Our Transportation System is in Crisis - 75

There is an urgent need to prepare a National Road Safety Policy providing for appropriate action by all concerned to reduce the number of traffic accidents and fatalities. According to India's draft national transportation policy with respect to road safety, road traffic injury prevention needs to be incorporated into broad range of activities such as, development and management of road infrastructure, provision of safety in vehicles, law and personnel, mobility planning, provision of health and hospital services, urban and environmental planning etc.

Analysis of their accident data shows that the primary causes of road accidents are driver fault (83.5%), pedestrian or passenger fault (4.7%), mechanical defect in vehicles (3%), bad roads (1.1%), bad weather (0.9%) and other factors like cattle, fallen trees, road blockage, non-functioning of signals, absence of rear reflectors/road signage etc. (6.8%).

In the case of Trinidad and Tobago, a study of fatal traffic accidents, that is, a traffic accident where at least one person dies within thirty days of the occurrence, between 2001 and the first half of 2005, as reported by the Central Statistical Office (CSO) reveals the following:

- One-third of all fatal traffic accidents occur between 6:00pm and 12:00 midnight;
- Approximately 60% of all fatal traffic accidents occur between 6:00pm and 6:00am;
- Fridays, Saturdays and Sundays together account for 55% of all fatal traffic accidents, with 20% of that figure on a Saturday as well as on a Sunday;
- Nearly 50% of all road fatalities are male victims between the age group 20-49, with about 60% of this figure in the age group 20-34;
- Over 80% of all road fatalities are males;
- Just over 34% of road fatality victims are drivers, over 27% are passengers, and 33% are pedestrians. In other words, a road fatality victim is almost equally likely to be a pedestrian, a passenger or a driver.
- Nearly 15% of all fatal accidents occur on the Churchill-Roosevelt Highway (CRH), and about 10% on the Solomon Hochoy Highway (SHH), and almost 10% on the Eastern Main Road (EMR). Of course, lately, several fatal accidents each with multiple fatalities have been occurring on the South Trunk Road.
- CSO no longer report the causes of road accidents. Between 1951 and the mid-1960s, the CSO always recorded and reported analysis of persons responsible and causes of road accidents.

So how does our country reduce road fatalities and rates of traffic accidents?

The rate of road fatalities is not traditionally measured in absolute numbers annually, but is internationally measured in terms of the annual number of road fatalities per 1000 vehicles. Figure 1 gives the absolute number of persons killed annually in road accidents in TnT, where it can be seen that since 1990 road fatalities have been fluctuating between 100 and 200 persons annually, with a slight tendency towards the higher end between years 2000 and 2004. Figure 2 gives the absolute number of persons killed annually in road accidents in TnT per 1,000 vehicles. It can be seen that the rate of road fatalities per 1,000 vehicles has actually been declining, revealing that the rate of increase of vehicles on the roadways in much higher that the rate of increase in the numbers of persons killed. Of course this second diagram is of no comfort to the planners and decision makers, and especially the families and loved ones of the victims. The higher traffic volumes and traffic densities on the congested roads are perhaps having the effect of reducing the rate of fatal crashes. So it may not be surprising that 60 percent of the fatal accidents are occurring when the traffic is much reduced and the speeds are higher. There is still a critical need for remedial schemes.

Accident remedial measures can be summarized as follows: (i) Driver related (ii) Road user related (iii) Vehicle related (iv) Environment related (v) Road related and (vi) Traffic related. Driver related accident reduction measures include improving driving skills by means of driver training, conducting proper driving tests, screening of accident-prone drivers, refresher courses etc. Road user related measures include imparting knowledge about rules of road use, awareness of traffic rules, safe driving behaviour and legal issues. Vehicle related measures are introduction of greater safety measures in vehicles, including efficient braking, glare free lights, proper tyres, cushioned dash boards, seat belts, collapsible steering columns, air bags, etc. Environment related measures include developing a culture of a safe environment. Road related measures are improvement of road layouts, intersections, accident-prone locations or black spots, appropriate use of medians and traffic islands, properly planned and located pedestrian crossings, traffic signs and markings, etc. Traffic related measures include speed control, entry restrictions, separate lane for bus, bicycle, pedestrian, etc.

Is it not possible for the police to patrol some of the roads during the nighttime and early morning hours, such as CRH, SHH, EMR on the Valencia stretch, and the South Trunk Road? Of course, the police speed trap mechanisms will have to change from the primitive method

of three men in the bushes to modern laser technology. Or perhaps there is need for a separate agency dedicated to traffic monitoring, enforcement and parking. More on this later.

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