



PROBLEMS OF ROAD TRANSPORT SYSTEM AT BARASAT MUNICIPALITY, WEST BENGAL



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ABSTRACT:

Barasat is one of the oldest towns in West Bengal. It has a past history during the period of Mughals. Barasat town is well connected with roads to Kolkata, North Bengal, Bangladesh and other towns of West Bengal. The two National Highways (NH-34 & NH-35) and one State Highway (SH-2) run through Barasat town. Barasat is also well connected by railway with Sealdah, Bongaon and Basirhat. Barasat has good communication link with rail and road with Kolkata and other places of West Bengal. There are a large number of busses run from Barasat to various places of Kolkata and other places of West Bengal. Barasat is well connected to Kolkata through Sealdah- Bongan railway route and Sealdah-Basirhat-Hasnabad railway route. Other than railway, Taxi and Auto rickshaws are also available for communication with different places. There are 2 national highways NH-34 named as Krishnanagar road and national highway NH-35 named as Jessore road and a state highway SH-2 from Barasat to Taki named as Taki road. Barasat is junction station of two railway routes Bongaon and Basirhat.

KEY WORDS: Road transport system, Traffic congestion, Road accident, Passengers' satisfaction, Barasat municipality.

INTRODUCTION:

At the period of Mughals, Ram Sundar Mitra had got the laminar at Barasat town. After that in 1600 AD Protapaditya, the king of Jessore (at present in Bangladesh) had lost the battle. After that his commander of soldiers Sankar Chakraborty came to Barasat and established himself in Barasat town. He had done many development works of Barasat town during that period. After that in 1700 AD Hazarat Ekdilsha, the muslim saint, had come to Barasat and started residing at Quazipara. He had done many social reforming works in this town. After his death a tomb had been constructed at Quazipara where he had been buried. This place is now a pilgrimage place of Muslim community. Protapaditya had made his way to Kolkata from Jessore and Sirajudoullah had made his way to Kolkata from Mushidabad via Barasat, which are later on converted into two National Highways (Wikipedia, 2016)

At the time of British Empire, Barasat Town had gradually got its importance. British had made Barasat as their week end relaxation place. They had made many garden houses at various places within Barasat town. Warren Hestings had made his Villa in the heart of Barasat town. During that period, Rishi Bankim Chandra Chatterjee, the renowned Author, was the first Indian Deputy Magistrate of this town.

The Blue merchant had control over Barasat and had tortured the poor people for cultivation of Blue. Titumir, the renowned freedom fighter, had declared revolution against Blue merchant at that time at Barasat.

The renowned personalities like Iswar Chandra Vidyasagar, Pyari Charan Sarkar, Kalikrishna Mitra had done many social reformation works like development of education along with women education and widow marriage at Barasat town.

In this way Barasat was getting importance day by day and British Govt. thought to make Barasat, a municipal town along with other ten places. Barasat at primary stage was a district and later on it had become division. At present it is the district headquarter of North – 24 Parganas district. Barasat town is located at a distance of about 25 km from Kolkata on the north side of Kolkata. On the northern side the area of Barasat town is 34.5 sq. km. total ward 32 nos. the latitude and longitude of Barasat town area 88.482962 and 22.707002. The town is stretched along north south direction Sealdah -Bongaon railway line (Eastern Railway) and in south east direction Sealdah - Hasnabad railway line (Eastern Railway) also two national highway NH 34 (Krisnanagar Road) & NH 35 (Jessore Road) are stretched along north south direction and SH 2 (Taki Road) stretched along south east direction junction of NH 34 & NH 35 at Dak bungalow more and function of NH 35 and SH 2 at Champadalimore is within this town. The survey report reveals the general slope of the area does not tend towards any particular direction. The town has a mixed topography. The west side of NH 34 is low lying of average ground level is found to be between 7.8m and 10.3m in GTS, in between east side of NH 34 and west side of Sealdah - Bongaon railway line. It has been noticed the arsenic level is in between 9.2m and 10.7m in GTS. In between east side of Sealdah - Bongaon rail track and west side of NH 35 the average level in between 8.5m and 11.2m in GTS and south side of Barasat- Hasnabad rail track and north side of SH 2; the average GL in between 9.6m and 11.2m in GTS and south side of SH 2 up to municipal boundary. The average GL is 8.1m and 10.8m in GTS (Barasat Municipality, 2016).

Thus it is seen that a highest and lowest level difference of Barasat town various between 7.8m and 11.2m in GTS. Thus the difference of GL is 3.4m from this topographical feature it is found that the water will flow from central part of the town towards boundary. As a district headquarter of North – 24

Parganas district and junction corridor of North Bengal and Bangladesh, the growth of population of this town is very high that is @ 3.5% per year. As per 2001 census the population of this town was 2, 31,521 and now it is 2, 75,000 (approx.) and the projected population by the year 2025 it will be 4, 34,101. The total municipal area of Barasat covers 34.50 sq. km (census, 2001).

Polarized development around the metropolises and district headquarters of India, especially at regional level triggers several problems including the problem of road transport system. Being a Class-I city (population 231521 as per 2001 Census & 278000 approx. at present) Barasat, the district head quarter of north 24 parganas also faces this problem. The major problems of the road transport are as follows:

a) Traffic congestion, b) Parking difficulty, c) Accidents and safety, d) Water logging, e) Problem in the freight distribution, f) Environmental Impact etc. Through this dissertation I am trying to highlight these problems and suggest some remedial measures to check down these problems.

2. OBJECTIVES OF THE STUDY

This dissertation tries to focus upon the following objectives.

- i. To find out the major problem of road transport and their underlying causes in Barasat municipality area.
- ii. Satisfaction of passengers and local inhabitants regarding road transport.
- iii. Measures taken by municipality and other local bodies to tackle the problem.
- iv. To provide suggestion to reduce the problem.

3. DATA BASE AND METHODOLOGY

Data in connection with this empirical study have been collected from two sources.

I) Secondary data: a) data of road accident collected from the office of Superintendent of Police, b) data on numerical growth of Motor vehicle collected from the office of Road Transport Organization and c) data on road width and number of rickshaw in different rickshaw stand from Barasat Municipality) bus services provided to different routes from the office of the Bus Owners Association.

II) Primary data: Being a resident of this municipality area the author's empirical observation on road transport system for a long period, the satisfaction of the passengers and local inhabitants regarding the road safety have been collected from the field.

4. STUDY AREA:

The city of Barasat has been selected for analyzing the problem of road transport. Barasat is located in the district of North 24 parganas (22.720N and 88.88480E), with an average elevation of 4 m (13ft) Barasat city is spread over an area of 16.0 sq. Km. and have 35 wards (Fig. 1)

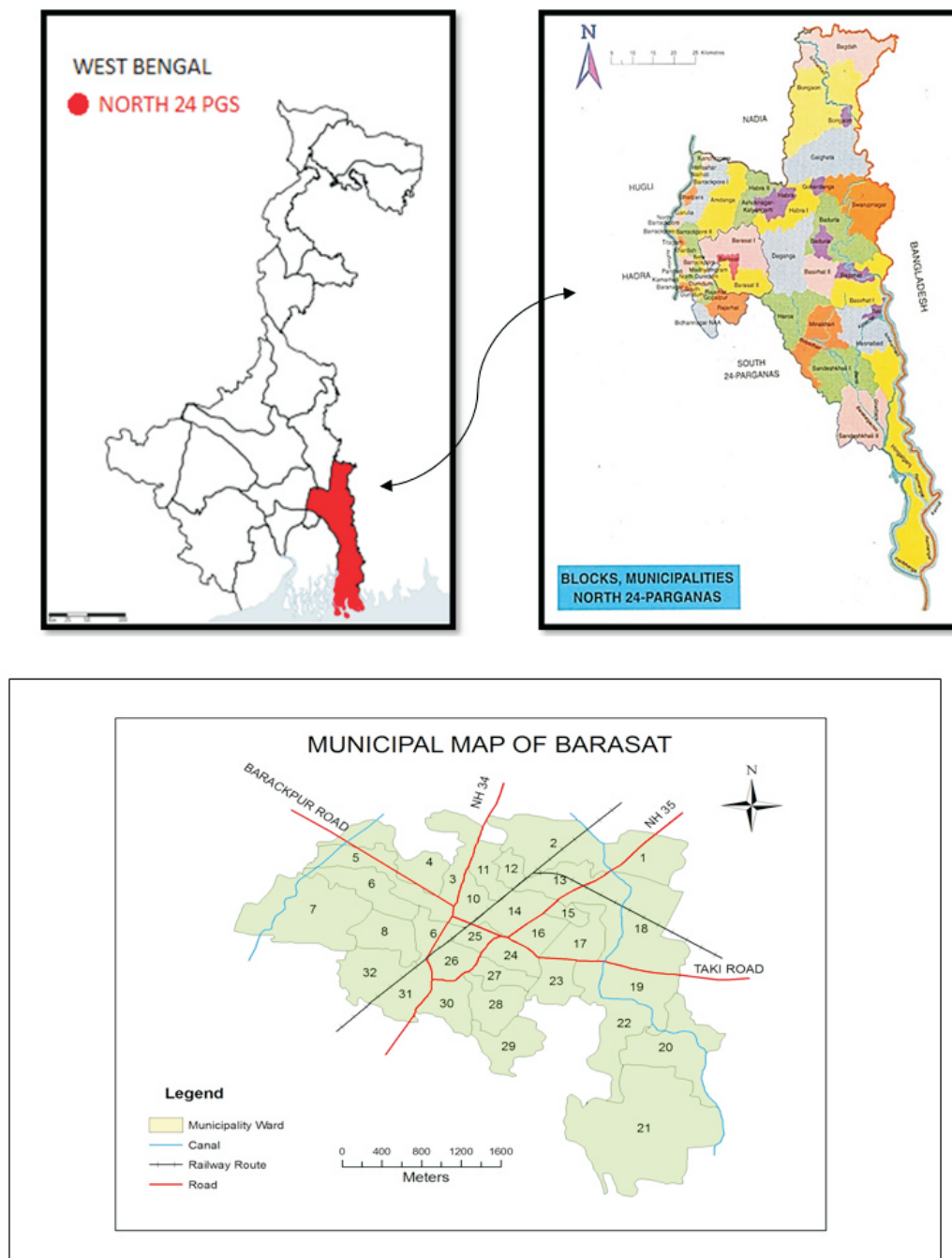


Fig. 1 LOCATION OF STUDY AREA

5. RESULTS AND DISCUSSION

5.1 ROAD ENCROACHMENT: In the city of Barasat, road occupies very little space. Only seven percentage of the total land is consumed by road besides, the very little road space, 30% of the road area is encroached by foot path user and permanent and semi-permanent structures including shops. Consequently there is very little space for the pedestrians. They face accident when they walk on the road used by the motorized vehicles (Islam, 2011).

5.2 RAPID VEHICULAR GROWTH: The number of registered motor vehicles has grown rapidly. The total number of registered motor vehicles has increased from 13016 to 36525 during the period of 2004-2015 Fig.2

Table 1. No. Of registered vehicles at Barasat urban area

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2015-2016	<u>3875</u>	<u>4682</u>	<u>5154</u>	<u>3278</u>	<u>3822</u>	<u>3544</u>	<u>2761</u>	<u>4060</u>	<u>5349</u>				36525
2014-2015	<u>4210</u>	<u>3218</u>	<u>4690</u>	<u>3629</u>	<u>3957</u>	<u>4626</u>	<u>3261</u>	<u>4862</u>	<u>5344</u>	<u>4272</u>	<u>4028</u>	<u>4426</u>	50523
2013-2014	<u>4366</u>	<u>2877</u>	<u>4324</u>	<u>4201</u>	<u>3878</u>	<u>3423</u>	<u>2425</u>	<u>3669</u>	<u>4728</u>	<u>4259</u>	<u>3376</u>	<u>3936</u>	45462
2012-2013	<u>3378</u>	<u>2410</u>	<u>1857</u>	<u>2540</u>	<u>3660</u>	<u>1457</u>	<u>4194</u>	<u>4683</u>	<u>5178</u>	<u>5956</u>	<u>4591</u>	<u>4336</u>	44240
2011-2012	<u>2500</u>	<u>3951</u>	<u>3283</u>	<u>1767</u>	<u>3880</u>	<u>4539</u>	<u>2671</u>	<u>4403</u>	<u>4250</u>	<u>3260</u>	<u>3982</u>	<u>2149</u>	40635
2010-2011	<u>2671</u>	<u>2862</u>	<u>3384</u>	<u>3468</u>	<u>3376</u>	<u>3137</u>	<u>2721</u>	<u>3684</u>	<u>3616</u>	<u>4152</u>	<u>3521</u>	<u>3897</u>	40489
2009-2010	<u>1488</u>	<u>1457</u>	<u>1602</u>	<u>2515</u>	<u>1937</u>	<u>1895</u>	<u>2721</u>	<u>2828</u>	<u>3221</u>	<u>2770</u>	<u>3435</u>	<u>3306</u>	29175
2008-2009	<u>1350</u>	<u>1576</u>	<u>1407</u>	<u>1645</u>	<u>1339</u>	<u>1604</u>	<u>1200</u>	<u>1506</u>	<u>1322</u>	<u>1666</u>	<u>1424</u>	<u>1694</u>	17733
2007-2008	<u>1315</u>	<u>1486</u>	<u>1617</u>	<u>1177</u>	<u>1517</u>	<u>1278</u>	<u>1176</u>	<u>1749</u>	<u>1626</u>	<u>1823</u>	<u>1683</u>	<u>1692</u>	18139
2006-2007	<u>1084</u>	<u>1629</u>	<u>1537</u>	<u>1417</u>	<u>1410</u>	<u>1532</u>	<u>1200</u>	<u>1948</u>	<u>1571</u>	<u>1429</u>	<u>1647</u>	<u>1555</u>	17959
2005-2006	<u>1101</u>	<u>1128</u>	<u>1095</u>	<u>1054</u>	<u>955</u>	<u>1121</u>	<u>1047</u>	<u>1427</u>	<u>1381</u>	<u>1312</u>	<u>1313</u>	<u>1544</u>	14478
2004-2005	<u>877</u>	<u>910</u>	<u>844</u>	<u>1074</u>	<u>1007</u>	<u>901</u>	<u>856</u>	<u>1301</u>	<u>1362</u>	<u>1182</u>	<u>1314</u>	<u>1388</u>	13016

Source: Barasat Motor Vehicles, 2015a

It is interesting to note that the private vehicles viz. motor cycles, and scooters registered the maximum growth. There is considerable rise in the number of private cars as well. The growth of the goods vehicle, buses and mini buses, jeep, taxi are also mentionable. In spite of the increase in the number of vehicles, there is no corresponding increase in the road areas. Consequently vehicle growth exceeds the carrying capacity of the roads resulting in the road accidents (Sexana, 2005)

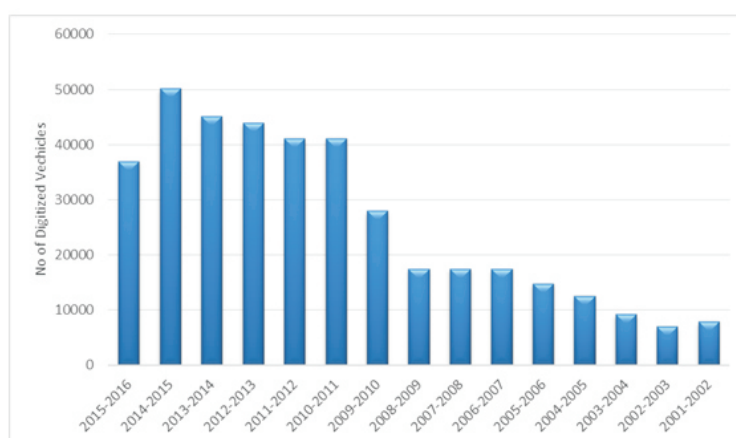


Fig.2(a) List of no of digitized vehicles in Barasat RTO, West Bengal as on 25-Dec-2015 09:48:46

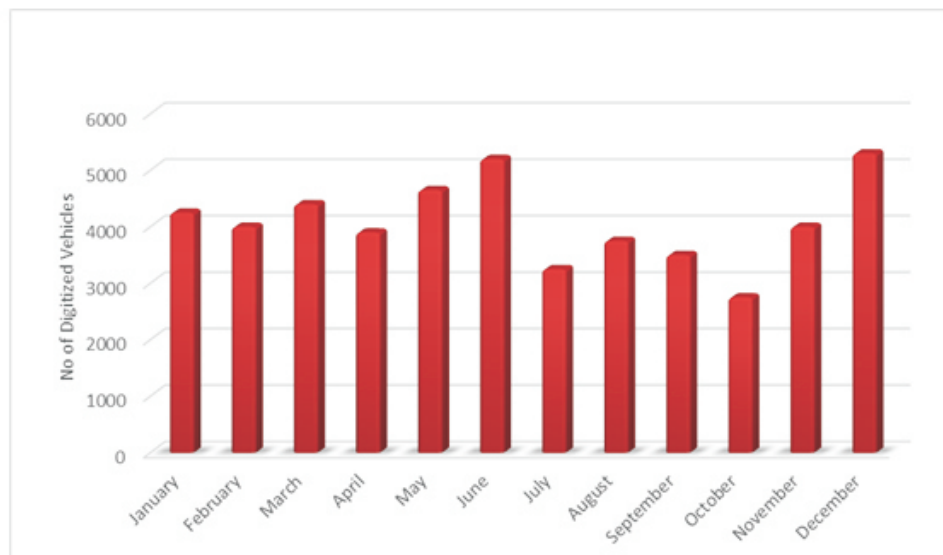


Fig.2 (b). Number of Digitized Vehicles in year 2015

5.3 TRAFFIC CONGESTION: there is peak time traffic congestion especially 9 a.m to 11 a.m and 4 p.m to 6 p.m due inadequate provision of road and huge traffic. Here the traffic flow maps for bi-cycles, motorcycles, cars, rickshaw, and buses have been prepared which shows that the maximum number of traffic is Toto and the cycle-van occupies the second largest position, and the cars occupies the lowest position for the selected vehicles(Khullar, 2008).





Fig. 3 Major Traffic Junction of Barasat Municipality (A) Dackbanglow More, (B) Champadali More, (C) Colony More, (D) Helabottala (Source: Field photographs, 2015)

5.4 ROAD ACCIDENTS: The pattern of road accident has been analyzed for the parameters of number of cases, persons killed and persons injured during the period 2005-2015. It is seen that the number of accidents have been steadily increasing since 2005. During the period 2005-2015, the number of cases has increased from 142 to 152 and the number of persons killed has decreased from 61 to 39 (it's a good sign) and the number of persons injured has increased from 292 to 295. (Nandi, 2015).

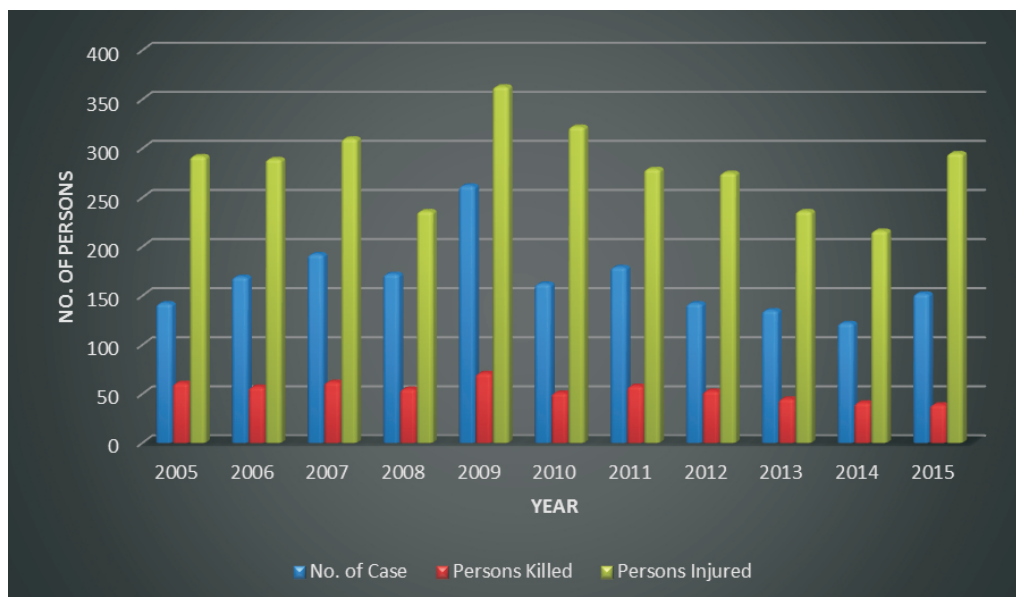


Fig.4 Road Accident Cases at Barasat Urban Area (Source: Superintendent of Police, 2015 b)

5.5 INADEQUACY OF TRAFFIC CONTROL POINT:

In Barasat Urban area there is dearth of traffic control points. There are traffic control points at Dakbanglow More, Colony More, Helabottala more, Champadali More and the remaining crossings are unmanned (Fig.3)(Saxena, 2005).

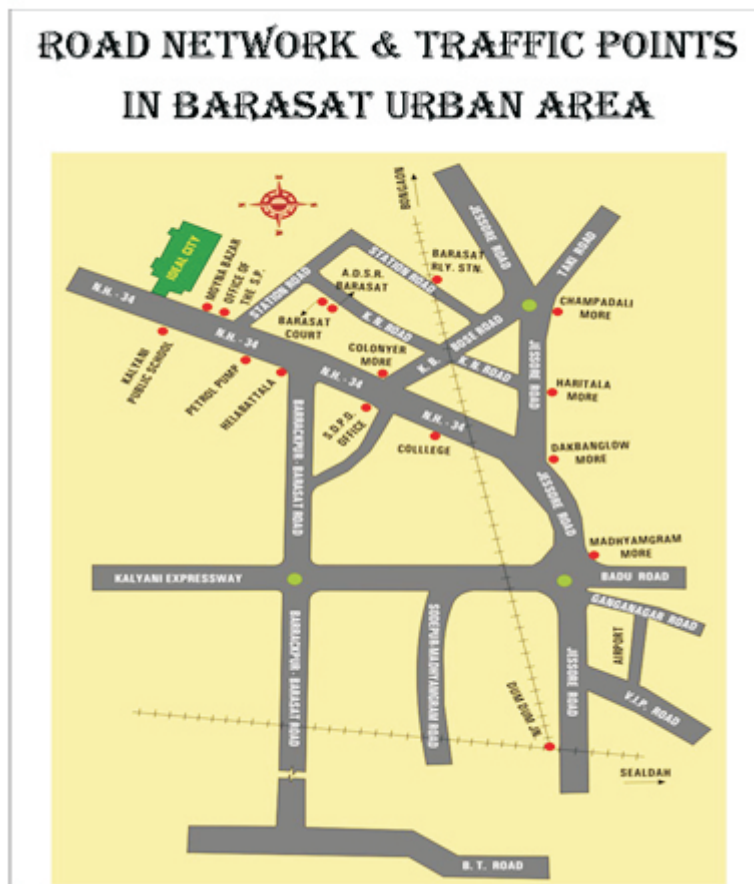


Fig.5. Road Network and Traffic Points in Barasat Urban Area (Source: <http://ganpatiproperty.blogspot.in/2009/05>)

5.6 USE OF SAME ROAD BY MOTORIZED AND NON-MOTORIZED TRAFFIC:

A point is to be noted that goods vehicle, taxi, private cars, buses, mini buses, auto rickshaw, motor cycle, bi-cycles, rickshaw, etc. ply on the same road. This multi speed vehicles not only creates traffic congestion but also triggers road accidents.(Islam and Tarafder, 2013).

5.7 NARROW ROAD: Most of the road in the Barasat Municipality is narrow. Nearly 44% of the total roads are 2-2.9 meter in width.

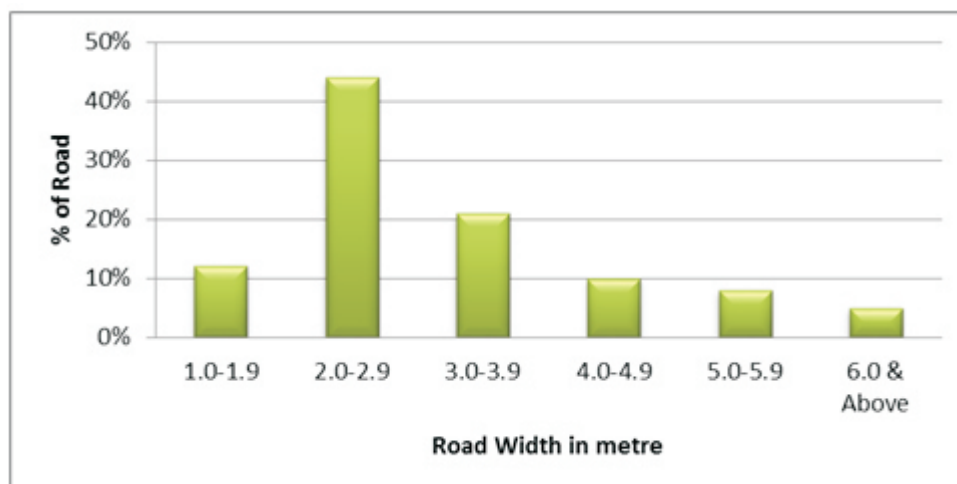


Fig.6 Road width in Barasat Urban Area

5.8 PEAKTIME OVER CROWDING:

Maximum number of population coming to this district head quarter daily or weekly basis from outside along with the huge population of its own create the problem of peak hour overcrowding in the buses. RODRIGUE, 1977).

5.9 PARKING PROBLEM:

In the city Barasat there is no provision of car and other vehicles' parking facility. Hence the vehicles are parked here and there creating road transport problem (PACIONE, 2004).

6. SATISFACTION OF PASSENGERS AND LOCAL INHABITANTS

6.1 SATISFACTION REGARDING BUS FREQUENCY: The bus commuters were surveyed .the survey indicates that nearly 49% bus commuters are satisfied with the frequency of buses and 31% were dissatisfied and the remaining 20% could not say (Nandy, 2015).

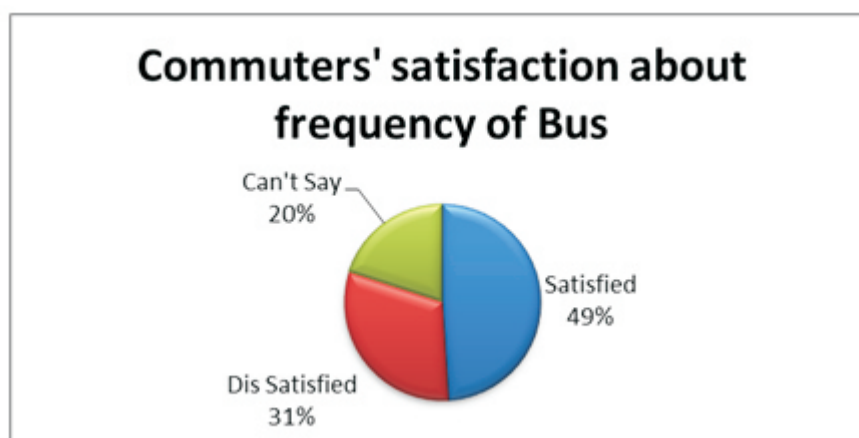


Fig.7 Level of satisfaction regarding frequency of bus (Source: Field Survey, 2015)

In other words, maximum passengers were satisfied about the frequency of buses. Those who are satisfied with this service travel towards barackpur, krishna nagar etc. And those who were

dissatisfied with this service commute towards kolkata, bongaon, bashirhat etc (Nandy, 2015).

6.2 PROBLEM OF TRAFFIC CONGESTION: Both the bus commuters and local inhabitants are well aware about traffic congestion. The 75% bus passengers and local people who were surveyed agree with traffic congestion and disgusted with this problem.

Level of satisfaction regarding Traffic Congestion

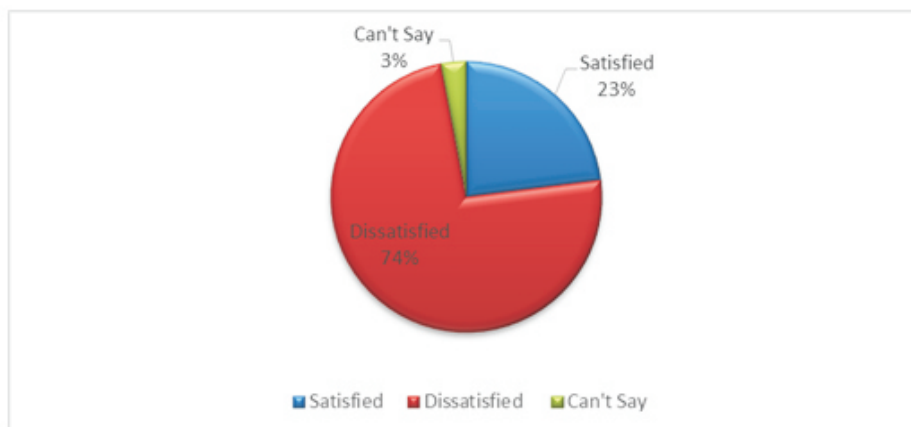


Fig. 8 Satisfaction of the Respondents about traffic congestion (Source: Field survey, 2015; Sample 140)

The day to day business gets greatly hampered. About 23% persons surveyed do not explain these phenomena as problem. But one point is to be mentioned that everybody has unequivocally admitted peak hour congestion namely between 9-11 a.m. and 4-6p.m.

6.3 PROBLEM OF OVERCROWDING: The 76% of the bus passengers surveyed admit overcrowding in bus.

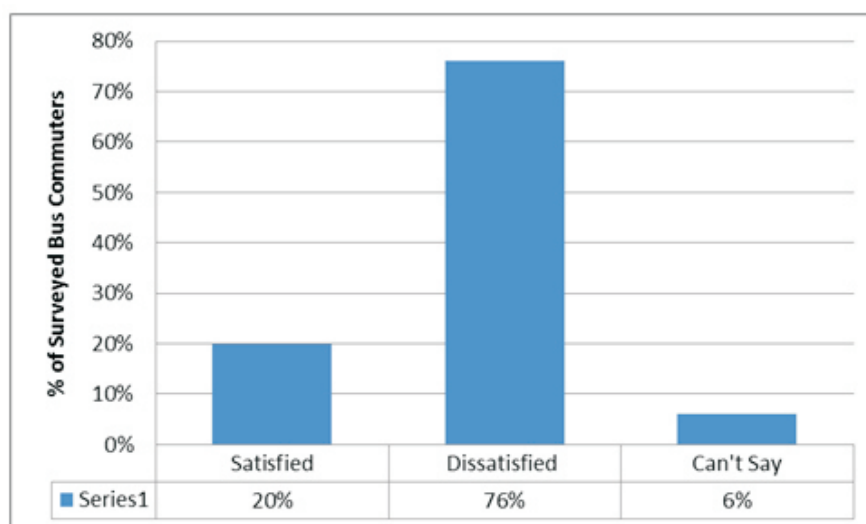


Fig. 9 Level of Satisfaction regarding overcrowding Source: Field survey, 2015

This problem is more acute in peak hours. In spite of increasing number of buses, the

thousands of common people come to this district headquarters to take different types of services viz. education, hospital, administrative function, employment opportunities (Thompson, 1977).

6.4 PROBLEM OF WATER LOGGING: The major roads in the Barasat urban area are not free from the problem of water logging. In some areas shower of only half an hour can create inundation of roads because of the poor drainage system. The major areas of water logging are Banamalipur, Prasadpur, Hridaypur, Kazipara, Nabapally of the Barasat Municipality. Sixty two percent of surveyed population admitted that they are not dissatisfied in this regard .Only 37% people, surveyed are satisfied.(Islam, 2011).

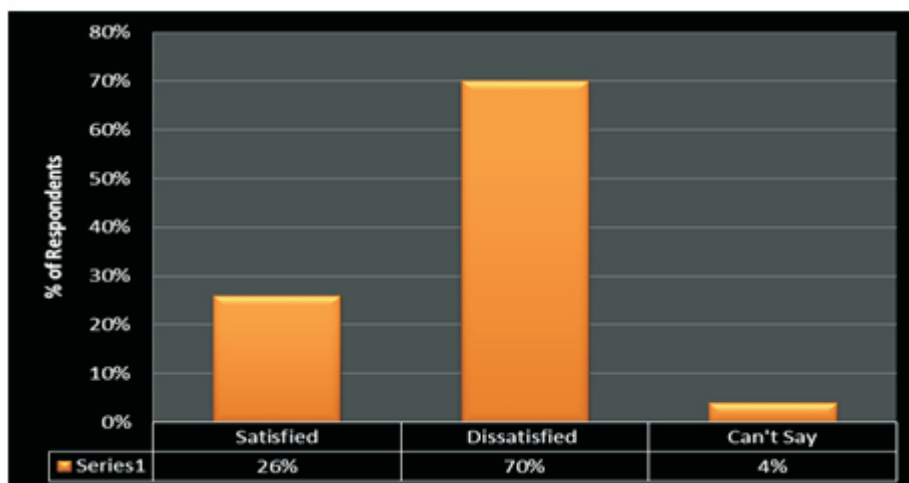


Fig.10 Level of satisfaction regarding water logging

Source: Field survey, 2015

6.5 ROAD CONDITION: About road condition notable road area, road width, maintenance of road 77% of the respondents were satisfied, and remaining 23% were dissatisfied. In spite of little road space they are satisfied because it is difficult to increase road area destroying the road side structures.

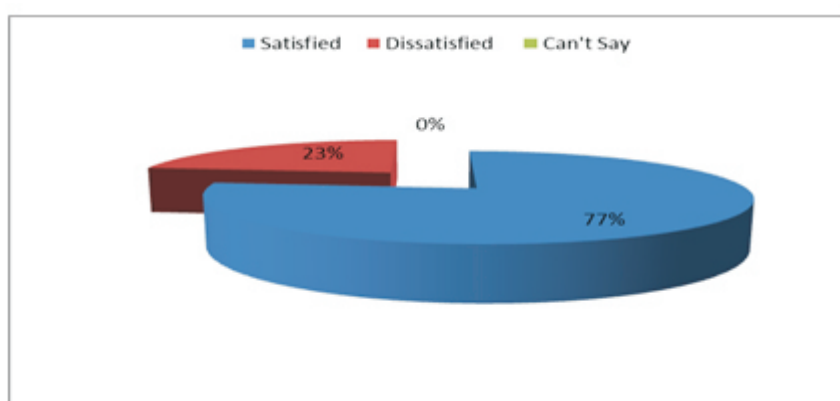


Fig .11 Level of satisfaction regarding road condition (Source: Field Survey, 2015)

6.6 TRAFFIC POLICE SERVICE: Regarding traffic police service only 45% of the respondents were satisfied and 53% of the respondents were dissatisfied because not only the traffic police service is inadequate but also the traffic police sometimes show negligence in their duties (Thompson 1977).

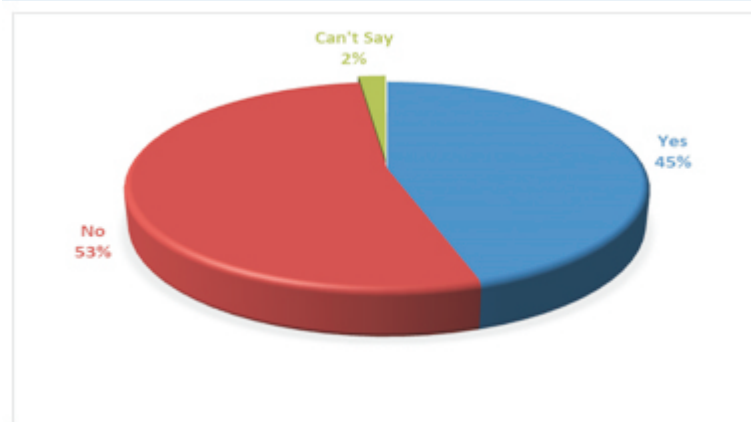


Fig .12 Level of satisfaction regarding traffic police services (Source: Field survey, 2015)



Fig. 13 Level of satisfaction regarding problem of road encroachment

6.7 PARKING PROBLEM: That parking of vehicles is an acute problem is attested by answer of overwhelming major of the people surveyed. About 70% of the respondents became dissatisfied about parking facility. Only 26% satisfied & 4% can't Say. This is because of near absence of any parking facilities in selected places; vehicles are parked haphazardly on the road or roadside.

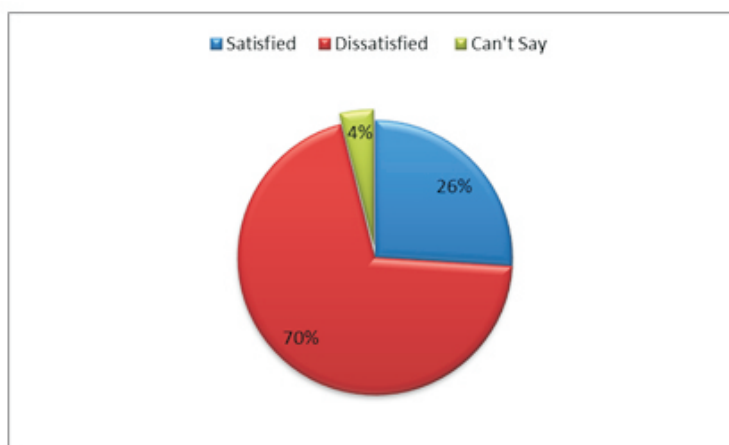


Fig. 14 Level of satisfaction regarding parking problem (Source: Field survey, 2015)

7.CONCLUSION

Now-a-days in Barasat, the main reason of traffic congestion is the rapid increase in the number of Totos on the road. But the totos run on batteries which are eco-friendly to nature. To get rid of this problem, at first the administration as well as the Barasat Municipality should take necessary action to control the rapid growth of the Totos on the road.

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