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# Some mega infrastructural development in Bangladesh

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#### ABSTRACT

In the context of the Bangladesh economy, this paper looked at infrastructural development and growth. The overall conclusion is that infrastructure plays a critical role in encouraging Bangladesh's progress. The design of a district-by-district Infrastructure Development Index (IDI) and the ranking of districts on the IDI imply that districts near to the capital city have higher IDIs than districts further away. Bangladesh government continuing many mega projects in its border, in aim to be a develop country within 2041. From many of those mega projects, this paper covered 13 most important mega project of Bangladesh. Such as - Padma Multipurpose Bridge, Purbachal Residential Model Town, Legacy tower, Sheikh Hasina International Cricket Stadium, Dhaka elevated expressway and so on. After the completion of those projects, poverty will be reduced, and Bangladesh will achieve Millennium Development Goals (MDG).

Keywords: Infrastructure, Development, Mega Project, Economic Growth

#### 1. INTRODUCTION

It is widely accepted that an effective infrastructure supply is beneficial to economic development. In middle-income nations like Bangladesh, infrastructure is thought to be one of the most important drivers for economic progress. Infrastructure that is both efficient and effective can help to support long-term economic and social growth [1]. It has a variety of repercussions, including those on production operations and household quality of life, and consequently affects the entire society. Infrastructure development is more likely to reduce poverty if it enhances the poor's quality of life [2]. Infrastructure services that are efficient and reliable are critical for economic growth and have a significant impact on Bangladesh's investment climate. Bangladesh's government targets for an increase in real GDP of 8%. The state of infrastructural development is functioning as a major stumbling block to achieving that growth goal. Improving the country's infrastructure will be necessary for achieving strong economic growth, which is critical. In the context of the Bangladesh



economy, this research explores the effects of infrastructure development on growth [3].

# 2. INFRASTRUCTURE AND ECONOMIC GROWTH

It is usually accepted that an effective infrastructure source is useful to economic development. In developing countries similar Bangladesh, infrastructure remains considered the most important components for economic progress [4]. Long-term economic and social growth can be aided by infrastructure that is both efficient and effective. The physical assets that underpin the provision of public goods and services are referred to as infrastructure. It has a wide range of consequences, including those on output and household quality of life [5]. Health and educational outcomes can be improved with better infrastructure. In terms of giving access to modern infrastructural services, Bangladesh lags behind other South Asian countries. Several megaprojects are underway in Bangladesh [6].

# 3. INFRASTRUCTURAL DEVELOPMENT IN BANGLADESH

#### 3.1. Padma Multipurpose Bridge

It is considered as the most challenging megaproject currently underway in the country. The Padma multipurpose bridge spans the Ganges River and connects the southwest region to northern and eastern areas. The structure accommodates a four-lane highway on top and a single-track railway. It believes that Padma multipurpose bridge will boost the local economy by 1.2% [7].

3.2. Purbachal Residential Model Town

Dhaka the country's capital city and the ninth most populous metro region in the world are bursting at the seams to accommodate the growth developers are expanding into territories surrounding [8]. Purbachal residential model town is the most anticipated build-out and a hotbed of investment opportunities just located sixteen miles from the center of Dhaka. Purbachal residential will occupy over six thousand acres and include recreational business residential and institutional components. Notably, Dhaka University will also open a second campus in purbachal.

# 3.3. Legacy Tower

It's part of the Bangabandhu tri-tower development site. The legacy tower is scheduled to be the 111th floor skyscraper in the new purbachal business district. Hirim architects designed the building and engineering teams from Japan, France and South Korea are collaborating on the build. A modern undertaking legacy tower will feature state-ofthe-art. Solar power technology and automatic waste systems construction began on the legacy in September 2020. Down the line liberation and language towers are schedule to complete the trio of planned high-rises.

# 3.4. Sheikh Hasina International Cricket Stadium

It is constructed on the 140 million dollar 38acre and the boat began in November 2019. When finished, it will be Asia's largest cricket arena accommodating 50000 seats with an option to add 25000 more. The stadium is a point of nation pride among Bangladeshis who feels the same way about cricket as facility will be much more than just a place to play the



original gentlemen's game. It will also house of pavilions for water sports, cultural performances, exhibitions and indoor recreation [9]. A government-backed endeavour both the national sports council and the cricket board are linked to the project and everyone is hoping for a 2022 opening. Once completed the stadium will serve as a home base for three cricket clubs for National cricket team, Dhaka dynamites and Bangladesh premier league.

#### 3.5. Dhaka Elevated Expressway

Dhaka's explosive population growth and small landmass have made it the poster child for infrastructure dysfunction. A 2016 New York times framed the city's dire traffic situation as quote - "traffic in extreme a state of chaos so persistent" and everlasting that it has converted the city's establishing principle [10]. It's not an uncommon for an eight-mile drive to take two and a half hours, but officials hope to fix the crisis with the Dhaka elevated expressway a 150000-foot highway that will run between Shahjalal airport and kutubkhali. The country's prime minister announced 1.4 billion projects in the spring of 2011 and gave it a three-year completion time. But things didn't work out exactly as planned as of 2021. The elevated expressway still isn't complete. However, there is a glimmer of hope that it will be done by 2022.

# 3.6. Bangabandhu Sheikh Mujibur Rahman Tunnel

The Bangabandhu sheikh Mujibur Rahman tunnel (karnaphuli tunnel) will be the first river tunnel in Asia located in Chattogram and expected to open in 2022. The country's most active port city the underground throughway will measure 2.06 miles and span about 34 feet. Analysts expect the final tolly to be in the 1.1 billion range and about half of the project's financing is funnelling through the Exim bank of China.

# 3.7. Dhaka Subway

In the not-too-distant past common wisdom discounted a Dhaka subway on account of the country's monsoonal flooding. But where there is a will there is a way and engineers figured out how to make it happen. So, if all goes according to plan the city will have a fully functioned underground train network by 2041. The 8 billion ventures is expected to span 160 miles and run 11 lines but don't expect to hop on the Dhaka express anytime soon the first line probably won't be open for at least another decade.

# 3.8. Matarbari Port

It is located in the moheshkhali region. Matarbari is a deep seaport the country's first. It's modified after two highly trafficked ports in Japan Nîgata and Kashima and the Japanese international cooperation agency won the contract to manage it's part of the port is complete and boats have already docked at matarbari. However, the project won't be 100 percent done until 2026.

# 3.9. Roop-pur Nuclear Power Plant

The country's first nuclear power plant Rooppur is about 87 miles west of Dhaka Rosatom state atomic energy cooperation a Russian conglomerate is building the energy critical components and local developers are handling the rest 2023 is the target launch date for two units and officials hope it will help alleviate



some of the region's energy issues. Currently, it is exacerbated by the growing economy and population.

# 3.10. Terminal Three at the Hazrat Shahjalal International Airport

Next year another terminal is slated to open at the Shah Jalal International Airport. Considerable in size it will have 12 boarding bridges, 12 accompanying conveyor belts, 115 check-in counters and 59 immigration desks. Like its neighbour India, Bangladesh has positioned itself to be a significant economic force on the work stage [11].

#### 3.11. Dhaka Metro Rail

Dhaka metro rail will alleviate traffic congestion from Dhaka as it will carry over 60000 passengers per hour. It has a plan to extend to nearby town like Savar, Tongi, Vulta by 2035.

# 3.12. Rampal Power Plant

Rampal power plant will be 1300 MW coalbased power plant worth \$1.6 billion. To address rapidly rising power demand in the south.

# 3.13. Chittagong-Cox'sbazar Railway

The Chittagong Cox-Bazar Rail Line is planned as a 120km two-lane passenger route from a village in south-eastern Bangladesh to one of the country's most popular tourist destinations, Cox's Bazar. The Greenfield Project is one of the seven partial investment projects by the Bangladesh Railway (BR) to improve railway links with other Asian countries. It is part of the Trans-Asian Railway (TAR) network and will improve access to Myanmar and beyond. This project is supported by the South Asia Subregional Economic Cooperation (SASEC). It will take five years to complete the project and hire about 3,500 workers in the community. It will also boost the country's southernmost trade and tourism. Construction work on the project will begin in March 2018 and is expected to be completed by 2022.

# 4. CONCLUSION

In a developing country like Bangladesh, where GDP is growing at 7% per year, infrastructure megaprojects are frequently cited as critical drivers for faster economic growth. The benchmark of 7% economic growth is normally required for these developing nations, both for capital accumulation to fund megaprojects and for reaping the advantages of these projects to lift the growth rate to the magical two-digit number. The Asian success story has showed economists and practitioners alike that maintaining a two-digit growth rate for at least 10-15 years is the key to pulling off an economic miracle. Mega-infrastructure projects clearly had a critical role in quickening economic growth in the early days of development in the so-called East Asian Tiger countries. Even under the framework of the Sustainable Development Goals, it is estimated that global economies will need to invest nearly \$57 trillion on infrastructure by 2030 to achieve the expected levels of global GDP growth. Two-thirds of that will be needed in emerging countries like Bangladesh. These large-scale infrastructure projects and megaprojects are projected to revolutionize the country's communications, transportation, ports, and energy scenarios by 2030, assisting the country in achieving highmiddle-income status by 2041.



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#### 6. CONFLICT OF INTEREST

The authors have declared that there is no conflict of interest.

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NA

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