UNFORGIVING INDIAN ROADS

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We all know that "Speed Thrills but Kills" but still we want to speed in our daily life. The deadly game of hunted and hunter is daily played on Indian Roads with the big vehicles playing the role of hunter and the vulnerable section and smaller vehicles being hunted. Everybody if given a choice would like to be in the biggest vehicles as they generally own the road literally. You may be surprised to know that nearly 95000 people get killed on Indian Roads on yearly basis, or nearly 260 people getting killed on daily basis. There is always a human tendency to underreport undesirable facts. In our country it's the number of accidents which often fails to get registered. Human Death due to its complexity cannot be neglected and thus often gets registered. Experts like Prof Dinesh Mohen have researched and indicated that a ratio of 1:15:70 for road accident deaths, injuries requiring hospital treatment, and minor injuries. Thus it indicates that nearly 8 million people "Directly-influenced "by accidents. The persons who are only injured are "blessed" and they know that things could have been either way.

Have we ever bothered to find why we have so many accidents? Do we have a way out? Is the situation improving as many believe? Let us try to move out of philosophy that accidents are unavoidable. Yes, they are! Western countries are using this philosophy in Vision zero, where they plan to make roads which cannot cause any fatalities.

Statistics is often used by many to proclaim that situation is improving in India. Is it so? The most often statistics put forward by the authorities is the ratio of number of accidents by thousands of vehicles. In 1970, the percentage was around 81% and in 2004 it is around 5.9%. This is the most common (mis)information spread by people. Now let us again consider government statistics. We know that Hospital facilities have come a long way and it's very easy to get a person to Hospital than say three decades back. But still you may be astonished to know that accidents have become fore fatal with time. In 1970's the percentage of Total killed by total accidents was around 12% which has increased to nearly 21.5% in 2004. In spite of improvement in infrastructure, vehicle designs, driver knowledge and hospitals still accidents are becoming more fatal in nature. The reason can be increase in speed. The researchers have traditionally identified the problems as lack of driver ethics and knowledge, road design issues and high traffic violations. When all these three ingredients combine, we have a recipe for disaster. Let us try to analyze as to why so many Indians get killed on Roads?

Indian Roads are designed on our Traditional Codes which are as good as extinct. The codes which designers generally follow are IRC-**73** (Rural Roads) and IRC-86 (Urban Roads). These codes have not been modified till now. People argue that Western countries have faster roads and still they don't have so many accidents. Yes it's true. But they also have active policies such as Vision Zero, forgiving road sides which we can never think off. The Road speed depends on the infrastructure and surroundings. We adopt "economical" designs which often are deficient. Consider the case of narrow medians, steep side slopes and median kerbs which facilitates overturning. We also allow pedestrians to cross such roads with design speed of 80-100 kmph putting them in direct risk. Internationally it has been proved that pedestrians and vehicles can only co-exist on a road with speeds of less than 30 kmph. This golden rule is often forgotten for the sake of "economy". We still have pedestrians competing with vehicles to gain space and often losing the battle. Nearly 40% of people killed in urban areas are pedestrians. Let us not make this reason and try to push the pedestrians out of roads but provide them better-safe facilities. It is an irony that Western countries are planning to have zero fatalities in future by investing in huge numbers and still we are banking on vasthu shastra in some places to reduce accidents (Nagpur).

Research proves that driver error is major cause of accidents in India (83.5%). "Driver Error" term indicates a whole spectrum of scenarios which may occur on the road. For example, the driver may not have realized about pedestrian on road, he could not judge the overtaking distance, he did not expect an intersection. In short this behavior can be tied down to the fact that road gave wrong signals to the driver. Roads send out the signals which the drivers catch and their behavior change. The Highway Designer and the authorities are to be blamed for this mess. They could have made the change in design approach which could have saved the life. The road side environment should be such that in case of mistake the resultant should not be a death. This is not a tall order and can be achieved. Putting "economy" in front of "design" is like putting the "cart" in front of "horse". Let us move away from such mistakes and plan for fatal free journey...