ROAD CRASH STATISTICS

▶ GLOBAL

- Globally, road crashes kill 1.35 million people and injure 50 million people every year; or more than 3000 persons every day.
- Road Traffic Injuries (RTIs) are the 8th leading cause of death globally and leading cause of death among children and young adults aged 5-29.
- There is ample evidence to suggest that RTIs affect the working age population most severely

INDIA

- India tops the world in road crash deaths (WHO, 2018), with more than 400 fatalities per day.
- India has 1% of the world's vehicles but accounts for 11% of all road accident deaths and 6% of total road crashes (MoRTH, 2018)
- In the last decade alone, road crashes have killed 1.3 million and injured over 5 million in India

Road crashes endanger the lives and livelihoods of millions of road users globally and in India (see Box 1). Owing to the epidemic of road crashes, in 2010, the United Nations General Assembly proclaimed 2011 – 2020 as the "Decade" of Action for Road Safety" and the Sustainable Development Goals (SDGs) included two important targets on road safety. The risk of a road crash in low-income countries is three times higher than compared to that in high-income countries. Not only does it lead to untold and unaccounted for suffering and loss for victims and their families, but also, it drains the GDP of countries by claiming millions of economically productive young lives. The World Bank estimates the total cost of Road Traffic Injuries (RTIs) at \$172 billion (INR 12.9 lakh crore) for the year 2016. While it is recognized that RTIs affect the developed and developing world in different ways, it also impacts poor households and disadvantaged sections of the population within developing countries differently.

World Bank commissioned a survey-based assessment study in association with the Save LIFE Foundation (SLF) to determine such differential impacts more objectively in India.

This study aims to capture the socioeconomic realities and nuances of road crashes at the sub-national level in India. It seeks to document inter-linkages between poverty, inequalities, road users, and road crash outcomes by analyzing data from four States in India, i.e., Uttar Pradesh, Bihar ,Tamil Nadu and Maharashtra. The four states have been selected on the basis of several criteria including demographic and geographical representation, magnitude of fatality burden and socio-economic parameters such as economic growth, poverty rate and social welfare. One state from each of the four geographical zones of the country were selected which cumulatively represents about one third of

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total road crash deaths in the country. In terms of economic parameters, Maharashtra and Tamil Nadu are selected to represent High Capacity States (HCS) whereas Bihar and Uttar Pradesh are selected to represent Low Capacity States (LCS). The study quantifies the differential financial impact of RTIs on poor disadvantaged households by comparing a test sample of victims and their family members from Low-Income Households (LIH, i.e., the bottom 40% of the population by per capita income) with a control sample of High Income Households (HIH, i.e., the top 10% of the population in terms of per capita income). It also reveals the gendered and psychological impact of crashes, a subject that has been hitherto unacknowledged in previous studies. It sheds light on the interactions of road crash victims and their families with systems, processes and institutions such as the police, insurance companies and the medical care system at large. Further, this study also captures the level of understanding and awareness of truck drivers on the recently passed Motor Vehicles (Amendment) Act, 2019 and on insurance and compensation in the event of a crash. The study reveals that social hierarchies and realities like class, gender and geographical location largely determine road crash outcomes and the severity of their impact in India. It highlights the nature and extent of the disproportionate impact of road crashes in terms of fatalities and serious injuries among poor and rich households. It elaborates on how socioeconomic inequalities affect households and in turn contribute to widening that gap.

A multi-stage purposive sampling method was used to select the target respondents for this study. The key target groups include road crash victims/their family members who had undergone a serious injury or fatal crash, and truck drivers involved in a crash in the last 15 years (from January 2005 - July 2019). Both exploratory and descriptive research was included. While the quantitative surveys

covered over 2400 interviews with LIH, HIH and truck drivers, the qualitative part of the study included 3 Focus Group Discussions (FGDs) with women in Bihar and Uttar Pradesh and 8 in-depth interviews with adolescents.

Some of the **key findings** of the report are :

- Overall, the post-crash impact was more severe for LIH in Low Capacity States compared to HIH in High Capacity States.
- The incidence of fatality post-crash is higher among victims from LIH than HIH. As high as 44% of the households in rural areas reported at least one death after a road crash compared to 11.6% of households in urban areas. Similarly, LIH reported twice the numbers of deaths post-crash vis-à-vis HIH. Victims from LIH and rural areas are also twice more likely to suffer a disability after a crash than their HIH counterparts.
- The socio-economic burden of road crashes is disproportionately borne by poor households. The decline in total household income was sharper among LIH (75%) than HIH (54%). The severe impact of decline in income was highest among LIH in rural areas (56%) compared to LIH in urban areas (29.5%) and HIH rural (39.5%), and cases where victims died as well as where victims were males.
- The ability to cope with financial distress post crash was better for HIH than LIH. LIH were three times more likely to seek financial help than HIH. Debt rates were also almost three times higher among LIH compared to HIH. In addition to financial distress, poor households experience a deterioration in their quality

of life accompanied by psychological suffering and emotional distress.

- Within households, women bear the brunt of caregiving activities post-crash, leading to a double burden of labour and mental load and exacerbated inequality of opportunities in returning to livelihoods and income generating tasks.
- Inequality in insurance coverage and delay in accessing compensation mars the quick recovery process for LIHs. Insurance coverage was significantly higher among HIH and households in urban areas visà-vis LIH and urban areas
- Information asymmetry and poor awareness of legal compensation among LIH compounds their distress. Only less than a quarter of the LIH victims were aware of the compensation process and insurance clauses; just a handful of the victims availed of government compensation/ex gratia.
- Low rates of insurance coverage and poor awareness related to legal compensation processes among truck drivers. Only a fifth and two-fifths of truck drivers surveyed were covered under medical insurance and life insurance respectively at the time of the crash. Overall, two-thirds of truck drivers were not aware of third-party liability insurance. None of the drivers had applied/benefited from cashless treatment at the hospitals, Solatium Fund for hit and run case or exgratia schemes.

The above findings of the report highlight the need for immediate improvements in crash reporting, post-

crash emergency care and protocols, insurance and compensation systems. It presents an opportunity for development agencies working in the sector to prioritise their targets and budgets, and for policymakers and respective State Governments to mandate a complete policy overhaul of the existing system and implement sustainable, solution oriented, inclusive measures to improve their performance on road safety. The report provides related recommendations for policy reform under six key areas as follows:

1. Need for effective institutional mechanisms and awareness building.

There is a need to improve VRU safety especially for LIH in rural areas, who are most at risk in road crashes. There is also a need for the State Governments to ensure greater sensitisation and awareness among stakeholders, especially the police who are often reluctant to file FIRs.

2. Institutionalise post-crash emergency care and make health infrastructure & coverage more accessible & inclusive.

The Central Government should urgently implement the cashless treatment scheme under Section 162(2) of Motor Vehicle (Amendment) Act, 2019, reducing Out-of-Pocket-Expenses for LIH, increasing health insurance coverage and extending its scope to address post-crash disability and mental health effects.

3. Provide a Social Security Net for crash victims from LIH through State Support.

The Central and State Governments should introduce

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vocational and educational support for victims and their families through community programmes and special schemes for jobs, skilling &education. Comprehensive rehabilitation support also needs to be extended to crash victims especially those with post-crash disabilities.

4. Create an accessible legal framework for availing insurance and compensation for road crash victims.

The Central Government should create schemes to increase insurance coverage and penetration for LIH. Insurance agencies should broaden the scope of insurance policies by including rehabilitation and recovery of crash victims. Since most compensation payments take time to process, under Section 164A of MVAA 2019, the Central Government must make provisions to provide interim compensation to crash victims to provide for immediate relief. The comprehensive coverage of MCTAP needs to be ensured through better mechanisms for effective coordination.

5. Recognize the gendered impact of road crashes and address it through participative governance & special schemes for women

Central and State Governments should incentivize employment opportunities for women affected by road crashes. Steps could include: encouraging small businesses in work from home set up, providing low-interest loans and emergency cash transfers to post-crash turned female-headed households. Women from households who have lost the breadwinners in road crashes should also be automatically enrolled in the State Government's employment database.

6. Strengthen post-crash support for children and young adults through state support.

State Governments should implement progressive provisions on child road safety under Sections 194B, 129 and 199A of the Motor Vehicles (Amendment) Act, 2019, framing a rigorous policy on child road safety and provide support for children and adolescents affected by road crashes. The State Government should ensure a minimum of three month moratorium on school fees for children impacted by road crashes from LIH.

The report provides detailed recommendations for strengthening institutional agencies to respond to the needs of VRUs and associated households. It lays out suggestions for States to strengthen their institutional capacities, to respond better to the challenges presented by road crashes and improve their performance, and to create efficient mechanisms for LIH to get access to legal and insurance-based compensation after a crash to mitigate their financial burden. These recommendations, if implemented, have the potential to significantly improve the lives of vulnerable road users and to create far-reaching positive road safety outcomes.

This study was initiated during the Covid-19 national lockdown period and has its limitations: it is limited to four States; it covers the financial impact on households for just the treatment period; it does not cover minor injury cases and their impact. It focuses on highlighting the differences in the short-term and long-term, direct and indirect impacts of road crashes on the victims and their households by comparing those having meagre resources and capacities to respond to a road crash (Low Income Households)

with those having comparatively more resources and social capital to mitigate a sudden crisis (High Income Households). Additionally, this report was conceptualised as a sub-national study to understand the impact of road crashes from the perspective of specific demographics. Central and State governments to build on this by initiating studies at a more granular level (municipality, census tract or ward levels) to assess the impact of crashes. In addition, the analysis is based on self-reported data from victims and their family members, and as such may be susceptible to associated potential biases, although care has been taken to mitigate this wherever possible. The data has been validated by asking respondents different questions at different points of time and cross-verifying and triangulating the information provided by them through other qualitative methods (that use other data sources such as insurance service providers data, and data from other similar studies etc). Efforts were made to weed out any biases that might have crept into the data thorough quality checks and statistical data validation exercises. Due to the pandemic, the methodology also had to be revised by adopting a mix of face-to-face and telephonic interviews (with shorter questionnaires), and this may somewhat effect as well. It also needs to be stated that this is not a longitudinal study (i.e., looking at long-term impacts of road crashes). As such, this study could be a precursor to follow-on studies on road crash related disabilities to holistically assess its long-term impacts on victims and their households (that are done routinely worldwide). Nevertheless, a baseline mapping of road users via such state-specific assessments can help inform the choice, design, and sequencing of alternative policy options, which in turn can improve the lives of millions of road users in India.

We acknowledge the work being carried out by the Ministry of Road Transport and Highways (MORTH) to improve overall road safety in the country. The Ministry's annual report on 'Road Accidents in India' is a valuable and rich resource for policy makers and researchers alike that provides detailed and comprehensive data on the causes, patterns, types and inter-state and global comparisons of road crashes in the country. Working across the 4Es of road safety, Engineering, Enforcement, Education and Emergency care; the Ministry is undertaking various initiatives that demonstrate its global commitment to reducing road crash fatalities by at least 50% by 2030. One such commendable initiative is the Integrated Road Accidents Database (IRAD) Project under World Bank Assistance that will help capture information in a more unified and holistic manner to facilitate formulation and execution of targeted programs.

The robust framework created by MoRTH for operationalising the MVAA, 2019 will go a long way in empowering states to strengthen their electronic enforcement and monitoring systems, automate and integrate all road safety databases through digitisation, provide speedier assistance to road crash victims, strengthen public transport and improve road user behaviour. We hope that the recommendations offered in this report would also help evolve the subordinate legislation/rules under the MVAA, 2019 to truly make it more inclusive and effective.

OVERALL KEY FINDINGS

Overall, the post-crash impact was more severe for LIH in Low Capacity States compared to HIH in High Capacity States.



The incidence of fatality post-crash is higher among victims from LIH than HIH. As high as 44% of the households in rural areas reported at least one death after a road crash compared to 11.6% of households in urban areas. Similarly, LIH reported twice the numbers of deaths post-crash vis-à-vis HIH. The risk of a victim undergoing disability after an crash was two times more likely among LIH in

rural areas.



The socio-economic burden of road crashes is disproportionately borne by poor households. Decline in total household income was sharper among LIH (75%) than HIH (54%). The severe impact of decline in income was highest among LIH in rural areas (56%) compared to LIH in urban areas (29.5%) and HIH rural (39.5%).



The ability to cope with financial distress post-crash was better for HIH than LIH.

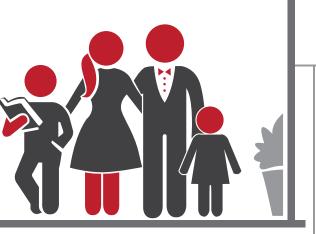
LIH were three times more likely to seek financial help than HIH. Debt rates were also almost three times higher among LIH compared to HIH after the crash.

In addition to financial distress, poor households experience a deterioration in their quality of life accompanied with psychological suffering and emotional distress.

Within households, it is women who bear the brunt of caregiving activities, leading to a double burden of labour and mental load, exacerbated inequalities of opportunities in returning to livelihoods and income generating tasks.



Inequality in insurance coverage and delay in accessing compensation further mars the quick recovery process among LIH households. Insurance coverage was significantly higher among HIH and households in urban areas



Information asymmetry and poor awareness on legal compensation among LIH:

Only less than a quarter of the LIH victims were aware of the compensation process and insurance clauses. Only a handful of the victims availed government compensation/ex gratia.

Low rates of insurance coverage and poor awareness related to legal compensation processes among truck drivers: Overall, 2/3rd of the respondent truck drivers did not file an FIR after the crash. Only 40% of the truck drivers were covered under life insurance and 18% under medical insurance at the time of the crash. Overall, 2/3rd of the truck drivers were not aware of third-party liability insurance. None of the drivers said that they had applied/benefited from cashless treatment at the hospital, solatium fund for hit and run case or ex-gratia schemes.