

Traffic Jam in Bangladesh: An Analysis Focusing the Economic Impact

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Abstract

The primary focus of this article is on the economic impacts of traffic congestion in Bangladesh. Chronic traffic congestion, especially in Dhaka, has long been a significant source of annoyance in Bangladesh. Recently, it has become substantially worse. Bangladesh is a developing nation, but it has significant traffic problems. The top cities on the list include Los Angeles in the United States, Delhi and Kolkata in India, and Sharjah in the United Arab Emirates. Along with the stress they currently experience, the nation's people's physical and emotional health are being negatively impacted by the excessive traffic. At present, the traffic bottlenecks are occurring more regularly, the atmosphere of the nation is alarmingly deteriorating. Secondary data are used to support this study. The information offered in this study has several lessons for both academics and practitioners.

Keywords: Traffic Jams, Economic Impact, Road Accidents, Economy, Vehicle Movement, Road system.

Introduction

Bangladesh's traffic congestion has long been a big source of discomfort, especially in Dhaka, but it has recently gotten significantly worse. Dhaka is the seventh most traffic-congested city in the world out of 246 (World Traffic Index, 2022). While the top cities

on the list are in developed countries, places with significant traffic congestion include Los Angeles in the United States, Delhi, Kolkata, and Sharjah in the United Arab Emirates. According to BUET's (2020) Accident Research Institute (ARI), this traffic jam wastes over 19 million working hours every day in Bangladesh, which has a detrimental effect on the country's economy. The GDP of the country loses six to ten percent of its annual output due to traffic congestion. In addition, the nation's residents' physical and emotional health is suffering as a result of the heavy traffic, in addition to the anguish that they are already experiencing. On the other hand, environmental degradation in the country is increasing along with the frequency of traffic bottlenecks, which is worrying.

In Bangladesh, Dhaka is home to over half of all employment opportunities and one-fifth of the GDP. Between 1995 and 2005, Dhaka's population increased by 50%, however during the same time, traffic bottlenecks surged by 134%. More than one crore people live in Dhaka, according to the most recent figures. The population of Dhaka is constantly increasing as it serves as the hub for all government operations, employment, top-tier educational institutions, healthcare, and other sectors. In addition, as the population of the city increases, so does the amount of traffic in Dhaka. According to senior transportation expert Rajesh Rohatgi, program manager for the World Bank, in the last ten years, Dhaka's average traffic speed has dropped from 21 km/hr to under 7 km/hr. The typical speed of vehicles on Dhaka's roads is anticipated to be four kilometers per hour by 2023. In addition to Dhaka, traffic jams are commonly heard in a number of other Bangladeshi cities, including Chittagong, the country's commercial center. In addition, it is widely known thanks to a variety of media sources that long traffic jams frequently occur on various rural roads. Additionally, each year around the Eid and Puja holidays, accusations of increased traffic congestion on highways are reported regularly. (The Financial Express, 2022)

Traffic Jams in Bangladesh

One of the reasons for Bangladesh's terrible traffic congestion is the country's subpar road system. The capital city of Dhaka only has 7% of the 25% of roads required for vehicular circulation, according to a study by the Bangladesh Institute of Planners (BIP, 2020). The number of vehicles on the road is currently more than five times more than the number of available lanes, which is insufficient given the level of demand. More than 19 million of Bangladesh's 55 million registered vehicles are concentrated in Dhaka alone (BIP, 2020). Due to improved access and purchasing power, the number of private cars has also expanded. One of the factors contributing to the increase in traffic in different cities around the country, including Dhaka, is the fact that Bangladesh now has more personal vehicles than it did in 2010 (when it was just over 1.5 million), and that figure has already exceeded 3 million (BRTA, 2020).

Additionally, a worker in Dhaka works 8 to 10 hours every day, depending on the firm. The trip to and from work in Dhaka can take 2 to 5 hours due to traffic. In other words,

even while the time spent traveling to and from work reduces the length of a person's day, 12 to 16 hours, or almost two-thirds of the day, are lost. 3.2 million work hours are lost nationwide each day. Only 7% of the 25% of roads needed for vehicular circulation, according to the Bangladesh Institute of Planners, are present in Dhaka. Due to traffic congestion, the country's citizens lost 3.2 million working hours each day (The Financial Express, 2022). In other words, the annual cost of traffic delays in Dhaka and Chittagong is at least Tk49,000 crore. Both cities incur annual costs for traffic congestion of \$5.5 billion, or 8.5% of their total budget. (The Business Standard, 2022)

Aim of the Study

The purpose of this paper is to present the economic impact of traffic jam in Bangladesh.

Methodology

Numerous documents have been reviewed by the researchers. Secondary data and desk-based research were used to prepare this article.

Economic Impact of Traffic Jams

Bangladesh loses 6 to 10% of its GDP owing to traffic delays, of which only 3% is linked to congestion in Dhaka, according to the Dhaka Tribune (2022). Around 5 million working hours are lost annually in traffic congestion in Dhaka, according to the Accident Research Institute (ARI) of BUET (2020), costing the country's economy \$4.35 billion annually and expected to climb to \$6.5 billion in 2020. After taking into consideration the additional operating expenses of people's time and vehicles, a different research by the BRAC Institute of Government and Development projected that Bangladesh lost 11.4 billion dollars annually in 2018 due to traffic congestion. According to ARI's study by BUET (2020), missed working hours, excessive fuel usage, accidents during peak hours, and environmental damage will cost Bangladesh 153 crore BDT per day, or almost Tk 56000 crore BDT year. In comparison, lost productivity due to traffic congestion alone will cost Bangladesh 137 crore Tk each day. People find it more challenging to move around when there is traffic, which lengthens the time required to do several tasks. They could have done something else with this time that would have improved their overall output if it had not been lost in traffic.

Spending a lot of time in traffic jams reduces the lifespan of these parts and raises the cost of maintaining both the automobile and the accelerator, according to ARI's research. On the other hand, because the car engine is not turned on when there is traffic congestion, around 40% of the gasoline is consumed daily and has an economic value of roughly Tk 4.2 crore. In addition, the poor condition of Bangladesh's roadways and the congested Dhaka area has made ride-sharing an especially successful industry. This first makes travel easier for people, but when traffic gets worse, the costs of ride-sharing businesses climb, raising the costs of passengers as well. Both passenger and freight transportation suffer from traffic congestion. Commodities move more slowly than usual due to traffic congestion, which affects both internal trade and export-import. Additionally, because of considerations like time and fuel, the cost of delivering goods increases as a result of traffic congestion. Traffic congestion in Dhaka and other major cities throughout the nation is having a negative impact on a number of delivery-based

enterprises, courier services, and e-commerce. It is becoming more difficult for these companies to provide better services at competitive pricing due to traffic congestion, which makes it more difficult for them to provide their customers the attention they deserve. These companies therefore charge higher prices in order to give good service.

According to a source from The Financial Express (2022), rush hour is when 40% of daily traffic accidents—which have a financial cost of 1.6 crore BDT—occur. Additionally, it is commonly reported in the media that due to excessive traffic, patients are dying without care and without having enough time to go to the hospital. The combined daily economic cost of the deaths from various ailments and the air pollution caused by this bottleneck is 8 crore 70 lac BDT. In addition, Bangladesh topped the list of all 118 countries. Additionally, Dhaka, the capital of the country, had a score of 141, which is concerning for the entire country because it represents the city's health. (AQI, 2021)

Conclusion

The economics, environment, and public health of Bangladesh are all negatively impacted by traffic congestion. It becomes extremely difficult to go to the office, school, college, or university on time during business hours. After being in traffic for a while, people start to feel emotionally and physically worn out. In addition, experts say that being in traffic for a long period of time can result in headaches, excessive sweating, dehydration, hearing loss, respiratory issues, dust allergies, and a range of eye issues. Once more, a person's daily production and efficiency are significantly impacted by how challenging it is to get through traffic to get to work. The stress of spending a lot of time behind the wheel causes many accidents for both drivers and passengers in cars. Almost all vehicles in Bangladesh still run on fossil fuels, which releases a lot of carbon into the atmosphere and contributes to significant air pollution. The majority of automobiles continue to produce black smoke and run their engines even when they are stopped. Additionally, even amid gridlock, drivers continue to repeatedly blow their horns, which add noise pollution to the atmosphere. The main objective is to achieve real digital governance by providing local governments with sustained power, much as in developed countries.

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