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# Metrorail, The New Era of Bangladesh's Transportation

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#### Abstract

Once, the people of Bangladesh used to ponder regarding the modernization of Bangladesh. Many intellectuals would criticize if Bangladesh would ever be a modern country or not, will it ever be technologically flourished or not. However, now Bangladesh is developed enough by technology as well as the other development projects. For example, The dream of the Padma bridge project has already been successfully done. Additionally, the long-awaited metro rail has just come into reality. The Bangladeshi people are so delighted by getting the first metro rail in their capital city of this country. Moreover, the first ever underwater tunnel project named Karnaphuli tunnel will be finished in Bangladesh very soon. This tunnel will improve the network and transportation system between Dhaka and Cox's bazar. In this way, Bangladesh will be included on the list of the world's most technologically progressive nations.

**Keywords:** Bangladesh, Padma Bridge, Dhaka, Government, Metro rail, Growth.

**Introduction:** For all Bangladeshis, the name of their dream was Padma Bridge. But now it is not a dream anymore. all Bangladeshis' dreams have come into reality. On 25 June 22, the Honorable Prime Minister of Bangladesh, Sheikh Hasina inaugurated the Padma Bridge (CPA News, 2022). Many experts think that this bridge will increase the country's GDP, particularly the GDP of the south and south-west areas. Additionally, the bridge will help aid the growth of regional communication. The present government took the initiative for the project of Padma Bridge for the overall progress of this country.

**Background checks:** Given its positive effects on our GDP, the Padma Bridge will truly enable our economy to expand more quickly than it did in the past. First of all, this bridge will make a convenient network system as well as transportation system with 21 districts of southern part of Bangladesh (Ahmed,2022). Now coming to Dhaka for the people of the south will not be that difficult like before. Secondly, this easier transportation system will create plenty of new business opportunities. Moreover, the patients who used to come to Dhaka for their treatment will get a hassle free journey as they don't have to use Feri anymore. Finally, it will make the Agriculture and industry sector more potential since there is a high possibility to establish new industries (Ahmed,2022). That is how new job possibilities will also be increased.

**Demerits:** However, everything has its demerits too. Now, all the southern people will use this padma bridge so that the Feri workers will be jobless. It will make their life harder. But this problem can easily be solved by the Government providing them with new jobs. Therefore, it is clear that the Padma bridge has plenty of advantages compared to the drawbacks. In this evolving stage of Bangladesh, traffic congestion is a big problem mostly in the capital of Bangladesh. But to reduce this major problem, to put an end to people's sufferings, the Bangladeshi government came up with a vision of "Metro Rail" project.

Although the world's first metro rail system was introduced in 1890 in London, for Bangladesh it was a whole new concept. As Bangladesh was facing a very major problem of traffic every day and it was not only a problem of road or time. It was affecting the economy of Bangladesh. So the Bangladesh government started to seek new plans to get rid of this problem by modernizing and expanding the road plan. So, in 2008 a non-rural transportation, the idea was sanctioned, where

the Bangladesh government laid out an extensive transportation plan naming it STP for the betterment of Dhaka and also other nearby areas. From many different policies, 10 were evaluated, and after a revised and new adopted plan 5 Metro Rail line ideas got selected for construction. (The daily star, 2022). Moreover, in 2013 (DMTCL) was built by the Bangladesh government to make our vision of Metro Rail come true. A bill of 2.8 billion USD was sanctioned by the government of Bangladesh for this project. However, no good comes without any sacrifice. About 15 million inhabitants had to move to get this project done. So the Bangladesh government sanctioned another 737.5 million USD for them. (Chen, 2022) However, on December 29, 2022, Metro Rail started its journey. (Railway Technology, 2022)

Economic growth: Moreover, according to the experts, The Metro Rail project will help the GDP by 1.5%, which is almost tk200 billion a year and also, almost 17% of the total tax. Also, not to forget, the metro project was mainly made to get rid of the traffic jam problem, which will decrease, and also not to mention, this will reduce the travel time.(CNN travel,2022). In developing nations like Bangladesh, where traffic jams are a daily source of difficulties, Metro Rail offers a perfect answer to this significant issue. Additionally, it will support Bangladesh's economic expansion. Economically speaking, Dhaka has a high demand for Metro Rail because people seek a safe, convenient way to travel that will also make their lives easier than they were previously. Finally, after all the sacrifice and hard work, the dream of residence of Dhaka came true. Metro Rail's dream was mainly to better the life of people of Bangladesh. So, The government of Bangladesh and the organization should try to understand the customer needs and provide them what is best for them. Most importantly security and air conditioning, also CCTV camera and smart card facility will make the consumers daily life easier and faster, as they will not need to wait in line. For a growing economical country connectivity from one part to another plays a great role, especially at the industrialized area with the initiatives to solve the problems which will occur in building smart Bangladesh our honorable prime minister took the decision of making a underwater tunnel named as Karnaphuli tunnel or Bangabondhu sheik mujibur rahman tunnel. At this time one must travel 36.4 km just to go to Anwara upazila from Chittagong airport using Cox's bazar Chittagong highway that will eventually take 2-3 hours. On the other hand it is only 2 km from Airport to Karnaphuli tunnel. Once the tunnel is fully usable then the time will come down to 30 minutes to arrive at

Anwara upazila and eventually decrease 15 km and Our honorable prime minister inaugurated the Karnaphuli tunnel on 14th oct, 2016. The working of it started on 24th Feb 2019. Its estimated budget is almost 1.1 billion USD, half of its(around 5931.19 cr) funding is happening by Exim bank of China (The daily star, 2022). And The project is operated by the Bangladesh roads and highway ministry. The length of this underwater port city is almost 3.32 km and the significance of this tunnel is huge. It is the 1st underwater tunnel in the whole of South Asia and the dream scheme after the Padma bridge in our country. Height and width of this tunnel is 10.74m and 3.4m. There are 3-cross passages. Economists are telling that it'll make 0.166 percent G.D.P jump by the help of it Chittagong city will become a one city two town model. Some intensive industrial spots airport, Chittagong-port, Potenga-Anwara connection, Cox's bazar, coal factory, Karnaphuli fertilizer company etc for reaching these places the use of Karnaphuli tunnel is inhabitable. Some large companies are planning to set up their factories near the Anwara and Karnaphuli area: Akij group, Four H group, diamond cement group, S.alam Group and even Partex. First G2G economic zone and Chinese economic zone will be established in Anwara upazila on 781 Acr land which will provide 0.2 million jobs to over 60 national and multinational companies proposed to invest 280 million in the economic zone(Azad, 2022).

**Conclusion:** Though it's a great initiative of the government of BD. But there will be some damage in nature by establishing industrialized areas. But there are flaws in its design, the bottleneck is not planned properly which can cause congestion at the entrance and the exits of the tunnel. Though they are redesigning the bottlenecks, Karnaphuli tunnel is helping Bangladesh to become a developed one by helping tourists and industry work through shortening the distance and helping to get fast communication. For a developing country like Bangladesh, projects like Metro Rail, Padma Bridge and Karnaphuli Tunnel may not look like too much, but it will create a positive impact on GDP as well as create a path to achieve the vision of creating a developed Bangladesh. Bangladesh is facing currently some economically due to these mega projects, but because of these mega projects, Bangladesh is starting its journey to the future. This is the beginning of a new era for Bangladesh.

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## **Authors' Biography:**

Ronodeep Bhowmik was born in Bangladesh on july 28, 2003 and is currently pursuing B.Sc in Computer Science and Engineering at Brac University, Dhaka. Since his childhood, he has been fascinated by computers and robots, and has always been interested in exploring all the possibilities that this extraordinary field has to offer. His aim is to help the world through technology, make life



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