



Impact of Weather Change on Road Accidents in Pakistan

By

Zainab Nayyar

MS (Engineering Management)

Department of Software Engineering

Registration Number: 01-246162-015

Thesis Supervisor

Dr. Taqadus Bashir

Bahria University, Islamabad, Pakistan.

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Declaration

I certify that this research work titled “*Impact of Weather Change on Road Accidents in Pakistan*” is my own work. The work has not been presented elsewhere for assessment. The material that has been used from other sources it has been properly acknowledged / referred.

Signature of Student
Zainab Nayyar
01-246162-015

Language Correctness Certificate

This thesis has been read by Dr. Taqadus Bashir the Supervisor of this research work and is free of typing, syntax, semantic, grammatical and spelling mistakes. Thesis is also according to the format given by the Bahria University Islamabad.

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Zainab Nayyar
Registration Number: 01-246162-015

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Abstract

Road accidents are one of the leading causes that are a threat to human life. Daily people are facing a lot of accidents and lose their loved ones. There are many causes of road accidents out of which weather is one of the major causes. In Pakistan we experience four seasons i.e. Summer, winter, spring, autumn. In these seasons different weather conditions happen. Smog and fog occur in winter, rainfall occur throughout the season, snow fall occur in winter. In this study quantitative research was carried out and both primary and secondary data was collected. Primary data was collected through questionnaire which was developed in 2007. Through questionnaire it was found through responses that whether weather has an impact in causing road traffic accidents and the modes through which people are comfortable in getting updates of those locations which are in worst condition for driving due to bad weather. It was also identified through responses that in what ways weather impacts on driving behaviors due to which road accidents occur. In order to get complete statistics about number of deaths and injuries that were caused due to road traffic accidents that occurred due to adverse weather conditions secondary data was collected from various organizations which includes 1122, federal bureau of statistics, survey of Pakistan and National transportation and research center. Content analysis was made to gather province wise data of road traffic accidents that were occurred due to adverse weather conditions data of past seven years was collected from different websites, newspapers, blogs, journals etc. to check the province wise data secondary data was collected to check the frequency of road accidents on yearly, daily and monthly basis. The sample size of primary data was 230 and it was analyzed using SPSS and smart PLS. there were two independent variables named as driver behavior and road conditions, one moderator named as weather conditions which was comprised of smog, fog, rainfall, snowfall, and sunny weather whereas accidents was a