## INTRODUCTION

As the world navigates through the COVID-19 pandemic, the road crash pandemic continues to fester the socio-economic landscape in India. India tops the world in road crash deaths and injuries. It has 1% of the world's vehicles but accounts for 11% of all road crash deaths, witnessing 53 road crashes every hour; killing 1 person every 4 minutes. In the last decade, 1.3 million (13 lakh) people have died and another 5 million (50 lakh) have been injured on Indian roads. Furthermore, 76.2% of people who are killed in road crashes are in their prime working-age, i.e. 18 – 45 years (MoRTH, 2018).

Globally, Road Traffic Injuries (RTIs) are the eighth leading cause of death (WHO, 2018). However, the road crash fatality rate is three times higher in low-income countries compared to high-income countries and statistics from India further reinforce this global trend. There is a distinct correlation between socio-economic status and road use patterns in Low- and Middle-Income Countries (LMIC)¹ like India - "Poor people are more likely to be involved in a road traffic crash" (GRSP, 2018).

In a country like India, where vulnerable road users are forced to share space with other less vulnerable road users, the income level of an individual has a direct bearing on the mode of transport used. This in turn further determines the level of risk faced by a particular road user. For instance, daily wage workers and workers employed as casual laborers and/or in informal activities are more prone to be defined as VRUs compared to workers engaged in regular activities.<sup>2</sup> It is no coincidence, then, that it is often the poor, especially male road-users of working age, that constitute the category of Vulnerable Road Users (VRUs)<sup>3</sup> in India. VRUs bear a disproportionately large burden of road crashes and account for more than half of all road crash deaths and serious injuries in the country (WHO, 2018).

RTIs have a profound long-term impact on income growth and welfare loss which further constrains the human capacity in emerging economies. The 2019 World Bank report "Guide for Road Safety Opportunities and Challenges: Low- and Middle-Income Countries Country Profiles" puts the road crash and serious injury cost estimate at 7.5% of India's GDP i.e. INR 12.9 lakh crore (\$166.43 billion) for the year 2016, which is more than twice the figure cited by the Government of India, i.e., 3% of GDP (Planning Commission, 2011), or INR 4.3 lakh crore (\$58.19 billion). A recent study commissioned by the Ministry of Road Transport and Highways (MoRTH) estimates the socio-economic costs of road crashes at INR 1.47.114 crores in India i.e. equivalent to 0.77% of nation's GDP.4 Considering the under reporting phenomenon and using the crash ratios for MoRTH crash numbers, the same study estimates the crash costs at INR 5,96,820 crores i.e. equivalent to 3.14%. At the individual level, road crash injuries and deaths impose a severe financial burden. They push entire (non-poor) households into poverty and the already poor into debt.

## 2.1 CURRENT ROAD SAFETY POLICY FRAMEWORK IN INDIA

The Motor Vehicle Act, 1988 has been the primary legislation governing road safety scenario in India for over 30 years till 2019. Over years, the Motor Vehicle Act became outdated and had limited impact. Even though it covers many aspects like licensing, registration of vehicles, setting standards for heavy motor vehicles, penalties for traffic offences etc, yet it was silent on some key issues like child road safety, or the safety of pedestrians and non-motorised users. Also,

the lack of a centralised licensing system and proper standards for mandatory driver training had resulted in various ill practices like a person holding multiple licenses from different states. The fines levied under the Act were also not rationalised. There was a need for an overhaul of the transport sector and for a policy framework that would focus on improving road safety in the country.

Keeping in mind the need to bring about progressive changes through provisions like cashless treatment of road crash victims, electronic enforcement and monitoring and a higher deterrent against committing traffic offences, the Motor Vehicles (Amendment) Act, 2019 was introduced in Parliament on 9th August, 2016 and was passed after three years of public mobilisation and political advocacy.

On 1st September 2019, the Motor Vehicles (Amendment) Act, 2019 came into effect nationally, with the objective to create an enabling framework to improve road safety in India. The Act consists of a total of 93 Amendments including several provisions such as a scheme for cashless treatment of road crash victims, state involvement in making rules for movement of non- motorised transport, provisions for safety of children during commute, electronic monitoring and enforcement, and liability on road engineers and authorities for faulty road design and engineering. These provisions can substantially reduce road crash fatalities and alleviate the economic burden of road crashes in the country.

<sup>1.</sup> Lower-middle-income economies are those in which 2019 GNI per capita was between \$1,036 and \$4,045.

<sup>2.</sup> Definitions have been drawn from Employment-Unemployment Rounds of the NSSO

<sup>3.</sup> VRUs are defined as pedestrians, cyclists, two-wheeler users and other non-motorized transport users.

<sup>4.</sup> Socio-Economic Cost of Road Accidents in India" (September, 2020) DIMTS Ltd. in association with TRIPP-IIT Delhi, MoRTH

## INTRODUCTION

The Act empowers the road users by providing certain key rights, including:

#### 1. RIGHT TO LIFE

- Protection of Good Samaritans from any Criminal or Civil Liability: Section 134A protects a Good Samaritan from any civil or criminal action while providing emergency medical care or any sort of assistance to a road crash victim.
- Timely medical assistance/cashless treatment to road crash victims. The Centre has been given power to make schemes for helping road crash victims under the following sections: Section 162 (1) directs insurance companies to provide for treatment of all road crash victims including under the Golden Hour. Section 162 (2) gives powers to the Centre to make a scheme for cashless treatment of victims of crashes during golden hour (the first critical hour after a road crash). Additionally, it contains provisions for creation of a fund for such treatment. State Governments can also make rules for the cashless treatment of victims and can augment the coverage for cashless treatment under Section 164D of the Act.

#### 2. RIGHTS OF VULNERABLE ROAD USERS

 The Act has special provisions to protect the rights of vulnerable road users such as pedestrians, cyclists, rickshaw pullers, hand drawn cart users, and animal drawn cart users. These road users generally belong to economically weaker sections of society, and face larger exposure to road traffic injury in comparison with motorised transport users. **Section 138(1A)** in the Act empowers States to regulate activities of pedestrians and non-motorised road users in public places.

#### 3. RIGHT TO SAFE ROADS

- 198A ensures that any designated authority, contractor, consultant or concessionaire responsible for the design or construction or maintenance of safety standards of roads shall comply with design, construction and maintenance standards.
- Section 215(B) sets up a National Road Safety Board for advising on all matters related to road safety and traffic management.

### 4. RIGHTS OF CHILDREN TO SAFE COMMUTE

MVAA, 2019 ensures safety of children through addressing key risk factors:

- Amendment to Section 129 of MVA, 1988 proposes that every child above the age of four years being carried on a motorcycle must wear a helmet.
- Section 194 B makes it mandatory for every child to be secured by a safety belt or a child-restraint system.
- Section 199A provides for adult accountability states

that the guardian of the juvenile or owner of the vehicle shall be liable in case an offence has been committed by a Juvenile under this Act.

#### 5. RIGHT TO SEEK REDRESSAL:

The Act provides right to seek insurance and settlement of claims within a reasonable time frame:

- Section 149 deals with settlement of claims by insurance companies and procedures to be followed.
  It provides for payment of compensation claim within a period of thirty days after acceptance of the offer by the claimant.
- Section 164 B constitutes a Central Motor Vehicles Crash Fund to provide compulsory insurance cover to all road users in the country.

The Motor Vehicles (Amendment) Act, 2019 has brought a multi-dimensional change to the road safety landscape in India. From improving access to emergency medical care to improving enforcement measures, the Act has prioritised improving safety of all road users, including the poor and vulnerable.

# 2.2 ABOUT THE TRAFFIC CRASH INJURY BURDEN ASSESSMENT

India has the third-largest number of poor people with

at least 53 million people living in extreme poverty<sup>5</sup>. RTIs further add additional financial stress due to exorbitant health costs, with just medicine related OOPE pushing 38 million people into poverty in 2011-12. (Selvaraj, Faroogui, & Karan, 2018) This study primarily aims to understand the socio-economic and gendered impacts of road crash outcomes on poor households, daily-wage, informal sector workers and its interplay with poverty. The study attempts to measure the economic impact of road crashes on households in four broad ways: direct financial costs of RTIs (the hospital costs, property damage, rehabilitation and other costs with a monetary value), indirect costs of RTIs (loss of quality of life and standard of living, compensation), insurance and compensation-related challenges, and geographic and demographic disparities in terms of habitation (urban vs rural) and gender. Gauging the awareness levels and accessibility of the insurance and compensation systems for road crash victims and their families is an important component of this study.

This is achieved by engaging two categories of respondents - a test sample of 'Bottom 40 per cent of the population' (hereafter referred as 'Low Income Household') and a control sample of 'Top 10 per cent of the population' (hereafter referred as 'High Income Household').

In terms of gender, road crashes impact women (differently) than men. 86% of the total road crash victims are male compared to 14% women (MoRTH, 2018). This complicates the post-crash care scenario in India with the burden of caregiving activities always almost falling on women within households. Thus, through structured FGDs, this study

## INTRODUCTION

captures the lived experiences of women in households that are often pushed into poverty.

This study aims to fill a gap by further exploring the psychological and emotional impacts of road crashes among households which are often invisible and unacknowledged in academic literature and government policy. Mental health is a sensitive subject and plays out in different forms. Determining the psychological well-being post-crash is imperative to estimate the indirect costs associated with road crashes.

Apart from the two key sample groups of Low-Income Households (LIH) and High Income Households (HIH), this study aims to probe into the impact of road crashes on key vulnerable and high-risk individuals. One such category is adolescents aged 14-18 years. India's productive potential is rising: Demographic transitions have led to rising worker-to-dependent ratio which will be a favourable 2.1 by 2050. The number of adolescents grew from 225 million in 2000 to 250 million in 2015 But the vast majority of youth are unemployed or in vulnerable, low paid informal jobs Hence, adolescents were identified to be a key cohort under thestudy. Their post-crash experiences are captured through structured In-depth Interviews (IDIs).

The other socio-economically marginalized and high-risk road user category is that of truck drivers. Out of the 1.5 lakh people killed in road crashes in the country every year, over 15,000 road crash victims are truck and lorry drivers alone, comprising 10% of the total deaths (MoRTH, 2018). In terms of vehicle category, trucks and lorries are involved in over 57,000 crashes in the country (MoRTH, 2018). Despite this, 93% of the truck drivers do not get any social security benefits such as provident fund, pension, life insurance, gratuity, etc. (SaveLIFE Foundation, 2020).

Poor road safety outcomes and lack of institutional support intensify the challenges faced by truck drivers, especially in the post-COVID-19 world.

The World Bank commissioned this study in association with SaveLIFE Foundation (SLF) to determine the differential impacts of road crashes more objectively in India. Though originally the study study was developed as "an analytical approach used to assess the distributional, poverty-related and social impacts of policy reforms on various stakeholder groups" (World Bank, 2016)<sup>6</sup>, this study can be treated as a baseline assessment study to document the variation in impact of road crash outcomes on low- income and high-income households. Once the policy framework established under Motor Vehicles (Amendment) Act, 2019 is implemented, mid-term and end-term assessment studies can be undertaken to understand the impact of the interventions

For this study, SLF further commissioned the survey to a Social and Market Research company, Marketing and Development Research Associates (MDRA) to assist in designing survey instruments and guidelines for qualitative research, administer telephonic and face to face surveys as well as conduct Focus Group Discussions (FGDs) and In-Depth Interviews (IDIs) for the Study; and prepare an analytical report based on outcomes of the survey

### 2.3 OBJECTIVES OF THE STUDY

The objective of the study is to analyze the socio-economic impacts of road crashes on vulnerable individuals and households below the poverty line, estimate collective economics losses resulting from gaps in the existing

 $6. \ http://documents1.worldbank.org/curated/en/701191479977368846/pdf/110453-REVISED-PUBLIC-PSIAAR.pdf/110458-REVISED-PUBLIC-PSIAAR.pdf/110458-REVISED-PUBLIC-PSIAAR.pdf/110458-REVISED-PUBLIC-PSIA$ 

architecture, and inform the regulatory framework across high and low capacity states from a poverty and social impact perspective.

The specific sub-objectives of the study are:

To assess the distributional impact of road fatalities and crashes on the poor, specifically the LIH. The study tests whether poor road safety outcomes disproportionately affect poor families and individuals leading to exacerbated pre-existing inequalities. It also looks at outcomes in HCS and LCS and attempts to capture differences in outcomes.

To assess the psychological and emotional impact of road crashes and fatalities on road crash victims and their families and how they cope with it.

To assess the gendered impact of road crashes among poor and rich families.

To assess the impact of road crash fatalities and crashes on vulnerable individuals like adolescents (14-18 years).

5

To assess the extent of awareness on compensation and insurance and other provisions and reforms brought in through the Motor Vehicles Amendment Act, 2019 among high risk and marginalized road user category of Truck Drivers.



To map the procedural, legal, and social hurdles faced in claiming insurance and compensation money by road crash victims/families.

Through this assessment, we aim to generate ex-ante empirical evidence to identify and shape broad priority areas, including sectors and policy initiatives needed to create an enabling framework to support poor and marginalized households that bear the brunt of road traffic injuries. We do so by proposing a series of cost-effective policies and reforms that will focus on mitigation of the adverse impact of road traffic injuries. We hope to initiate a meaningful dialogue on the distributional impact of road crashes in India and to offer constructive measures to alleviate the cost burden on poor, vulnerable and high-risk groups of road users and their families.