environmental set up of the town. These brick fields have giant emission chimneys which emit CO₂ smoke and coal particles in the air. With excavations large low lands are made which are filled with accumulated stagnant water and these water serve as the breeding ground of mosquitoes. So far as air pollution, comprehensive report is not available, but it is not only wild guess that suspended matters, the quantum of CO₂ and CO in the air, the smoke emitted by the vehicles, all contribute to it. The town is not far from Calcutta, World Health Organisation (W.H.O.) report on global pollution and health has characterised Calcutta as one of the 41 most polluted cities. It ranks 6th, the quantum of suspended matter (SPM) is 344.3 micro gram per cubic metre of air and is over the permissible limit. Barasat which is becoming an important transport, commercial and trading centre is rapidly catching the fate of Calcutta.

6.9 OTHER COMMUNITY PROBLEMS:

Open spaces are usually used for parks and play grounds. The old schools and the colleges of the town have their own play ground. Although the study area has 37 parks and 12 play grounds. The area have so many parks and play grounds which are the meeting places of the public as well as community festivals but due to lack of maintenance and protection most of these have lost significance (Plate-64). The people has little scope to come out in the open and breath fresh air. Libraries apart from the district libraries,



Plate - 63. Open-air vans ready for carrying fish from the market



Plate - 64. Poor maintenance and protection of a park

now a days receive Government help but depend mostly on peoples initiative. Only 6 public libraries and 6 free reading rooms are inadequate for an area which has brone the earlier fruits of English education. The town in the beginning, was a municipality by courtesy, the flavour was rural. A tiny hamlet was surrounded by agricultural land. But as the town expanded, it accommodated the fringe areas thus engulfing the agricultural land which provided employment to their people owing this land. Thus "attack on the rural area was led in two fronts. *First*, the land owing labours had to dispose off their land for a higher price. They lost both the sustainable source of income and their household. *Second*, the municipal authority expands its area, in lieu of valuable agricultural lands. Due to urbanisation, agricultural labourers, lost their jobs. In absence of big industries, most of the agricultural labourers are becoming engaged in rickshaws or van pulling for their subsistence. It is seen elsewhere that more people are sometimes absorbed in the job market but the town shows different picture. Surplus of population from the agricultural sector and the uprooted people from neighboring countries create major problems in all sectors in city life.

CONCLUSION:

From the discussion of different socio-economic deficiencies, it can be concluded that the town faced serious problems due to inadequate finance and increase of population in an unplanned manner. After 1947, the town which is located only 41 kms away from the international border and the areas arround Calcutta became vulnerable to immigrant population, no planning could be made beforehand on the basis of surplus population. The town could not escape the problems of education, housing, health facilities, supply of drinking water etc. The town is an administrative centre only, it has no industrial base. Nearby, Barrackpore, an industrially developed area, 10

to 15 kms away, has some jute, engineering and other industries. But the study area has a tradition for small scale industries only.

It is a town fit for trading (wholesale and retail) and transport activities. Of course, a Metro Dairy is an important industrial center located in the outskirts of the town but it is not labour intensive. Employing the people within a reasonable time remains a distant possibility.

As far education, the problem bites both ways. The population pressure shows an increasing number of school entrants. Each year, a number of schools needs to be opened or new class rooms are to be constructed. As it is a district town, the educational standard is high in the expectation of the outside people. Hence the educational centres have behave like magnets for the pupils outside the town. Education in all stages is thus under strain. The district hospital is there. In fact, the sub-divisional hospital itself was renamed as no separate district hospital could be made.

The district hospital is usually regarded as a reference centre for rural and sub-divisional hospitals. But at present, the district hospital is not so equipped. The town is fortunate to have a number of National, State high ways but being a nodal point it has a tremendous rush for in coming and out going passenger traffic. The rail way crossing is the cause of detention of road traffic. In side the town the lanes and bye-lanes are narrow. Regular and planned invasion on the high ways and wayside open spaces are of great disservice. Any water works which can supply filtered water from the river is neither available now, nor any plan for it is viewed in near future. The area has to depend on the under ground source of water. The length of pipes which carry water is not sufficient to push water to every household.

A number of reservoirs has been built up for supplying drinking water. But in the absence of proper hydrological survey of the underground water table, the future of the underground source is not very hopeful. Lack of civic sense is also responsible for wastage of water. The drainage system is neither good nor sufficient. The rivers and the canals nearby are silted up and hence have lost the capacity to carry the waste materials. As far as electricity is concerned, frequent load-shading, voltage fluctuations, tapping etc. are the problems confronting the administration. The town is located in an unique position as regards of transportation network. The emission of CO₂ and CO, lead particles, dust, etc. accumulate in the atmosphere, creating health hazards breathing troubles, enteric fevers etc. Stagnation of polluted in the low-lying areas of the town create environmental hazards. Arsenic pollution in water is increasing.

This problem is not localised. It spreads over the entire greater Calcutta metropolitan area. This can not be tackled in a piece meal, part time approach, rather a global view is needed. Excepting ward number 1, most of the area under the town suffers under the scarcity of trees. After the declaration as the district town (1986), more and more area is brought under administrative purpose and the trees are cut down. This is the casualty of civilization.

It the next chapter, a summary of what has already been done will be reviewed, keeping an eye to the probable plans for improvement.