

Assessment of Urban Transport in Medium Towns

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Abstracts: India is urbanizing at a very rapid pace still many of the Indian cities are struggling to keep with this fast pace of urbanization. Today with increasing urban population there is growth in demand for urban transport, which leads to increase in private vehicular ownership and decline in public transport share. Cities in India are suffering from severe and worst transport problems like: congestion, parking shortage, traffic injuries and fatalities. Sudden rise in private vehicle ownership, deteriorating public transport service, limited and outdated transport infrastructure with inadequate as well as uncoordinated land use and transport planning are the major concern areas. This paper is a scholastic attempt to understand the emerging issue of transport infrastructure in medium town. Furthermore, it also reveals the need of strategic planning in urban transport infrastructure and recommends planning improvements that would help to mitigate urban transport problem and promote better quality of life in a pragmatic and holistic manner.

Keywords: strategic planning, transport infrastructure, urbanization, urban transport

1. INTRODUCTION

Transportation is the major problem that today our cities are facing either it is movement of freight or the people both with the increasing time are becoming costlier and slow in functioning. But the main issue to discuss is why this is happening all because we are yet not capable to cope with the pace of development or because of gap between the formulation and execution step. If we consider the development and urbanization one of the factor which is yet slow in medium towns as they are next in queue to develop after the large cities of the nation, but there is also another face of coin which clearly states our incapability of decision making and its successful execution. Further in this paper we will discuss how land use planning and transportation system are dependent on each other and how our medium towns got into this rat race of urbanization.

2. URBANIZATION IN INDIA

India shares most characteristic features of urbanization in the developing countries. Number of urban agglomeration /town has grown from 1827 in 1901 to 5161 in 2001. Number of total population has increased from 23.84 crores in 1901 to 102.7 crores in 2001 whereas number. Of population residing in urban areas has increased from 2.58 crores in 1901 to 28.53

crores in 2001. This process of urbanization in India is shown in Fig 1. Urban growth can be attributed to mainly three components 1) Natural increase, 2) Net migration, 3) Areal reclassification. These components have been estimated using residual method. This trend is less observed in developed nations but in developing nations, cities are getting urbanized at faster rate accounting for 68% of urban population in 2000 and 77% (3.26 billion) by 2020 [1].

For the last 30 years, migration has contributed about a filthy of the population; natural urban population growth contributed about 60 % and the rest about equally split between new town formation because of reclassification and urban boundary expansion or sprawl.

According to Census of India 2011 there are 7, 935 towns in the country. The number of towns has increased by 2, 774 since last Census. Many of these towns are part of Urban Agglomerations and the rest are independent towns. The total number of Urban Agglomerations/Towns, which constitutes the urban frame, is 6166 in the country. The total urban population in the country as per Census 2011 is more than 377 million constituting 31.16% of the total population [3].

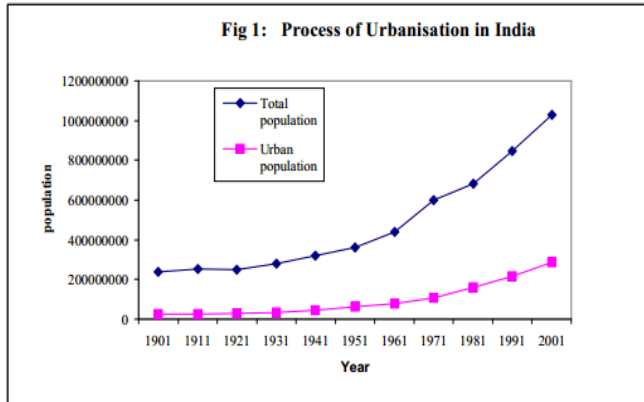
As per Census of India 2011, there are 468 such Urban Agglomerations/Towns. The corresponding number in Census 2001 was 394 whereas 264.9 million persons, constituting 70% of the total urban population, live in these Class I Urban Agglomerations/Towns. [3].

3. IMPACT OF URBAN TRANSPORT ON INDIAN CITIES

Economic efficiency of cities and well-being of urban inhabitants are directly influenced by mobility. Whereas structure and growth of a city is directly influenced by its transport system. As our metropolitan cities are completely saturated with their extreme limit, considering case of Delhi, as its outgrowth is there in the name of National Capital Region (NCR), and to connect these areas further MRTS systems were introduced so as to lower down the population pressure on the city.

After these metropolitan cities there comes the number of our Class I towns, which are next to get influenced by this urbanization factor. As medium towns have lower income

group population therefore their mode of transportation yet not shifted to four wheeler but due to high commercialization and urbanization factor which brought the concept of township and housing society at the periphery of the city lead to the increase in ownership of private vehicular ownership, increasing congestion on roads and load on inefficient public transport system.



Around half of the share of the development cost goes to transportation sector which accounts both the industrial and socio-cultural development. According to the Economy Watch (2011) report, rapid economic growth, increase in per capita income, hassle free financing options and supporting government policies towards the transport sector will continue to drive an unprecedented increase in private motor vehicle ownership and usage in India.

4. URBAN TRANSPORT SCENARIO IN MEDIUM TOWNS

“Medium cities have larger share of the poor and a slightly larger share of slum population than the million plus cities.”[2]

With rapid urbanization and uncontrolled migration our medium towns are growing in size mainly with the contribution of urban slums, which is majorly due to low income level and availability of land outside the municipal limit but they account in the population of the city which leads to the urban transport demand in India which continues to grow, also bus service is the only one which has skeletal infrastructure provided by the municipal authority along with this system IPTs play a major role in the mobility of the city and they play important role to meet the travel demand in medium towns in India like Kanpur, Varanasi, Lucknow etc. as these systems have minimal regulations and their operation is left to the private operator.

Due to privatization of these systems often the regulations and safety parameters are violated and the measures or the guidelines by the government are not honored by these private

operators and this decline in public transport mode share is observed as 20-70% decline in different size cities between 1994 and 2007. This can be attributed to the inability of public transport services to keep pace with rising demand and to maintain high quality of service which is supported with the rising private vehicular ownership and usages [7].

As per the report of McKinsey’s 2010 report, it is expected that population in Indian cities will increase by around 250 million in the next 20 years, that will bring enormous rise in urban travel demand. It is projected that total daily passenger trips in Indian cities will be more than double from around 229 million in 2007 to around 482 million in 2031[7].

Furthermore, according to a World Bank study, for every one million people in a developing city an extra 3.5 to 4 million public transport trips per day are generated [4]. According to a study done on road fatalities in India, it is observed that from 36 fatalities per million persons in 1980 to 95 fatalities per million persons in 2006, it also reports that the growth in private motor vehicles is a major contributing factor to the deteriorating road safety trends in the Indian cities [8].

5. NEED OF URBAN TRANSPORT PLANNING IN MEDIUM TOWNS

First and foremost question arises why we need urban transport planning in medium towns; as after seeing the worsening situation of our metropolitan cities due to fast urbanization leading to migration, we should brace ourselves to avoid that to happen in next level of cities that is class I towns or out medium towns as they are next in the queue, also to cater certain issues like growth in urban transport demand; growth in private motorization; declining public transport modal share; declining non-motorized transport (NMT).

With the fascination for capital-intensive rail-based projects, investments in pedestrian, bicycle and road-based public transport infrastructure continues to be neglected. Today public transport users are largely the people who are using these modes not out of choice, but because of financial constraints. With a rise in income the ownership of private vehicles is increasing, and for ‘mile-stone connectivity’ which is inefficient through public transport, large population shifted to private vehicle ownership to attain this door to door connectivity also decline in the reliance on public transport can be observed as number of personal vehicles per 1000 population has expanded about 3 times (between 1981 and 2001), the number of buses per 1000 population has increased only 2.3 times [5].

6. PLANNING IMPERATIVES TO IMPROVE TRANSPORT SYSTEM IN MEDIUM TOWNS

6.1 The National Urban Transport Policy (NUTP) was formulated by the Government of India in 2004 and

adopted in 2006. The policy seeks to promote integrated land use transport planning, better use of public transport and non-motorized transport mode, use of cleaner technology; also it includes the guidelines and framework to prepare City Mobility Plan (CMP) for every city of India, which will help to assess the shortfalls and how to overcome those issues.

- 6.2 To promote urban transport, Central Government is financially supporting metro rail projects in many of metropolitan cities like Delhi, Chennai, Bangalore etc. whereas many of our medium towns are yet in process of preparation of DPRs for their city to introduce this high end technology system.
- 6.3 UIDSSMT- to enhance infrastructural facilities and to assist to develop durable public assets with public private partnership for infrastructural development and to promote integrated development of towns/cities in a planned and systematic manner.
- 6.4 At the policy level TCPO and development authorities are instructed to prepare master plans or the city development plan in coordination with all the sector, as here our main priority is land use planning integrating with transport planning.

7. SUMMARY

The failure of the public transport agenda also reflects the failure of our democratic process because the present mechanism of planning and decision-making does not allow inclusion of the demands of the majority of the city residents who are pedestrians, bicyclists and public transport users. On the one hand, the policy makers are concerned about the growing levels of congestion and pollution. At the same time transport policies continue to encourage the use of private vehicles.

Due to underdeveloped public transport system in India, major issues came out to be congestion on roads due to mixed traffic characteristics, also in our medium towns for capturing the market in this sector, privatization gave a new way high to them with uncontrolled fare hike and decline in the quality of service provided which led people to shift from public to private transport, which directly leads to increase in per capita trip rate and increase in pollution level and road accidents too.

Due to huge responsibilities assigned to various levels of governance authorities in India, most of the city suffers from negligence from those authorities.

Demand for urban transport is expected to double by 2030, hence, there is an urgent need to develop strategies, which will reduce demand for public transport without constraining growth and provide a healthy environment to urban dwellers.

8. RECOMMENDATION

Transport sector has crucial role to play in economic development, it is observed that the provision of a high quality transport system is a necessity for the overall development of the nation. But with the small initiation and adaptation of simple guidelines which are implementable at the ground level many severe issues can be cured, some of the suggestions to conclude this study are as follows-

- Lane segregation, after the conceptualization of BRTS, the concept of lane segregation is high in demand through which different modes can be segregated accordingly; like segregation for cycle, pedestrian, bus, and other vehicles.
- Improving traffic management system to lower down the chances of fatal accidents and decreases the several cause of congestion on roads.
- Introduction of different modes like electric rickshaws, NMTs, under IPT to attain last-mile connectivity.
- Privatization of bus services for scheduling and re-routing with improvement of infrastructure.
- Increase in motor vehicle technology and rates like use of non-polluting fuel e.g., CNG also solar or battery operated rickshaws which are more efficient and non-polluting in nature.
- Interdependency between land use and transport planning is always learned but adopted in practice was very less; therefore, this should be put at high priority to get it done correctly.
- Promotion to higher density development (TOD), for a city to grow in planned manner always transport should be planned first, rather than vice-versa case to have a control on haphazard development or growth of the city.
- Hike in parking charges by increase in pricing of parking charges to shift the traffic from private to public transport.
- Increase in tax on private vehicle ownership, to reduce the vehicles on road by different taxation method, or the day segregation for vehicles on road, all to avoid road accidents.
- Vehicular quota system to have a check and control on the number of new vehicles allowed for registration by considering the prevailing traffic conditions and number of vehicles taken off the road permanently.

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