



Recent Energy Crisis of Bangladesh and Recovery Plan

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Introduction

Bangladesh is suffering from an energy crisis, especially crude oil, due to the Russia-Ukraine war, which has triggered electricity shortages across the country. Lower power production than demand intensified the crisis, and the power supply could not meet up to 50% of the demand during July 2022 (Business Inspection, 2022). The total electricity generation capacity is 25,730 MW, and the highest electricity generation record up to April is at 14,782 MW (Power Cell bd, 2022). Bangladesh's electricity demand is expected to exceed 40,000 megawatts (MW) by 2041. The government of Bangladesh plans to invest USD127 billion in the electricity generation sector over the next 20 years, aiming to assist fuel growth in the export-oriented economy and meet the needs of the growing middle class (International Trade Administration, 2022).

Bangladesh's electricity generation mainly relies on domestic natural gas production, as 52% of electricity is produced by gas, and 27% comes from furnace oil (Figure 1). The share of renewable energy production is very meager, which hinders the country's energy safety.

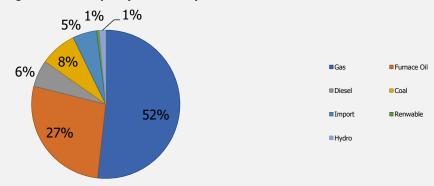


Figure 1. Total Capacity of Electrcity Production

Source: Ministry of Power Energy and Mineral Resource (2022)

Recent Energy Crisis and Power Shortage

The main reason for the power shortage in Bangladesh is the rising cost of fuel and ongoing currency devaluation against the dollar. The Covid epidemic, followed by the Russia-Ukraine war, kept all energy prices unusually high for a long time.

Domestic gas production has recently decreased, aggravating the energy shortage. In response to lower gas production, Bangladesh's government has started importing LNG on the spot market, but the soaring price of LNG has put pressure on the country's foreign currency reserves. In this scenario, the administration decided to discontinue spot LNG import (The Daily Star, 2022).

In July 2022, the government announced the country-wide implementation of a scheduled power cut as there has been a mismatch between the demand and supply of electricity. Figure 2 illustrates a division-wise electricity supply and load-shedding scenario from July to September 2022. According to data from

Bangladesh Power Development Board (BPDB), the Dhaka division has the most electricity deficits, with 329892 MW demand and a Power cut of 5,010 MW. Following the Dhaka division comes Mymensingh and Comilla divisions. This scheduled power outage has disrupted production systems and hampered people's daily activities.

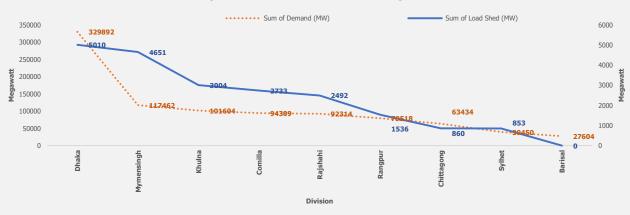


Figure 2. Division Wise Power Shortage and Demand

Source: BPDB (2022)

Impact of Power Cut on Industrial Production

Due to a recent power cut, industrial production is hampered exceedingly. Moreover, the production cost is rising for the interrupted power supply, which is alarming as the industrial output is reduced. In this scenario, export-oriented companies fail to deliver their product within the timeline, which might slash their export order. The manufacturing sector is facing a power shortage which increases production costs by up to 20-30%, and production decreases by 5-10% (The Business Standard, 2022).

The energy crisis is hurting the readymade garments sector, Bangladesh's leading export sector. Even the supporting garments industries are facing production cuts due to power shortages, and a fall in gas production resulted in the production of the spinning and textile mills. Nearly 50% of production dropped in knitting and spinning mills to the shortage, considered the primary backward linkage of the garments sector (The Financial Express, 2022).

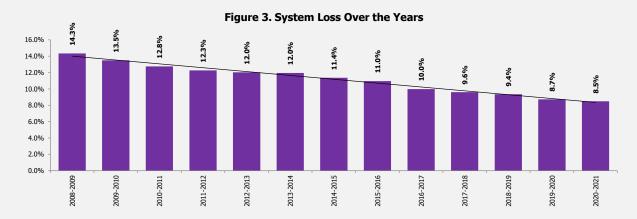
Nevertheless, due to the price hike of refined diesel in the international market, the production cost of the diesel-based plant surged. Thus, the government postponed the diesel-based plant until the oil price fell. Government has to take the additional pressure for decreased production as the government has to pay a capacity charge for unused capacity.

Recovery Plan of Government in the Power Sector

Bangladesh has achieved tremendous success in power in the last 13 years; power generation has increased substantially in recent years. The government has targeted 40,000 MW of electricity production by 2041. The government has taken many steps to support the goal of electricity generation. For instance, to ensure uninterrupted power supply government has taken short-, medium-, and long-term plans. In the year 2016 government prepared a master plan on electricity generation to define the policy of future power generation.

The government has planned to achieve the electricity generation target of 40,000 MW by the year 2030 and 60,00 MW by the year 2060 (UNB, 2022). To achieve this target, the government has established many coal and nuclear plants. To ensure long-term low-cost electricity, coal-based plants and nuclear plants are established across the country. In order to generate green energy, the government is providing policy support to ensure sustainable energy solutions.

Figure 3 shows the system loss of our country in the last 13 years, as system loss is one of the significant issues in electricity distribution. According to Ministry of Energy and Mineral Resource system statistics, loss decreased to 8.5% in 2021 compared to 14.3% in 2009.



Source: Ministry of Power Energy and Mineral Resource (2022)

The government's liabilities to private power generation companies are piling up which might further result in an increase in interrupted power supply. The government has to take a swift step towards mitigating the power shortage crisis as it will have a long term impact on the output of the economy and might affect the economicgrowth. If the power cut continues in the future, industrial survival will be challenging for different sectors and domestic production will slash substantially affecting export of the country. The world is moving towards recession due to inflation and high fuel price that will create more pressure on industrial production.

Conclusion and Policy Implication

The recent energy crisis has created pressure on the government and industrial sectors. The crisis can be solved through a master plan formulated in 2016. In such cases, fuel price stability in the international market is essential. Otherwise, this problem will be more severe in the upcoming days. Dependency on fuel import from the international market has made the situation more vulnerable for our government.

In such a scenario, the government must search for fuel alternatives from different sources. As the majority of power is generated by natural gas production, in this case, natural gas production should increase by searching for new sources and renovating existing gas fields. Renewable and nuclear energy can be a better alternative for Bangladesh. Depending on biofuel for electricity generation will not ensure sustainable power production as biofuel is limited worldwide. Moreover, an integrated effort from the government and private sector can resolve the energy crisis of Bangladesh.

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Emerging Credit Rating Limited (hereinafter referred to as ECRL) began its journey in the year 2009 with the motive to deliver credible superior & quality credit rating opinion in various industry segments around Bangladesh. ECRL obtained credit rating license from Bangladesh Securities and Exchange Commission (BSEC) in June 2010 as per Credit Rating Companies Rules 1996 and also received Bangladesh Bank Recognition as an External Credit Assessment Institutions (ECAI) in October 2010 to do the rating of Banks, Financial Institutions and their borrowers and also from Insurance Development & Regulatory Authority (IDRA) in 2015 to do the rating of Insurance Companies & affiliated with Malaysian Rating Corporation Berhard.

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