TRAFFIC CONGESTION ISSUE AT VARIOUS SQUARE OF RAIPUR CITY

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Abstract : One of the big problems facing city municipalities is the traffic congestion. It makes life in cities uncomfortable for people. This paper investigate the traffic congestion issue at various square of Raipur (Moti Bagh Chowk, Azad chowk, Kuchery Chowk, Station Chowk, Netaji chowk). These issues are rising because number of vehicles is rising and they cause major loss of lives through accidents. In this paper several traffic congestion issues are explained and problem is found out. This paper will help in recognising the issues and gather information at different squares of Raipur.

Keywords: Traffic congestion; Traffic jam, urbanization.

1. INTRODUCTION

Raipur is a developing city but still road development work in Raipur lags behind in many aspects and this leads to traffic congestion issue. This issue is global issue and must be solved properly because it directly affects the road user. Some of the main reason behind traffic congestion issue is lack of public transport amenities, poor road planning, poor discipline, safety issues etc. These issues affect our economy as well. Traffic jams in Raipur city have reached an alarming stage. People from all walks of life are facing the acute problem day by day. It is a big worry for everyone. No one knows at what time one will reach one's destination. It is uncertainty, anxiety and frustration that one has to undergo while being stuck in traffic. With each passing day the problem has only aggravated. I feel we have overlooked one simple aspect. It is our changing life style. Because of easy availability/ accessibility to the transport system, we have become lazy. To commute even a short distance by walking has become impossible.

Traffic congestion has a number of negative effects: It increases the travel time of motorists and passengers which increase the trouble and make the journey unpleasant. It increases the fuel consumption of vehicles and harm the environment by producing air pollution. It directly affects the performance of vehicles by increasing the wear and tear on vehicles this reduces the age of vehicles. Traffic congestion may interrupt the route of emergency vehicles like ambulance. It higher the chance of collision of vehicles due to less spacing.Chhattisgarh's first Multi-Level parking was inaugurated by the Raipur Municipal Corporation at the site of the Old Bus stand. This was done the ease the traffic of vehicles and prevent the illegal parking near the Jaistambh chowk area which is also one of the prime market area of Raipur. One of the prime issues faced by peoples of Raipur were parking spaces and people on not finding parking spaces would gradually encroach the roads.

The congestion problem is a common problem among developed and underdeveloped countries, so, it's a global problem [1]. Various investigations are carried out by other countries tofind the accident data. India has adopted the technique of investigation done by police authorities to find out the reason behind accidents [2].The traffic congestion leads to other kinds of problems especially in big cities, according to a study conducted in cities of Sweden the traffic jam caused a noise pollution too [3]. Due toeconomic growth, vehicle users are increasing thereby increasing road accidents [4].Other studies showed that development in any county in the world is not perfect if traffic congestion results big economic costs [5]. A good road network in the rural areas is one of the most important components ofdevelopment, because it promotes a path towards economic and social services, which shows improvement in the field of increased agricultural productivity, reduction in poverty and increase in employment [6].In this research paper traffic congestion on different squares of Raipur is observed and try to find out the main problem behind these congestion. All the reason of traffic congestion is observed properly at peak time of traffic.

2. METHODOLOGY

A road side survey is done at various squares of Raipur. The main point that taken care is the driving habits of the civilians and their ability to make the decision to reduce the congestion. One of the major point of observation is that do civilians obey the traffic rules or not, and is the traffic is due to the lack of knowledge of traffic rules?Traffic survey done at Motibagh chowk, Azad chowk, Kutchery chowk, Station chowk, Avanti chowk, and Netaji chowk. Various survey data considered at these squares are number of connecting road, type of traffic, type of area, peak time of traffic, present amenities, future forecasting of population, causes of traffic congestion, and causes of traffic density.

Table1: Various data taken at six squares of Raipur City

Type of data	Motibagh chowk	Azad chowk	Kutchery chowk	Station chowk	Avanti chowk	Netaji chowk
Number of connecting road	4	5	4	4	3	5
Type of traffic	light traffic	moderate traffic	heavy traffic	heavy traffic	moderate traffic	moderate traffic
Type of area	commercial, residential and official	Commercial and residential	Commercial and official	Commercial and residential	commercial and residential	commercial and residential
Peak time of traffic	6pm to 9pm	6:30 pm to 9 pm	9am to 10pm	6pm to 10pm	6am to 11 am and 6pm to 9pm	6pm to 9pm
Present amenities	Road marking, efficient drainage, and Signal facility	Road marking, efficient drainage, and Signal facility	Road marking, efficient drainage, Signal facility, and Camera	Alignment, Efficient drainage, and road marking	Road marking, efficient drainage, Signal facility, and Circular Island	Road marking, efficient drainage, and Circular island
Future forecasting of population	May increase in future	Yes will increase	Saturated	Saturated	May increase in future	May increase in future
Causes of traffic congestion	Encroachment, and Obstruction to visibility	Encroachment, Island is not provided, Confusion due to improper planning, and Poor parking	One way, Poor parking, and Connecting point	Encroachment, Road width, Island is not provided, Poor parking, Poor marking, and Poor planning	Encroachment, Obstruction to visibility, improper placement of island, Poor parking, and poor planning	Encroachment, Obstruction to visibility, and Island is not provided
Causes of traffic density	near hotel, hospital, commercial market, official complex, mosque, church and motibagh garden	near school, hospital, shopping complex, and temple	near collectorate, hospital, commercial market, official complex, and court	near hotel, hospital, commercial market, railway station, and hospital	near hotel, hospital, and commercial market	near hotel, hospital, and commercial market

2.1 The Global Parking Problem

I. Congestion: Abrupt on-streetParking leads to traffic congestion.
II. Pollution: Vehicle hoping from one to other place in search of Parking.
III. Enforcement: Lack of Enforcement for Abrupt Parking**.**
IV. Lack of Parking: Lack of Sufficient Smart Parking Spaces. With increase in standard of living comes the urge to acquire a personal vehicle resulting in increased vehicle density. Rapid increase in vehicle count creates in convenience to traffic flow Lack of adequate space within the city. Typically vehicle runs for one hour and is parked for remaining 23 hours. Parking policy has emerged as an effective tool worldwide to address the parking problems of the city.

2.2 Parking Scenario in Raipur

I. Total number of registered vehicles in Raipur as per record is 544275 and increasing at exponential rate.
II. Study says that at least 30% of the vehicle running on road look for parking.
III. Only 12 Parking Lots are owned by Raipur municipal corporation with a capacity of 600 four wheelers and 550 two wheelers. Few parking lots are available in Malls and large shopping complex as well.
IV. Due to lack of parking infrastructure, most of the vehicles are parked on road sides especially in market areas hampering free flow of traffic.
V. The traffic enforcement rules are not actively followed allowing users to park their vehicles anywhere.

3. CONCLUSION

After the survey of various squares of Raipur city the conclusion that comes out is the proper planning of city is required with effective ideas to reduce the traffic congestion. The proper planning will definitely reduce the problem of traffic congestion of city. The road user must aware of traffic rules so that they obey the rules which will make the road planning a lesser traffic congestion area. Although traffic congestion is inevitable, there are ways to slow the rate at which it intensifies.Widening the road is the best solution for deceasing the congestion.

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