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Evaluating Road Traffic Accidents and Safety Measures in Bangladesh: A Data-Driven Approach

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Abstract

Road safety has been an issue in Bangladesh, with low safety standards, high rates of accidents, lack of proper infrastructure, poor enforcement, and rapid urbanization. Road designs and traffic management in some areas have become poor and should consequently make accidents more frequent. In this paper I discuss challenges and I offer some policy advice. The aim of this study is to investigate the regional, seasonal, and infrastructural trends of road traffic accidents in Bangladesh and to assess the efficacy of the preventive measures. In final, the study will be closed with indentifying the contributive factors which cause accidents and corresponding policy measures. This study analyzes road traffic accident data from 2015-2023, examining trends, regional disparities, and infrastructure factors. It evaluates the effectiveness of safety measures and proposes policy recommendations based on findings. The research on road accident trends in Bangladesh indicates an average of 117 accidents per month, totaling 1,404 accidents, 276 fatalities, and 1,140 injuries. The data presents large discrepancies in severity related to time, location, and conditions; the highest rates were found in urban areas such as Dhaka and Chittagong. This finding raises the need to improve the infrastructure of the roads, imposition of traffic laws, public awareness, and driver assistance systems for safer travel. Abstract Road traffic accidents (RTAs) are currently recognized as a global crisis, and this study aims to determine the key factors contributing to RTAs in Bangladesh and to strengthen evidence-based policy recommendations.

Keywords:

road safety, accidents, fatalities, infrastructure, traffic laws, Bangladesh. **Sub Theme & Presentation type** – Road safety and Traffic management & Research paper.