

STUDENT



STUDY

Essay Writing

### ১০টি রচনার তালিকা

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## Corona virus

**Introduction:** A pandemic is defined as an epidemic occurring worldwide or over a very wide area, crossing international boundaries and usually affecting a large number of people. The classical definition includes nothing about population immunity, virology or disease severity. On 11 March 2020, the World Health Organization (WHO) declared the outbreak of a new type of Coronavirus, SARS-CoV-2, that causes COVID-19 respiratory disease, a global pandemic. Though some vaccines are discovered and some are on the pipeline, the deterioration of the situation cannot be mitigated yet.

**Overview of this diseases:** The coronavirus family causes illnesses ranging from the common cold to more severe diseases such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS), according to the WHO. They circulate in animals and some can be transmitted between animals and humans. Several coronaviruses are circulating in animals that have not yet infected humans. The new coronavirus, the seventh known to affect humans, has been named COVID-19.

**Origination of corona virus:** COVID-19 is thought to have originated in a seafood market where wildlife was sold illegally. On February 7, Chinese researchers said the virus could have spread from an infected animal to humans through illegally trafficked pangolins, prized in Asia for food and medicine. Scientists have pointed to either bats or snakes as possible sources.

**Signs and symptoms of corona virus:** Symptoms of COVID-19 are variable, ranging from mild symptoms to severe illness. Common symptoms include headache, loss of smell and taste, nasal congestion and rhinorrhea, cough, muscle pain, sore throat, fever, diarrhea, and breathing difficulties. People with the same infection may have different symptoms, and their symptoms may change over time.

Three common clusters of symptoms have been identified: one respiratory symptom cluster with cough, sputum, shortness of breath, and fever; a musculoskeletal symptom cluster with muscle and joint pain, headache, and fatigue; a cluster of digestive symptoms with abdominal pain, vomiting, and diarrhea. In people without prior ear, nose, and throat disorders, loss of taste combined with loss of smell is associated with COVID-19.

**Transmission:** Coronavirus disease 2019 spreads from person to person mainly through the respiratory route after an infected person coughs, sneezes, sings, talks or breathes. A new infection occurs when virus-containing particles exhaled by an infected person, either respiratory droplets or aerosols, get into the mouth, nose, or eyes of other people who are in close contact with the infected person. During human-to-human transmission, an average 1000 infectious SARS-CoV-2 virions are thought to initiate a new infection.

**Diagnosis and prevention:** The standard methods of testing for presence of SARS-CoV-2 are nucleic acid tests, which detects the presence of viral RNA fragments. As these tests detect RNA but not infectious virus, its ability to determine duration of infectivity of patients is limited. The test is typically done on respiratory samples obtained by a nasopharyngeal swab; however, a nasal swab or sputum sample may also be used. Preventive measures to reduce the chances of infection include staying at home, wearing a mask in public, avoiding crowded places, keeping distance from others, ventilating indoor spaces, washing hands with soap and water often and for at least 20 seconds, practicing good respiratory hygiene, and avoiding touching the eyes, nose, or mouth with unwashed hands.

**Vaccines:** Two vaccines have been on the pioneering position so far. There are lots of vaccines which are already on the pipeline.

**Pfizer:** The European Community approved the Pfizer BioNTech vaccine. Vaccinations began to be administered on 27 December 2020.

**AstraZeneca:** The Moderna vaccine was authorized on 6 January 2021 and the AstraZeneca vaccine was authorized on 29 January 2021.

**Treatment for corona virus:** There is no specific, effective treatment or cure for coronavirus disease 2019 (COVID-19), the disease caused by the SARS-CoV-2 virus. Thus, the cornerstone of management of COVID-19 is supportive care, which includes treatment to relieve symptoms, fluid therapy, oxygen support and prone positioning as needed, and medications or devices to support other affected vital organs. Due to a shortage of mechanical ventilators, a bridge ventilator is being used to automatically actuate a bag valve mask. Most cases of COVID-19 are mild. In these, supportive care includes medication such as paracetamol or NSAIDs to relieve symptoms (fever, body aches, cough), proper intake of fluids, rest, and nasal breathing. Good personal hygiene and a healthy diet are also recommended.

**Covid-19 in perspective of Bangladesh:** The COVID-19 pandemic in Bangladesh is part of the worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus was confirmed to have spread to Bangladesh in March 2020. The first three known cases were reported on 8 March 2020 by the country's epidemiology institute, IEDCR. Since then, the pandemic has spread day by day over the whole nation and the number of affected people has been increasing.

Medical experts feared that not enough tests were being conducted. Newspaper reports and social media continued to report about additional deaths of patients with COVID-19 symptoms. Some of the deceased were treated at COVID-19 isolation centres at hospitals in the districts and others were denied treatment, though no tests were conducted to confirm contagion. For a long time, testing was centralised to only Institute of Epidemiology, Disease Control and Research (IEDCR) in the capital Dhaka, although patients with symptoms were reported all around the country.

The government has already arranged for Social distancing measurement, repatriation of Bangladeshi citizens, travel and entry restrictions, fighting disinformation, proper testing. Recently, the government has relaxed lockdown to some garments industries, markets and shopping centers and allowed them to run their business keeping social and physical distance along with maintaining all the rules of health and sanitation to stop COVID-19 transmission in the community.

**Non-Government Response:** Most of the private companies are contributed to lessen the outbreak of this lethal diseases. They are providing food, medication, PPP and other necessary elements.

**Economic impact of COVID-19 on Bangladesh:** The COVID-19 pandemic has heavily impacted household and individual level earnings in Bangladesh with around 13 percent of people have become unemployed; lower and middle-income classes have been experiencing a significant drop in income for the last few months. Consequently, the disposable income of the country people is following a declining trend. Meanwhile, the national poverty is forecasted to increase by 25.13 percent, claimed by Bangladesh Institute of Development Studies (BIDS). The pandemic has taken a heavy toll on almost all sectors of the economy, inter alia, most notably, it has caused a reduction of exports by 16.93 percent, imports by 17 percent, and also a decline of average revenue for all small and medium enterprises (SMEs) by 66 percent in 2020 compared to 2019. Exceptionally, only remittance inflow has seen an 11 percent increase this year. Even though garment factories were allowed to continue operating under the country's lockdown, an estimated one million garment workers, or one-quarter of the workforce, were laid off due to declining orders for export.

**Conclusion:** It is vivid that Corona Virus transmission is increasing in an alarming rate in Bangladesh, retiring all the government and non-government responses. Hence the national task force needs to be more strict to stop community transmission of corona virus as well as a high-tech technology needs to be introduced to the physicians and health workers to take care of the COVID-19 patients in Bangladesh to end this pandemic.

## Key-Notes of the Essay

### 1. Introduction:

#### ✎ Important points:

A pandemic is defined as an epidemic occurring worldwide or over a very wide area.

The classical definition includes nothing about population immunity, virology or disease severity.

### 2. Overview of this diseases:

#### ✎ Important points:

The coronavirus family causes illnesses ranging from the common cold to more severe diseases.

Several coronaviruses are circulating in animals that have not yet infected humans.

The new coronavirus, the seventh known to affect humans, has been named COVID-19.

### 3. Origination of corona virus:

#### ✎ Important points:

COVID-19 is thought to have originated in a seafood market where wildlife was sold illegally.

Scientists have pointed to either bats or snakes as possible sources.

#### 4. Signs and symptoms of corona virus

##### ✚ Important points:

Symptoms of COVID-19 are variable, ranging from mild symptoms to severe illness. Common symptoms include headache, loss of smell and taste, nasal congestion and rhinorrhea.

#### 5. Transmission:

##### ✚ Important points:

Coronavirus disease 2019 spreads from person to person mainly through the respiratory route. A new infection occurs when virus-containing particles exhaled by an infected person.

#### 6. Diagnosis and prevention:

##### ✚ Important points:

The test is typically done on respiratory samples obtained by a nasopharyngeal swab. Preventive measures to reduce the chances of infection include staying at home, wearing a mask.

#### 7. Vaccines against corona virus:

##### ✚ Important points:

The European Community approved the Pfizer BioNTech vaccine. The Moderna vaccine was authorized on 6 January 2021.

#### 8. Treatment for corona virus:

##### ✚ Important points:

There is no specific, effective treatment or cure for coronavirus disease. Due to a shortage of mechanical ventilators, a bridge ventilator is being used. Good personal hygiene and a healthy diet are also recommended.

#### 9. Covid-19 in perspective of Bangladesh:

##### ✚ Important points:

The COVID-19 pandemic in Bangladesh is part of the worldwide pandemic of coronavirus disease. The virus was confirmed to have spread to Bangladesh in March 2020. The first three known cases were reported on 8 March 2020.

#### 10. Economic impact of COVID-19 on Bangladesh:

##### ✚ Important points:

The COVID-19 pandemic has heavily impacted household and individual level earnings. The disposable income of the country people is following a declining trend.

#### 11. Conclusion:

##### ✚ Important points:

It is vivid that Corona Virus transmission is increasing in an alarming rate in Bangladesh. The national task force needs to be more strict to stop community transmission of corona virus.

## Padma Bridge

**Introduction:** The dream of Padma Bridge has turned into reality with its construction inauguration on 12 December 2015. The Padma Bridge is a multipurpose road-rail bridge across the Padma River to be constructed in Bangladesh. When completed it will be the largest bridge in Bangladesh and the first river crossing for road traffic. It will connect Louhajang, Munshigonj to Shariatpur and Madaripur, linking the southwest of the country, to northern and eastern regions. The Bridge will contribute to a great extent to our communication, economy, and industrialization.

**The construction project of Padma Bridge:** The Padma Bridge project has been undertaken with the main aim of improving the social, economic and industrial development of the southwest region of Bangladesh. The project also aims to provide the people in the southwest region with improved access to markets and services throughout the rest of the country while accelerating growth in Bangladesh as a whole.

**The Design and Construction of Padma Bridge:** The bridge design contract was awarded to a team led by Maunsell AECOM, the new Zeland business of AECOM. The design team also includes experts from North-west Hydraulic consultant, SMEC International, ACE consultants, Aas Jakobsen, and HR Wallingford. The bridge will be approximately 6.15km long and 18.10m wide. It will be a double-deck composite steel truss structure and will use 41 pieces. The main spans will be 150m long. The upper deck will contain a four lane highway, while the lower deck will house a rail line. Gas transmission pipeline, optic fiber cable and power transmission lines.

**The Multipurpose Bridge named Padma at a glance:**

**Carriers:** Motor vehicles, railway

**Crosses:** Padma River

**Locale:** Louhajang, Munshigonj to Shariatpur and Madaripur, linking the southwest of the country, to northern and eastern regions.

**Maintained by:** BBA (Bangladesh Bridge Authority)

**Designer:** Maunsell AECOM

**Contractor:** China major Bridge Engineering Corporation

**Design:** Truss bridge

**Material:** steel

**Total length:** 6150m

**Width:** 18.10m

**Construction begins:** December 2014

**The Financing sources of Padma Bridge:** The donor agency including World Bank, Asian Development Bank, and the JICA promised a loan of \$1.9 billion for the project. But the loan was canceled by the donors on the allegation of corruption conspiracy against former communication minister Sayed Abul Hossain. However, the government dismissed the World Bank's allegation and decided to construct the bridge in its own fund. The government has made an allocation of Tk. 8100 core for Padma bridge project in the Annual Development program. And thus the government will fund for the project for its total cost.

**The Economic and social transformation brought by Padma Bridge:** Reliable infrastructure plays a key role in economic growth. Studies have found positive relationship between infrastructure and economic output in many countries. This happens through gross domestic capital formation, employment, trade and human capital. Good infrastructure enhances productive capacity and improves competitiveness of a country. There is ample evidence that infrastructure and output are mutually beneficial. That is, infrastructure boosts output and higher output also leads to better infrastructure. The Padma Bridge is estimated to increase the GDP of the country by more than one percent. It will benefit about three crore

people across 21 south-western districts of Bangladesh. These districts will be connected with the growth centers through better connectivity. They can be used as economic corridors. This will create opportunities for employment and income. The transportation system will be improved as movement of people will be enhanced. Supply chains within the country will be connected better. Goods and services will move smoothly from one place to another. People from the south-western parts of the country are also expected to have better access to education, healthcare and other services.

**The benefits perceived through many factors:** Infrastructure generates economic benefit to the extent they create services for people. In other words, benefits from infrastructure are not automatic and it cannot work in isolation. The return from investments depends on enabling policy framework and supporting measures. One of the preconditions is the development of all regions including the rural areas and creating opportunities for people everywhere. Decentralization of services and opportunities is critical for reaping benefits from such infrastructure. For example, setting up of industries in the newly connected districts will help stop migration from the rural areas to the big cities for work. Better access to finance for small and medium businesses such as agro-processing, handicrafts and food industries will also help create jobs. Besides, improvement of facilities such as uninterrupted electricity, internet, education and healthcare in the villages will restrain people from crowding the cities.

Earlier, the Jamuna Bridge which linked the north-western districts with the rest of the country had also created a lot of hope. However, much of that hope remained unfulfilled. With much dismay we observe how farmers of Sirajganj and other districts have to throw milk on the road as they do not get fair prices. Potato and other vegetable producers in the villages have to do the same due to lack of better prices for their produce. On the other hand, students from the rural areas have to come for higher studies to Dhaka. Critical patients have to be brought to big cities for treatment despite having clinics at district and sub-district levels. Professionals and doctors do not want to live outside Dhaka. In many districts there are medical colleges and universities. Still those places are not the desired destinations due to lack of other essential amenities. Because Dhaka is the centre of all economic, administrative, social and cultural activities, people cannot do without living in and around this mega city. This is deterring the development of the rural areas.

**The Challenge against building Padma Bridge:** Crossing Bangladesh's Padma River, the world's third largest, has always been a challenge. Often a tiring and sometimes dangerous journey due to unreliable and limited ferry connections, there are regularly long waits for overcrowded boats and ferries.

The lack of connectivity has prevented timely and effective access to medical care, education, and has also hindered mobility and economic activity. The proportion of the population below the poverty line in the south west region is about 5% higher than the national average. Primarily due to lack of connectivity, the region economically lagged behind the rest of the country. Trucks and buses sometimes have to wait for days a ferry so they can move people and goods from the South West to economic centers such as Dhaka and Chittagong. Even when there's no backlog, the journey to Dhaka often takes over 4 hours with almost half of the journey taken by the river crossing.

**The Quality and Transparency about Padma Bridge:** Given the paramount impact the project will have on the lives of millions of people, the World Bank is partnering with the Government of Bangladesh and other development partners to ensure that the highest quality standards are maintained from start to finish of the bridge. The Government of Bangladesh and the World Bank agreed on a jointly developed Governance and Accountability Action Plan that aims at integrating good governance in project design, enhancing supervision to guarantee quality and ensuring oversight and transparency for greater accountability to the people of Bangladesh.

**Conclusion:** Construction of Padma Multipurpose Bridge with own fund was a courageous initiative of Bangladesh government. It proves our valor and strength and inspires us to come out of dependency that will help us to take bigger projects in future independently. The completion of Padma Bridge will fulfill the ever cherished dream of the people of Bangladesh.



## Key-Notes of the Essay

### 1. Introduction:

#### ✎ Important points:

It's the largest bridge in Bangladesh and the first river crossing for road traffic.  
It will connect Louhajong, Munshigonj to Shariatpur and Madaripur.

### 2. The construction project of Padma Bridge:

#### ✎ Important points:

The Padma Bridge project has been undertaken for improving the industrial development.  
The project also aims to provide the people in the southwest region with improved transportation.

### 3. The Design and construction of Padma Bridge:

#### ✎ Important points:

The bridge design contract was awarded to a team led by Maunsell AECOM.  
The bridge will be approximately 6.15km long and 18.10m wide.  
It will be a double-deck composite steel truss structure and will use 41 pieces.

### 4. The Multipurpose Bridge named Padma at a glance:

#### ✎ Important points:

Maintained by: BBA (Bangladesh Bridge Authority)  
Total length: 6150m  
Width: 18.10m

### 5. The Financing sources of Padma Bridge:

#### ✎ Important points:

World Bank, Asian Development Bank, and the JICA promised a loan for the project.  
The government has made an allocation of Tk. 8100 core for Padma bridge project.

### 6. The Economic and social transformation brought by Padma Bridge:

#### ✎ Important points:

Good infrastructure enhances productive capacity and improves competitiveness of a country.  
The Padma Bridge is estimated to increase the GDP of the country by more than one percent.

### 7. The benefits perceived through many factors:

#### ✎ Important points:

Decentralized opportunities is critical for reaping benefits from such infrastructure.  
Improvement of facilities in the villages will restrain people from crowding the cities.

### 8. The Challenge against building Padma Bridge:

#### ✎ Important points:

Crossing Bangladesh's Padma River, the world's third largest, has always been a challenge.  
The lack of connectivity has prevented timely and effective access to medical care, education.

### 9. The Quality and Transparency about Padma Bridge:

#### ✎ Important points:

The Government of Bangladesh and the World Bank agreed on a jointly.  
They ensure oversight and transparency for greater accountability to the people of Bangladesh.

### 10. Conclusion:

#### ✎ Important points:

Construction of Padma Multipurpose was a courageous initiative of Bangladesh government.  
The completion of Padma Bridge will fulfill the ever cherished dream of the people of Bangladesh.

## Rohingya refugee crisis in Bangladesh

**Introduction:** Rohingya refugees in Bangladesh mostly refer to Forcibly Displaced Myanmar Nationals from Myanmar who are living in Bangladesh. The Rohingya people have experienced ethnic and religious persecution in Myanmar for decades. Hundreds of thousands have fled to other countries in Southeast Asia, including Malaysia, Indonesia, and Philippines. The majority have escaped to Bangladesh, where there are two official, registered refugee camps. Recently violence in Myanmar has escalated, so the number of refugees in Bangladesh has increased rapidly. According to the UN Refugee Agency (UNHCR), more than 723,000 Rohingya have fled to Bangladesh since 25 August 2017.

**History of Rohingyas:** Rohingyas are a Muslim minority in Myanmar regarded by many Myanmar Buddhists as illegal migrants from Bangladesh. The Rohingyas have lived in Myanmar for generations and the Bangladesh government has called for Myanmar to take back the refugees. They are denied citizenship in Myanmar and have been described as the world's most persecuted minority. Myanmar has denied persecuting the Rohingyas. Since the 1970s Rohingya refugees have been coming to Bangladesh from Myanmar. In the 1990s, more than 250,000 resided in refugee camps in Bangladesh.

**Relocation of Rohingyas:** In 2015 the government of Bangladesh proposed a relocation plan for the Rohingya refugees in Bangladesh to the remote island of Bhasan Char in the Bay of Bengal. The plan was pushed back following criticism by human rights activists and the UNHCR. Between October and November 2016, about 65,000 Rohingya refugees arrived from Myanmar. The government of Bangladesh decided to revive the relocation plan. Bhasan Char submerges during high tide and was formed in the 2000s by sediments from the Meghna River. It is eight kilometers from Hatiya Island. The Bangladesh Navy has been tasked with making the island habitable for the refugees. In 2019 the government announced an expansion of the Ashrayan Project (Ashrayan-3) to build 100,000 homes. In January 2020 the project was moving forward despite opposition from Rohingya leaders and human rights groups. Bangladesh's minister for refugee affairs has said the island is "ready for habitation," though he gave no timetable for the relocation. The government has not permitted foreign journalists or Rohingya leaders to travel to Bhasan Char. The island is less than 20 years old, and some think there is no guarantee that it will not disappear in the next monsoon.

**Repatriation of Rohingyas:** After the ARSA attacks on 25 August 2017 and subsequent humanitarian crisis, Bangladeshi Foreign Minister Abul Hassan Mahmud Ali met with Myanmar officials on 2 October 2017, later stating after their meeting that both countries had agreed on a "joint working group" for the repatriation of Rohingya refugees who had fled to Bangladesh. The governments of Myanmar and Bangladesh signed a memorandum of understanding on 23 November 2017 regarding the repatriation of Rohingya refugees to Rakhine State. Bangladesh's Foreign Minister stated that a joint working group composed of UNHCR and members of both nations was to be established within three weeks to fix the final terms for the beginning of the process. He also stated that those returning would be kept in temporary camps near their abandoned homes. Under the deal, Myanmar would ensure that they are not kept in the camps for long and are issued identity cards. The foreign secretaries of both nations met on 19 December to finalise the agreement. Bangladesh's foreign ministry issued a statement saying that the group would "ensure commencement of repatriation within two months" by developing a timetable for verification of identities and logistics.



**Health issues of Rohingyas:** Since the rapid influx of Rohingya refugees into Bangladesh began in 2017, public health officials have been concerned that a myriad of health issues among the refugees would arise. As predicted, mental health has deteriorated, food- and water-borne diseases are spreading, infectious diseases are emerging, malnutrition is prevalent, and reproductive health for women and girls must be addressed.

**Mental health of Rohingyas:** In humanitarian crises, mental health responses typically follow the IASC pyramid of Mental Health and Psychosocial Services (MHPSS). Ideally, different levels of care are to be provided to best serve communities, as well as individuals. The philosophy behind this model maintains that individual psychological treatment and broad social interventions are both essential to overall mental wellbeing and resilience.

**Food- and water-borne diseases of Rohingyas:** In the Rohingya refugee camps in Bangladesh, the actual prevalence of latrines is one latrine for 37 individuals. Clean water is also in demand for the Rohingya refugees. Many people draw from nearby rivers for drinking water, however, these rivers are also sources of bathing and open defecation, especially in unofficial Rohingya camps. Contamination of these rivers and latrines by harmful pathogens becomes an even greater risk during monsoon seasons for Rohingya camps in both Myanmar and Bangladesh.

**Infectious diseases among Rohingya refugees:** Due to poor sanitation, low water quality, close living quarters, and high levels of drug trafficking and sexual violence, infectious disease outbreaks in Rohingya refugee camps are of concern to public health officials.

**Vaccination status and disease prevention:** Starting in October 2017, Rohingya refugees migrated in droves into Bangladesh and since, massive spread of communicable diseases has occurred among them. Rohingya refugees are often not vaccinated and there is worry that outbreaks of vaccine-preventable diseases, such as polio, measles, and tetanus, will occur if living conditions are not improved. But the UN and the WHO, along with Bangladesh Government, were quick to begin mass vaccination of the population.

**Malnutrition of Rohingyas:** Malnutrition is a serious public health concern for Rohingya refugee children. According to the World Health Organization (WHO) malnutrition refers to deficiencies and excesses or imbalances in a person's intake of energy and/or nutrients and is a strong predictor of mortality in children that are 5 years and younger.

**Reproductive health of Rohingyas:** The Rohingya refugee crisis has made Rohingya women more vulnerable. Currently, Rohingya women make up approximately 67% of the refugee population and are victims of sexual violence and exploitation.

**Education of Rohingyas:** As of 2020, approximately one-third of refugee Rohingya children were able to access primary education, primarily through temporary centers run by international organizations. UNICEF runs approximately 1,600 learning centers across the country, educating around 145,000 children. Beginning in April 2020, UNICEF and the Government of Bangladesh will enroll 10,000 Rohingya children in schools where they will be taught the Myanmar school curriculum.

**Conclusion:** In the end it won't be wrong to say that Rohingyas are an unfortunate set of stateless people, stuck in a terrible crisis with no place to call home. The countries of South and South-East Asia need to decide whether it is right to push Rohingya refugees back to violence torn Myanmar or it should be dealt at the regional level in a more comprehensive way. If a long-term solution is not reached, the spillover effect of this crisis will have to be faced by all the neighbouring nations of Myanmar.

## Key-Notes of the Essay

### 1. Introduction:

#### ✎ Important points:

Rohingya refugees in Bangladesh mostly refer to Forcibly Displaced Myanmar. Hundreds of thousands have fled to other countries in Southeast Asia.

### 2. History of Rohingyas:

#### ✎ Important points:

Rohingyas are a Muslim minority in Myanmar regarded by many Myanmar Buddhists. The Rohingyas have lived in Myanmar for generations. They are denied citizenship and have been described as the world's most persecuted minority.

### 3. Relocation of Rohingyas:

#### ✎ Important points:

In 2015 the government of Bangladesh proposed a relocation plan for the Rohingya refugees. The plan was pushed back following criticism by human rights activists and the UNHCR.

### 4. Repatriation of Rohingyas:

#### ✎ Important points:

The governments of Myanmar and Bangladesh signed a memorandum of understanding. The foreign secretaries of both nations met on 19 December to finalise the agreement.

### 5. Health issues of Rohingyas:

#### ✎ Important points:

Public health officials have been concerned that a myriad of health issues. Ideally, different levels of care are to be provided to best serve communities, as well as individuals.

### 6. Vaccination status and disease prevention:

#### ✎ Important points:

Massive spread of communicable diseases has occurred among them. Rohingya refugees are often not vaccinated and there is worry that outbreaks.

### 7. Education of Rohingyas:

#### ✎ Important points:

Rohingya children were able to access primary education, primarily through temporary centers. UNICEF runs approximately 1,600 learning centers across the country.

### 8. Conclusion:

#### ✎ Important points:

Rohingyas are an unfortunate set of stateless people, stuck in a terrible crisis. The spillover effect of this crisis will have to be faced by all the neighbouring nations of Myanmar.

## Mujib-100-year-anniversary

**Introduction:** Bangabandhu, the undisputed leader of the Bangali nation, the architect of independent Bangladesh, and the greatest Bangali of all times, was born in 1920 at Tungipara village of the then Gopalganj sub-division, now district. He was the third among six siblings — two sons and four daughters — born to parents, Sheikh Lutfur Rahman, and Sheikh Sayera Khatun.

**Celebration of Mujib 100 years:** The nation is set to celebrate the day through extensive programs with fanfare and gaiety amid Covid-19 pandemic. Bangladesh missions abroad have also chalked out elaborate programs to celebrate the day. The theme of this year's birthday of Bangabandhu and National Children's Day is "Bangabandhur Janmadin, Shishur Ridoy Hok Rangin" (Let children's lives become more colourful on Bangabandhu's birthday).

**Foreign guests:** Maldives' President Ibrahim Mohamed Solih is scheduled to join Bangladesh's Independence golden jubilee and Sheikh Mujibur Rahman's birth centenary celebrations. He would then pay homage to Bangabandhu by placing a wreath at his portrait on the premises of Bangabandhu Memorial Museum on March 17. Sri Lankan Prime Minister Mahinda Rajapaksa is scheduled to arrive in Dhaka on March 19 on a two-day tour. Nepalese President Bidya Devi Bhandari is likely to reach Dhaka on a two-day tour on March 22, and Bhutanese Prime Minister Lotay Tshering on March 24.

**President on this celebration:** In observance of the day, President M Abdul Hamid and Prime Minister Sheikh Hasina will issue separate messages, to pay profound respects to the memory of Bangabandhu and greet the children.

**Prime minister on this celebration:** Marking the day, Prime Minister Sheikh Hasina is scheduled to virtually address a program marking the occasion of the birth centenary of Bangabandhu, and the National Children's Day-2021, on the premises of the mausoleum of Bangabandhu at Tungipara in Gopalganj at 10:30 am on Wednesday. The day is a public holiday.

**Media on this celebration:** Bangladesh Betar, Bangladesh Television, and other private TV channels and radio stations are likely to air special programs highlighting the significance of the day. The portrait of Bangabandhu – Guinness World Record breaking art on a field – was captured by a drone in Bogra on Tuesday, March 9, 2021. Besides, Indian Prime Minister Narendra Modi is scheduled to arrive on March 26 and depart on March 27.

**Arrangement of programs:** A 10-day special program is ready to kick off at the National Parade Ground from March 17, marking the birth centenary of Bangabandhu and Golden Jubilee of the Independence of the country. Chief Coordinator of Sheikh Mujib's Birth Centenary Celebration National Implementation Committee Dr Kamal Abdul Naser Chowdhury announced the programs at a press conference on March 12. Naser informed that the events would be held between March 17 and 26 following the health guidelines as guests from both home and abroad are supposed to join the programs. The theme of the 10-day event is "Mujib Chirantan," but separate themes for each day have been set in place. "Bengechho Duar Eshechho Jyotirmoy" is the theme of March 17, while "Mohakaaler Torjoni" for March 18 event, "Jotokal Robe Padma Jamuna" for March 19, "Tarunner Alokshikha" for March 20, "Dhongsostupe Jiboner Gaan" for March 21 events, "Banglar Mati, Amar Mati" for March 22, "Nari Mukti, Shammo o Shadhinota" for March 23, "Shanti, Mukti O Manobotar Ogrodoot" for March 24 events, "Gonohottar Kalratri O Aloker Obhijatra" for March 25 and "Shadhinatar Ponchash Bochor O Ogrogotir Shubornorekha" for March 26. Around 500 guests from both home and abroad are supposed to attend the events at the National Parade Ground on March 17, 19, 22, 24, and 26. All the programs – including on March 18, 20, 21, 23, and 25 – would be aired on television channels, online, and social media.

**World leaders visiting:** On March 17, Naser said Maldivian President Ibrahim Mohamed Solih is supposed to attend the inauguration session of the 10-day event on March 17 as a guest of honour, while Chinese President Xi Jinping and Canadian Prime Minister Justin Trudeau are scheduled to deliver the welcome speeches virtually. He informed that Cambodian Prime Minister Hun Sen is supposed to deliver the welcome speech on March 18, while OIC Secretary General Dr Yousef bin Ahmed Al-Othaimeen would deliver speech on March 20, Japanese Prime Minister Yoshihide Suga on March 22, and South Korean Prime Minister Chung Sye-kyun, and Friend of Bangladesh, Takasi Hawarkawar's, son Osamu Hawakawa, on March 25.

**Bangabandhu's fight for an independent Bangladesh:** Nicknamed Khoka, Bangabandhu got involved in politics in his adolescence, and was arrested for the first time as an eighth grader of Gopalganj Mission School for joining the movement against British rule.

He founded the Chhatra League in 1948 and was instrumental in the founding of the Awami Muslim League, which later became the Awami League, in 1949. Through his dynamic leadership, Bangabandhu organized the Bangali nation in the struggle against exploitation and repression by

Pakistani rulers between 1947 and 1971. On March 7, 1971, he delivered the historic speech that inspired Bangalis in their movement against subjugation and subordination by West Pakistan, declaiming, "Our struggle is for our freedom. Our struggle is for our independence."

A few weeks later, in the early hours of March 26, he declared Bangladesh's independence before being arrested by the Pakistani occupation army. The movement culminated in the emergence of independent Bangladesh through a nine-month Liberation War in 1971. On returning from imprisonment in Pakistan after liberation, Mujib began rebuilding the war-ravaged state. On August 15, 1975, the great leader, along with most of his family members, was assassinated by a disgruntled group of army men.

Salient features of the birth centenary observance: The whole nation marked the birth centenary of the Father of the Nation through various programs. Additionally, under the supervision of Unesco, the entire world will celebrate the centenary. Through the celebrations by the United Nations, the history of Bangabandhu's long struggle and his great sacrifice for the nation and the people of Bangladesh will be projected before the world. In Bangladesh, the celebrations will begin with fireworks at 8pm at Suhrawardy Udyan today, marking the moment of Bangabandhu's birth.

**Venues of celebration:** Organizers of the centenary celebrations have selected Suhrawardy Udyan for the inauguration of the Mujib Year with fireworks, considering the site to be historic as Bangabandhu had at the place delivered his momentous March 7, 1971 speech leading to the Liberation War and eventual independence, said Birth Centenary Celebration National Implementation Committee chief coordinator Dr Kamal Abdul Naser Chowdhury at a media briefing yesterday. Earlier, the countdown for the celebration's opening began on January 10, coinciding with Bangabandhu's homecoming in 1972.

Although Bangladesh had earlier planned large-scale events to mark Mujib Year, the authorities later scaled down the inauguration fanfare by revising the schedule because of coronavirus.

**Types of programs:** Most of the programmes were made indoors to avoid public gatherings. The original plan to organise the grand inaugural ceremony of the "Mujib Borsho," or Mujib Year at the National Parade Ground in Dhaka has been postponed. The program will be concluded with a pixel-laser show, which will be broadcast live from the south plaza of the National Parliament. The committee has named the whole program "Muktir Mohanayok - The great hero of freedom"

There will be a broadcast of a recorded poem recitation by Prime Minister Sheikh Hasina, written by her sister and daughter of Bangabandhu Sheikh Rehana. The government also cancelled all kinds of programs at schools for celebrating the Mujib year. This year, there will be no Shishu Samabesh (congregation of children) in schools. However, teachers will organise tree plantation programs by avoiding mass gatherings at the school premises.

**Celebration in different levels:** Different socio-cultural and political organisations from the grassroots to national levels, ministries and divisions have drawn up programmes to celebrate the birth centenary inaugural. The Awami League will celebrate the day through floral wreath laying, special prayers at religious institutions, giving food to underprivileged people and making fireworks, said AL general Secretary Obaidul Quader.

**Conclusion:** Mujibur maintained close ties with India. He signed the 25-year Indo-Bangladeshi Treaty of Friendship, Cooperation and Peace, which pledged extensive economic and humanitarian assistance and training from India for Bangladesh's security forces and government personnel.

## Key-Notes of the Essay

### 1. Introduction:

#### ✎ Important points:

Bangabandhu, the undisputed leader of the Bangali nation, was born in 1920 at Tungipara. He was the third among six siblings.

### 2. Celebration of Mujib 100 years:

#### ✎ Important points:

The nation is set to celebrate the day through extensive programs with fanfare and gaiety. Bangladesh missions abroad have also chalked out elaborate programs to celebrate the day.

### 3. Foreign guests:

#### ✎ Important points:

Maldives' President Ibrahim Mohamed Solih is scheduled to join Bangladesh's Independence. Sri Lankan Prime Minister Mahinda Rajapaksa is scheduled to arrive in Dhaka on March 19.

### 4. Media on this celebration:

#### ✎ Important points:

Bangladesh Television air special programs highlighting the significance of the day. The portrait of Bangabandhu was captured by a drone in Bogra on Tuesday, March 9, 2021.

### 5. Arrangement of programs:

#### ✎ Important points:

A 10-day special program was ready to kick off at the National Parade Ground from March 17. All the programs be aired on television channels, online, and social media.

### 6. Bangabandhu's fight for an independent Bangladesh

#### ✎ Important points:

Nicknamed Khoka, Bangabandhu got involved in politics in his adolescence. He founded the Chhatra League in 1948. Pakistani rulers between 1947 and 1971. On March 7, 1971, he delivered the historic speech.

### 7. Venues of celebration:

#### ✎ Important points:

Organizers of the centenary celebrations have selected Suhrawardy Udyan for the inauguration. The authorities later scaled down the inauguration fanfare by revising the schedule.

### 8. Conclusion:

#### ✎ Important points:

Mujibur maintained close ties with India. He signed the 25-year Indo-Bangladeshi Treaty of Friendship, Cooperation and Peace.

## Golden jubilee of Bangladesh Independence

**Introduction:** Independence of Bangladesh was gained through a nine-month guerilla war against the Pakistan Army, and their collaborators including paramilitary Razakars which resulted in the death of about 3 million people, as per Awami league and Indian sources, in the Bangladesh War of Independence and Bangladesh Genocide. The violent crackdown by the Pakistan Army led to Awami League leader Sheikh Mujibur Rahman declaring East Pakistan's independence as the state of Bangladesh on 26 March 1971.

**The preparation for the celebration of Golden jubilee of Bangladesh independence:** The nation celebrates 50 years of its Independence and National Day today coinciding with the grand celebration of the birth centenary of Father of the Nation Bangabandhu Sheikh Mujibur Rahman. The grand celebration of the birth centenary of Bangabandhu and the golden jubilee of Bangladesh's independence, which marked the physical attendance of five heads of states and governments and virtual attendance of other global leaders, started on March 17 at the National Parade Square in the presence of Maldivian President Ibrahim Mohamed Solih. The 10-day grand celebration will end today following the celebration of the Independence and National Day with the attendance of Indian Prime Minister Narendra Modi in person as the guest of honour.

**The presence of respectable personalities in the program:** Sri Lankan Prime Minister Mahinda Rajapaksa, Nepalese President Bidya Devi Bhandari and Bhutanese Prime Minister Dr Lotay Tshering joined the grand celebration in person since March 17.

**Government's elaborative programs:** Marking the day, the government has taken elaborate programs maintaining the health guidelines in view of the global pandemic coronavirus. On the occasion, President M Abdul Hamid and Prime Minister Sheikh Hasina issued separate messages extending heartfelt greetings and warm felicitations to the countrymen living both home and abroad.

**The venues fixed for the grand celebration:** The National Memorial at Savar will be the main venue of the celebration of the day where President Md Abdul Hamid and Prime Minister Sheikh Hasina will place wreaths early in the morning as a mark of profound respect to the memories of the martyrs.

**Celebration of people from walks of life:** People from all walks of life, including families of Bir Shreshthas, war wounded freedom fighters, members of the diplomatic corps, leaders of different political parties, social, cultural and professional bodies, will also lay wreaths at the national memorial in the morning of the day.

**Schedule of the programs held:** The day's programs will begin by heralding a 50-gun salute early in the morning as a mark of profound respect to the heroic struggle of this nation, which suffered a protracted subjugation under foreign rules from time to time till achieving their coveted Independence in 1971. The national flag will be hoisted atop all government, semi-government, autonomous and private buildings with the rises of sun while all streets and important city intersections will be decorated with national and multi-coloured miniature flags and festoons.

Important buildings and establishments as well as city streets and islands will be illuminated with colorful lights.

**Media's activities on the celebration:** National dailies will bring out special supplements while Bangladesh Betar, Bangladesh Television, private radio stations and television channels will air month-long special programs on Liberation War and highlighting the significance of the day.



**National cultural institution's activities on this celebration:** Bangladesh Shilpakala Academy, Bangla Academy, National Museum, Liberation War Museum, Bangladesh Shishu Academy, and other social and cultural organisations will arrange discussions, cultural programmes and sports competition while painting competition for children, essay and debate competitions will be organized virtually. Liberation War based documentaries and movies will be screened at cinema halls across the country maintaining the health guidelines, including wearing face masks.

**Local programs based on this day:** Reception will be accorded to freedom fighters and the members of martyred freedom fighters at city, zilla and upazila levels, while Bangladesh Postal Office will publish commemorating postal stamps. Special prayers will be offered in all mosques, temples, churches and other places of worship across the country seeking divine blessings for the eternal peace of the departed souls of Father of the Nation, four national leaders, martyrs of the War of Liberation and all other patriotic sons of the soil. Improved meals will be served to the inmates of hospitals, jails, old homes and orphanage centres to mark the day. The country's all children's parks and museums will remain open for all.

All children parks and museums will remain open for all in terms of maintaining health guidelines while naval ships of Bangladesh Navy and Coast Guard will be exhibited at Chittagong, Khulna, Mongla and Payra ports and the jetties of Bangladesh Inland Water Transport Authority (BIWTA) in the city's Sadarghat, Pagla in Narayanganj, Barisal and Chandpur from 2pm until the sun sets.

The missions abroad will also celebrate the day through similar programs.

**Different political Parties celebration of this memorable day:** Different political parties including ruling Awami League as well as socio-cultural and professional organisations have also taken various programs to observe the day in a befitting manner. Every year, the March 26 brings the most tragic reminiscence of the history's blackest episode that heralded a nine-month bloody ordeal from the night of March 25, 1971, achieving the long-cherished independence on December 16 the same year at the cost of a sea of blood.

**The man behind this grand celebration:** In the wake of the military crackdown, Father of the Nation Bangabandhu Sheikh Mujibur Rahman, who became the undisputed leader of the then Pakistan following the massive victory of his party, Awami League, in the 1970 general elections, declared the independence of Bangladesh through the then EPR (East Pakistan Rifles) wireless at 00-30 hours on March 26 (the night following March 25) in 1971 at his historic Road-32 residence at Dhanmondi. The great leader also called upon the people to build up strong resistance against the Pakistani barbaric occupation forces. The Pakistani military junta, in a bid to stop the legitimate movement of the Bangalees, arrested Bangabandhu on that night following his declaration of independence. Later, Bangabandhu was taken to the then West Pakistan where he had to spend nine months in a dark condemned cell. Bangabandhu wrote down the declaration of independence soon after the Pakistani army cracked down on the fateful night of March 25, 1971.

**Experts attribute Bangladesh's growth story to a range of factors:** one of the world's most competitive garment industries, the education and empowerment of women, a vibrant network of nongovernmental organizations, and high levels of remittances. As C. Raja Mohan notes in Foreign Policy, the country is poised to become a bigger player in regional and global geopolitics—thanks in no small part to this growth.

But Bangladesh's economic success has been accompanied by a descent into authoritarianism. The ruling Awami League (AL) party, led by Prime Minister Sheikh Hasina—the daughter of independence hero Rahman—has consolidated its rule through harsh crackdowns on the opposition and the muffling of dissent. While the AL enjoys genuine support, many analysts argue the party won elections in 2018 and 2014 that were neither free nor fair. Bangladesh's Freedom House democracy score declined by 35 percent between 2013 and 2020.

Other Asian countries, such as China and Singapore, have enjoyed economic growth without democracy, but Bangladesh's democratic backsliding risks imperiling its economic success, as FP's Sumit Ganguly wrote last November. The AL's consolidation of power could contribute to corruption and cronyism, and Dhaka's severe curbs on internet freedoms could constrain the country's digital economy and scare off foreign investment.

**Conclusion:** Despite its impressive track record, Bangladesh's economy still faces major challenges, including persistent income inequality and poor transportation infrastructure. If its democracy continues to suffer, Bangladesh's confident march to middle-income status could experience more setbacks—with a future not as bright as the proud nation's extended 50th birthday celebrations suggest.

## Key-Notes of the Essay

### 1. Introduction:

#### ✎ Important points:

Independence of Bangladesh was gained through a nine-month guerilla war against Awami League leader Sheikh Mujibur Rahman declared East Pakistan's independence in 1971.

### 2. The preparation for the celebration of Golden jubilee of Bangladesh independence:

#### ✎ Important points:

The nation celebrates 50 years of its Independence.  
The grand celebration marked the physical attendance of five heads of states and governments.

### 3. Celebration of people from walks of life:

#### ✎ Important points:

People from all walks of life will also lay wreaths at the national memorial in the morning.

### 4. National cultural institution's activities on this celebration

#### ✎ Important points:

Bangladesh Shilpakala Academy, Bangla Academy will arrange discussions, cultural programs.  
Liberation War based documentaries and movies will be screened at cinema halls.

### 5. Experts attribute Bangladesh's growth story to a range of factors:

#### ✎ Important points:

Bangladesh's economic success has been accompanied by a descent into authoritarianism.  
Bangladesh's Freedom House democracy score declined by 35 percent between 2013 and 2020.

### 6. Conclusion:

#### ✎ Important points:

Despite its impressive track record, Bangladesh's economy still faces major challenges.  
If its democracy continues to suffer, Bangladesh could experience more setbacks.

## Sustainable Development Goals (SDGs) and Bangladesh

**Introduction:** The Sustainable Development Goals (SDGs) were adopted by the United Nations (UN) at the end of 2015 immediately after achievement of the MDGs. The SDG Agenda was adopted after extensive consultations with governments, civil societies, business and development partners to agree on a new and inspirational agenda for global development. The SDGs link people, the planet, and prosperity, and provide a framework for all countries, developed and developing alike, to pursue better paths to development.

**Difference between MDGs to SDGs:** Apart from the simple fact that SDGs contain many goals covering a broader set of issues than MDGs and making the plan more challenging, there are several significant differences between the two. SDGs are meant for all countries -- not just for developing countries;

A look at some of the goals and targets of SDGs -- especially those relating to growth, employment, education, health, indicates an emphasis on qualitative aspects of development;

As for fighting poverty, in addition to the income dimension, non-income dimensions are also emphasized: In a few instances, concerning economic growth and industrialization, quantitative targets are specified for least-developed countries (LDCs).

**MDGs:** The MDGs represented a relatively narrow agenda focused on following eight goals intended to rally official development assistance and domestic policy-

1. To eradicate extreme poverty and hunger
2. To achieve universal primary education
3. To promote gender equality and empower women
4. To reduce child mortality
5. To improve maternal health
6. To combat HIV/AIDS, malaria, and other diseases
7. To ensure environmental sustainability
8. To develop a global partnership for development

**SDGs:** The SDGs seek to achieve what the MDGs did not achieve. On September 25, 2015, the UN General Assembly adopted the 2030 Agenda for Sustainable Development to redirect humanity towards a sustainable path that was developed following the United Nations Conference on Sustainable Development in Rio de Janeiro, Brazil in June 2012. 17 SDGs at the core of the 2030 Agenda are:

1. No Poverty - End poverty in all its forms everywhere
2. Zero Hunger - End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3. Good Health and Well-Being - Ensure healthy lives and promote well-being for all at all ages
4. Quality Education - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5. Gender Equality - Achieve gender equality and empower all women and girls
6. Clean Water and Sanitation - Ensure availability and sustainable management of water and sanitation for all
7. Affordable and Clean Energy - Ensure access to affordable, reliable, sustainable and clean energy for all
8. Decent Work and Economic Growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9. Industry, Innovation and Infrastructure - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10. Reduced Inequalities - Reduce inequality within and among countries
11. Sustainable Cities and Communities - Make cities and human settlements inclusive, safe, resilient and sustainable
12. Responsible Consumption and Production - Ensure sustainable consumption and production patterns
13. Climate Action - Take urgent action to combat climate change and its impacts

14. Life below Water - Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15. Life on Land - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16. Peace, Justice and Strong Institutions - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Partnerships for the Goals - Strengthen the means of implementation and revitalize the global partnership for sustainable development

**The objectives of SDG:** The aim of the 17 SDGs is to secure a sustainable, peaceful, prosperous and equitable life on earth for everyone now and in the future. The goals cover global challenges that are crucial for the survival of humanity. They set environmental limits and set critical thresholds for the use of natural resources. The goals recognize that ending poverty must go hand-in-hand with strategies that build economic development. They address a range of social needs including education, health, social protection and job opportunities while tackling climate change and environmental protection. The SDGs address key systemic barriers to sustainable development such as inequality, unsustainable consumption patterns, weak institutional capacity and environmental degradation.

**Feature of SDG:** A key feature of the 2030 Agenda for Sustainable Development is its universality and indivisibility. It addresses all countries - from the Global South and the Global North - as target countries. All countries subscribing to the 2030 Agenda are to align their own development efforts with the aim of promoting prosperity while protecting the planet in order to achieve sustainable development.

**Time to attain SDG:** The periods for attaining these goals have been set from 2015 to 2030. SDGs are basically formulated by interrelation with social, economic and environment which can be described by three Ps-people, planet and profit. It can be undoubtedly mentioned that people are the key element for achieving SDGs. For achieving SDGs, there is no alternative system but a democratic government which is proven by the iconic quote of Abraham Lincoln, as a system of government 'of the people, by the people, and for the people'. To supplement government efforts, involvement of private sectors has also been emphasized in achieving SDGs.

**Bangladesh on SDG:** Bangladesh has integrated global goals and targets into its national five year plan with an effective drive in SDG implementation by involving all the ministries of the government, private sector, civil society organizations, non-governmental organizations (NGOs), development partners and other stakeholders, called as the "whole of society approach". Meanwhile, for monitoring sustainable development targets, Bangladesh has created online tool namely "SDG Tracker" for its own initiative as the first country. Through this tool, the Prime Minister is directly supervising all actions pertaining to the implementation of SDGs. Apart from ensuring transparency and accountability in the implementation of development activities, field-level development progress is being monitored by this tool. Among the 17 targets, Bangladesh already is in a very good position in 8. These are: Poverty, hunger and nutrition, education, gender equality, water and sanitation, energy, climate change, and global partnership. As for the goals where the country lags behind and needs to work hard are: health, inequality, urban and human settlement, sustainable consumption and production, use of sea and marine resources, ecology and biodiversity, good governance, infrastructure, growth and employment for all, and industrialization and innovation. However, within the next five years the country will go ahead with infrastructure, growth for all and employment and industrialization and innovation. The government is implementing several mega projects in the infrastructure arena.

**Challenges to attain SDG:** The challenges to attain SDG's goals are given below:

1. Integration in the national planning process
2. Financial and non-financial resources
3. Institutional mechanism for implementation
4. Data for Monitoring
5. Participation and accountability

**Solution to attain SDG:** Attainment of the SDGs would require a strong and effective institutional mechanism involving all stakeholders including public representatives across the country, government and the bureaucracy, private sector, civil society, knowledge community, and development partners.

**Local government role on SDG:** Acknowledging the vital role of local government in the achievement of the SDGs will enable us to mobilize local stakeholders and to create new partnerships, based on a common understanding of our shared humanity.

**Conclusion:** In achieving SDGs, financing in developing countries is a big challenge. There are also a lot of challenges in the development process which needs assistance from the development partners. The "SDG Financing Strategy: Bangladesh Perspective" provides a well-defined work plan that highlights the actions necessary to attain significant progress in the SDGs. For SDGs 1-4, 14, 16 and 17, public sector has a major responsibility. On the other hand, for SDG-5, 7, 8, 9, 12 Public-Private Partnership can play an effective role. Furthermore, external sources can play important role in achieving the remaining goals.

## Key-Notes of the Essay

### 1. Introduction:

#### ✎ Important points:

The Sustainable Development Goals (SDGs) were adopted by the United Nations (UN). The SDG Agenda was adopted after extensive consultations with governments & business.

### 2. Difference between MDGs to SDGs:

#### ✎ Important points:

Apart from the simple fact that SDGs contain many goals covering a broader set of issues. There are several significant differences between the two.

### 3. The objectives of SDG:

#### ✎ Important points:

The aim of the 17 SDGs is to secure a sustainable, peaceful, prosperous and equitable life. The goals cover global challenges that are crucial for the survival of humanity.

### 4. Time to attain SDG:

#### ✎ Important points:

The periods for attaining these goals have been set from 2015 to 2030. It can be undoubtedly mentioned that people are the key element for achieving SDGs.

### 5. Bangladesh on SDG:

#### ✎ Important points:

Bangladesh has integrated global goals its national five year plan with an effective drive in SDG. Among the 17 targets, Bangladesh already is in a very good position in 8.

### 6. Challenges to attain SDG:

#### ✎ Important points:

The challenges to attain SDG's goals are given below:  
Integration in the national planning process  
Financial and non-financial resources

### 7. Local government role on SDG:

#### ✎ Important points:

Acknowledging the vital role of the SDGs will enable us to mobilize local stakeholders. It will create a new partnerships, based on a common understanding of our shared humanity.

### 8. Conclusion:

#### ✎ Important points:

In achieving SDGs, financing in developing countries is a big challenge. External sources can play important role in achieving the remaining goals.



# Bangabandhu Satellite-1

**Introduction:** Today almost all the modern and enlightened nations have their own satellite in the orbit. A sovereign country, in a pursuit of sustainable development, needs its own satellite in order to reduce its dependency on other nations. BTRC started working with the vision to open new dimension of possibility in the telecommunication sector of Bangladesh by launching its first ever satellite. Preliminary implementation activities are in progress with the consultation of USA based consultancy firm Space Partnership International (SPI) and specialist advice of International Telecommunication Union (ITU). A country like Bangladesh is highly exposed to natural disaster risk because of its unique geographical location. Telecommunication system in Bangladesh has always been suffering from interruptions and problems as erratic disasters hit the country. During such emergency situation, Satellite network can play an important role in ensuring uninterrupted telecommunication services in Bangladesh.

**Overview of Bangabandhu-1 Satellite:** Bangladesh has entered a new era as a proud member of the satellite club as the flag of Bangladesh has also been hoisted in the space through launching of the Bangabandhu-1 Satellite. The launch made Bangladesh the 57th nation in the world and fourth in South Asia after India, Pakistan and Sri Lanka to own a satellite. On 14 June 1975 Bangabandhu Sheikh Mujibur Rahman initiated the country's first space mission by inaugurating the country's first land satellite station at Bethuniya. Finally, on November 11, 2015, Bangladesh signed the agreement with France's Thales Alenia Space for the construction of the first land-based artificial satellite "Bangabandhu-1". Later on, May 12, 2018, after the successful launch of the Satellite at 2:14 am Bangladesh gets its place in the Elite Society of the satellite-owned countries.

**What Is a Satellite & Why satellites are important:** A satellite is a moon, planet or machine that orbits a planet or star. For example, Earth is a satellite because it orbits the sun. Usually, the word "satellite" refers to a machine that is launched into space and moves around Earth or another body in space. Earth and the moon are examples of natural satellites.

The bird's-eye view that satellites have allows them to see large areas of Earth at one time. This ability means satellites can collect more data, more quickly, than instruments on the ground. With satellites, TV signals and phone calls are sent upward to a satellite.

**Baseline Characteristics of the country's first Satellite:** Bangladesh has planned to launch a Communication & Broadcasting Satellite consisting 24 Ku and 16 C-band transponders. The priority satellite applications are Direct to Home (DTH), VSAT, Backhaul and Trunking, Network Restoration, Disaster Preparedness and relief etc. The Primary Service Area (PSA) would be Bangladesh and neighboring countries and the Secondary Service Area (SSA) would be South East Asia, Europe, MENA, and East Africa depending on orbital slot. The system concept of the proposed satellite comprises with satellite payload requirements, orbital slot/frequencies, coverage area(s), ground segment, user terminal design characteristics, satellite operations and environmental factors.

**Current Project Activities:** The preparatory project has made significant progress since its inception in the area of feasibility study, frequency coordination for achieving an orbital slot, arranging source of fund, RF survey for finalizing two locations for satellite ground stations and preparation of DPP for the next project named "Bangabandhu Satellite Launching Project" etc. The project team has taken training on Satellite systems in Washington D.C., USA and is working relentlessly to fulfill the major objective of the project of having country's first satellite in orbit. In addition to regular activities, the project office communicates with ITU and maintaining liaison as and when required. Now, Bangladesh is looking forward to a successful launch of the country's first satellite which will ensure improved and uninterrupted connectivity with the rest of the world.



**Bangabandhu satellite 1 design and development:** Based on the Spacebus 4000B2 platform developed by Thales Alenia Space, the Bangabandhu satellite has a launch mass of 3,500kg. It includes two deployable solar arrays with batteries and has a design lifespan of 15 years. Thales Alenia Space was selected as the prime contractor to provide turnkey systems, including design, production, and testing services for the BD-1 satellites, in November 2015. The contractual scope also includes the development of the ground segment. BD-1 satellite's communications module integration work was carried out at Thales Alenia Space's plant located in Toulouse, France. The critical design review (CDR) of BD-1 satellite was completed in January 2017.

**Bangabandhu satellite communication capabilities:** The Bangabandhu satellite is fitted with 26 Ku-Band and 14 C-Band transponders. The major applications of the spacecraft include DTH, very small aperture terminal (VSAT) communications, backhaul and trunking, network restoration, and disaster preparedness and relief. The primary service area (PSA) of the satellite is Bangladesh and neighbouring countries, while secondary service areas (SSA) include South East Asia, Europe, Middle East and North Africa (MENA), as well as East Africa.

**The Launch and operation of Bangabandhu Satellite-1:** Bangabandhu Satellite-1 was launched at 20:14 UTC on 12 May 2018, on a SpaceX Falcon 9 launch vehicle at the Kennedy Space Center, USA. It was the first payload to be launched using the new SpaceX Block 5 model of the rocket. The satellite was originally planned to launch 10 May 2018. However the rocket carrying the payload triggered an automatic abort as it entered internal power and control at T-58 seconds. The rocket launch was pushed back 24 hours, and it was finally launched on 11 May 2018. The satellite uses ground control stations built by Thales Alenia Space with its partner Spectra primary ground station in Gazipur Secondary ground station is at Bethunia, Rangamati. The first test signal after launch was received by the operators on 12 May 2018.

**Financing for Bangabandhu satellite 1:** The development of the BD-1 satellite was completed at a cost of \$248m. The Bangladeshi Executive Committee of the National Economic Council (ECNEC) approved \$37.58m in funding for the development of the country's first satellite in September 2014. Hong Kong and Shanghai Banking Corporation (HSBC) provided \$17.46m for the construction of the BD-1 and its ground equipment.

**What purpose will it serve:** The priority operation of BS-1 would be: Direct to Home (DTH) service for TV channels, VSAT, backhaul and trunking, network restoration, disaster preparedness and relief. As of now, Bangladesh rents all of these services from satellite service providers in the region.

**Coverage Areas of 'Bangabandhu-1' Satellite:** The satellite's coverage zone encompasses Bangladesh and the surrounding region offering the capacity in Ku-band over Bangladesh and its territorial waters of the Bay of Bengal, India, Nepal, Bhutan, Sri Lanka, Philippines, and Indonesia; it also provides capacity in C-Band over the whole region. In the event of unexpected disasters hitting the country, telecommunication system in Bangladesh might be unavailable. During such emergency situations, satellite network can play an important role in ensuring uninterrupted telecommunication services in the country.

**Conclusion:** This essay has presented an overview of communication satellite where the Bangabandhu-1 satellite has been taken as an example. A simple explanation of satellite communication has been given with the help of a block diagram. It appears that BS-1 will enable a dramatic development in the current telecommunication and internet connectivity of the country as well as weather forecasting. BS-1 has added a new pace to the country's IT and economy for establishing digital Bangladesh.

## Key-Notes of the Essay

### 1. Introduction:

#### ✎ Important points:

A sovereign country needs its own satellite in order to reduce its dependency on other nations. Satellite network can play an important role in ensuring uninterrupted telecommunication services.

### 2. Overview of Bangabandhu-1 Satellite:

#### ✎ Important points:

Bangladesh has entered a new era as a proud member of the satellite club. Bangladesh gets its place in the Elite Society of the satellite-owned countries in 2018.

### 3. What Is a Satellite & Why satellites are important:

#### ✎ Important points:

A satellite is a moon, planet or machine that orbits a planet or star. With satellites, TV signals and phone calls are sent upward to a satellite.

### 4. Baseline Characteristics of the country's first Satellite:

#### ✎ Important points:

Bangladesh has planned to launch a Communication & Broadcasting Satellite. The proposed satellite comprises with satellite technological and environmental factors.

### 5. Current Project Activities:

#### ✎ Important points:

The preparatory project has made significant progress since its inception. Bangladesh is looking forward to a successful launch of the country's first satellite.

### 6. Bangabandhu satellite 1 design and development:

#### ✎ Important points:

It includes two deployable solar arrays with batteries and has a design lifespan of 15 years. Thales Alenia Space was selected as the prime contractor to provide turnkey systems.

### 7. Bangabandhu satellite communication capabilities:

#### ✎ Important points:

The Bangabandhu satellite is fitted with 26 Ku-Band and 14 C-Band transponders. The primary service area (PSA) of the satellite is Bangladesh and neighbouring countries.

### 8. The Launch and operation of Bangabandhu Satellite-1:

#### ✎ Important points:

It was the first payload to be launched using the new SpaceX Block 5 model of the rocket. The rocket launch was pushed back 24 hours, and it was finally launched on 11 May 2018.

### 9. Financing for Bangabandhu satellite 1:

#### ✎ Important points:

The development of the BD-1 satellite was completed at a cost of \$248m. The (ECNEC) approved \$37.58m in funding for the development of the country's first satellite.

### 10. What purpose it will serve.

#### ✎ Important points:

The priority operation of BS-1 would be: Direct to Home (DTH) service for TV channels. Bangladesh rents all of these services from satellite service providers in the region.

### 11. Coverage Areas of 'Bangabandhu-1' Satellite:

#### ✎ Important points:

It provides capacity in C-Band over the whole region. Satellite network can play an important role in ensuring uninterrupted telecommunication services.

### 12. Conclusion:

#### ✎ Important points:

A simple explanation of satellite communication has been given with the help of a block diagram. BS-1 has added a new pace to the country's IT and economy for establishing digital Bangladesh.

## One Belt One Road (OBOR)

**Introduction:** The Belt and Road Initiative, known in Chinese and formerly in English as One Belt One Road or OBOR for short, is a global infrastructure development strategy adopted by the Chinese government in 2013 to invest in nearly 70 countries and international organizations. It is considered a centerpiece of Chinese Communist Party general secretary and paramount leader Xi Jinping's foreign policy, who originally announced the strategy as the "Silk Road Economic Belt" during an official visit to Kazakhstan in September 2013.

**Overview and Benefits of the One Belt One Road:** One Belt One Road (OBOR), the brainchild of Chinese President Xi Jinping, is an ambitious economic development and commercial project that focuses on improving connectivity and cooperation among multiple countries spread across the continents of Asia, Africa, and Europe. It has been dubbed as the “Project of the Century” by the Chinese authorities, OBOR spans about 78 countries. OBOR is a project that focuses on improving connectivity and cooperation among multiple countries in Asia, Africa, and Europe. OBOR's scope has expanded over the years to include new territories and development initiatives. Kyrgyzstan and Tajikistan support OBOR thanks to the massive investments by China in local transmission projects in these nations.

**How One Belt One Road Works:** Initially announced in the year 2013 with the purpose of restoring the ancient Silk Route that connected Asia and Europe, the project's scope has been expanded over the years to include new territories and development initiatives. Also called the Belt and Road Initiative, the project involves building a big network of roadways, railways, maritime ports, power grids, oil and gas pipelines, and associated infrastructure projects. The project covers two parts. The first is called the “Silk Road Economic Belt,” which is primarily land-based and is expected to connect China with Central Asia, Eastern Europe, and Western Europe. The second is called the “21st Century Maritime Silk Road,” which is sea-based and is expected to will China's southern coast to the Mediterranean, Africa, South-East Asia, and Central Asia. The names are confusing as the ‘Belt’ is actually a network of roads, and the ‘Road’ is a sea route.

### Six economic corridors:

1. The New Eurasian Land Bridge, which connects Western China to Western Russia
2. The China-Mongolia-Russia Corridor, which connects North China to Eastern Russia via Mongolia
3. The China-Central Asia-West Asia Corridor, which connects Western China to Turkey via Central and West Asia
4. The China-Indochina Peninsula Corridor, which connects Southern China to Singapore via Indo-China
5. The China-Pakistan Corridor, which connects South Western China through Pakistan to Arabia sea routes
6. The Bangladesh-China-India-Myanmar Corridor, which connects Southern China to India via Bangladesh and Myanmar

Additionally, the maritime Silk Road connects coastal China to the Mediterranean via Singapore-Malaysia, the Indian Ocean, the Arabian Sea, and the Strait of Hormuz.

### The Financing of one belt one road:

**Asian Infrastructure Investment Bank (AIIB):** The Asian Infrastructure Investment Bank, first proposed in October 2013, is a development bank dedicated to lending for infrastructure projects. As of 2015, China announced that over one trillion yuan (US\$160 billion) of infrastructure related projects were in planning or construction. The primary goals of AIIB are to address the expanding infrastructure needs across Asia,

enhance regional integration, promote economic development and improve public access to social services. In November 2014, Xi Jinping announced a US\$40 billion development fund, which would be separate from the banks and not part of the CPEC investment. The Silk Road Fund would invest in businesses rather than lend money to the projects. The Karot Hydropower Project, 50 km (31 mi) from Islamabad, Pakistan is the first project. The Chinese government has promised to provide Pakistan with at least US\$350 million by 2030 to finance this station. The Sanxia Construction Corporation commenced work in January 2016.

**Special Considerations: OBOR's Importance to China:** OBOR is of prime significance to China as it aims to boost its domestic growth and is also a part of the country's strategy for economic diplomacy. By connecting the less-developed border regions like Xinjiang with neighboring nations, China expects to bump up economic activity. OBOR is expected to open up and create new markets for Chinese goods. It would also enable the manufacturing powerhouse to gain control of cost-effective routes to export materials easily. Any excess capacity in terms of production can be channelized effectively to regions along OBOR routes. China has announced investments of over \$1 trillion in the various infrastructure projects and is funding them by offering low-cost loans to the participating countries.

Many participating countries, like Kyrgyzstan and Tajikistan, support the OBOR due to massive investments by China in local transmission projects in these nations. Landlocked Nepal has recently joined OBOR by signing a deal that will help it improve cross-border connectivity with China, and Pakistan is set to benefit from the \$46 billion China Pakistan Economic Corridor (CPEC) that will connect southwestern China to and through Pakistan, allowing access to Arabian Sea routes. While China continues to pitch OBOR as an all-inclusive project for regional development, other nations perceive it as a strategic move by the Asian powerhouse to attain significance and control at a regional level and to play a larger role at the global level by building and controlling a China-focused trading network. China sees this venture as an opportunity to emerge as a regional leader. In the future, we may see a boost in the Chinese yuan, with increased usage in the OBOR region.

**Transportation through the one belt one road:** One Belt One Road has assisted many countries in developing infrastructure from transportation to electrical energy. For example, China has invested \$14 billion in Eastern Africa Kenya's Standard Gauge Railway (SGR). SGR is 485km single-track railroad, and acts as one of the most significant projects since Kenya became independent in 1963. SGR stretches from Mombasa to the Kenyan capital, Nairobi, and in December 2015, Kenya loaned \$1.5 billion from China to extend the SGR further to Naivasha in the north-west. The SGR also facilitates local industries and trade between Africa and China.

**Economic benefits of one belt one road:** One Belt One Road promotes trade between each country and generates mutual economic benefits. For example, Kazakhstan is a landlocked country in Central Asia, and as its winters are very cold, there is barely any vegetable production.

One Belt One Road connects Kazakhstan and the northwestern Chinese Xinjiang Uygur Autonomous Region. The cross-border trade of vegetables provides Kazakhstan's people with their basic needs.

**Conclusion:** The One Belt One Road Initiative can be argued to be China's economic masterpiece that came into play after the global economic crises. It was an initiative that opened up China for trade with other states of the world, increasing trade and relations. The OBOR initiative reflects a multifaceted interplay of realism, liberalism, constructivism, and altruism between China and the rest of the world. It is expected that the rise of China and the principal powers of the existing world order will have to go through a considerable period of struggle, adjustment, and tension. So, it is imperative for Bangladesh to prepare from now to reap full benefit of this initiative.

## Key-Notes of the Essay

### 1. Introduction:

#### ✎ Important points:

The Belt and Road Initiative is adopted by the Chinese government in 2013. It is considered a centerpiece of Chinese Communist Party general secretary.

### 2. Overview and benefits of the One Belt One Road:

#### ✎ Important points:

It has been dubbed as the “Project of the Century” by the Chinese authorities.

OBOR's scope has expanded over the years to include new territories and development initiatives.

### 3. How One Belt One Road Works:

#### ✎ Important points:

The ancient Silk Route project's scope has been expanded over the years.

The names are confusing as the ‘Belt’ is actually a network of roads, and the ‘Road’ is a sea route.

### 4. Six economic corridors:

#### ✎ Important points:

The New Eurasian Land Bridge, which connects Western China to Western Russia

This Corridor, which connects South Western China through Pakistan to Arabia sea routes.

This Corridor connects Southern China to India via Bangladesh and Myanmar.

### 5. The Financing of one belt one road:

#### ✎ Important points:

Asian Infrastructure Investment Bank (AIIB):

The Asian Infrastructure Investment Bank dedicated to lending for infrastructure projects.

The primary goals of AIIB are to address the expanding infrastructure needs across Asia.

The Silk Road Fund would invest in businesses rather than lend money to the projects.

### 6. Special Considerations: OBOR's Importance to China:

#### ✎ Important points:

It aims to boost the country's strategy for economic diplomacy.

It would also enable the manufacturing powerhouse to gain control of cost-effective routes.

It improve cross-border connectivity with China, and Pakistan.

### 7. Transportation through the one belt one road:

#### ✎ Important points:

It has assisted many countries in developing infrastructure from transportation to electrical energy.

The SGR also facilitates local industries and trade between Africa and China.

### 8. Economic benefits of one belt one road:

#### ✎ Important points:

One Belt One Road promotes trade between each country and generates mutual economic benefits.

The cross-border trade of vegetables provides Kazakhstan's people with their basic needs.

### 9. Conclusion:

#### ✎ Important points:

It was an initiative that opened up China for trade with other states of the world.

It is imperative for Bangladesh to prepare from now to reap full benefit of this initiative.



## DELTA PLAN 2100

**Introduction:** A delta is a geo morphological area, largely defined by its low lying surface form and location in landscape and coastal area that forms at the mouth of a river. Deltas form from deposition of sediment carried by a river as the flow leaves its mouth. Over long periods, this deposition builds a dynamic and characteristic geographic, ecological and social pattern of the delta and its features. The most expansive definition of the Delta is the Bangladesh Delta that includes all districts that face various natural hazards owing to the deltaic formation of Bangladesh and the related interface with the vast river networks, the Bay of Bengal and climate change. For Bangladesh, Delta Plan is a visionary project by which Bangladesh will get her desired results from unwanted climatic disorders.

**Perspective of delta plan:** The government would spend \$37 billion by 2031 for ensuring food and water security and fighting disasters, according to a draft of the Delta Plan 2100. The government of Bangladesh, in cooperation with the government of the Netherlands, aims to create the Bangladesh Delta Plan 2100. The Delta Plan will integrate planning from delta-related sectors and from all across the country to come to a long-term, holistic and integrated plan for the Bangladesh Delta. The Delta Plan will be grounded in a long-term vision of the Delta's future. This long-term vision, combined with the use of scenarios, allows planning to be adaptive and dynamic by constantly taking into account uncertainties in future developments in climate change, socio-economic development, population growth and regional cooperation. The Delta Plan aims to provide the foundation for permanent delta governance in Bangladesh through the outlining of a Delta Framework.

**Bangladesh on Delta plan:** Bangladesh is the largest delta of the world. Its rivers and floodplains make up 80% of the country and support life, livelihoods and the economy. Bangladesh is a rapidly developing country, envisaging to become a middle-income country in 2021. The country faces major inter-related delta challenges in water safety, food security and socio-economic development and is prone to natural calamities such as floods, cyclones, and droughts. There is already high pressure on the available land and water resources in the delta.

**The formulation of Delta plan 2100:** The formulation of the plan is led by the General Economics Division of the Ministry of Planning, and is supported by the Government of the Kingdom of the Netherlands. Technical assistance is provided through the Dutch-Bangladeshi consortium and by Bangladeshi research organization Policy Research Institute, bringing together cross-sectoral expertise from the Netherlands and Bangladesh. Having started in 2014, the formulation of the Bangladesh Delta Plan 2100 was expected to be completed in 2016.

### Key Points of the Bangladesh Delta Plan:

- The Bangladesh Delta Plan integrates all delta-related sector plans and policies, enveloping a Delta Vision and strategies that make it possible to integrate sector plans and policies for the long term and to present actionable interventions with a roadmap for realization. It will change the individual sector approach of project planning and implementation into a multi-lateral coordinated approach and related program management.
- It enables the government to integrate climate change adaptation in a more strategic, knowledge-based and consistent way, making efficient use of limited natural and economic resources in Bangladesh. Lessons learnt in other countries like the Netherlands will be explored and reflected upon.
- The Delta Plan enhances good governance through its focus on institutional strengthening, policy or institutional reform, coordination and cooperation, on capacity building and transparency and integrity.



- The Delta Plan enables coordination of the funding process among the different government bodies and private stakeholders, thus using limited funds and investments more effectively.
- The Delta Plan creates an opportunity to harmonize regional and local development plans for agriculture, water management, environmental affairs, ecosystem management, urbanization, tourism, etc. with the national plans.
- The Delta Plan provides a means for strengthening international cooperation, both with development partners and neighboring countries e.g. on trans-boundary river issues.
- The Delta Plan creates an opportunity to harmonize regional and local development plans for agriculture, water management, environmental affairs, ecosystem management, urbanization, tourism, etc. with the national plans.

**Time span to achieve Delta plan:** The plan took four years to formulate with the help of local, national and international experts and involved a huge number of stakeholders from all walks of life. In each and every stage of its formulation till its final approval, it went through the scrutiny of technical experts and also the policy makers in the government. We are looking forward to the active participation, contribution and support from the government, private and civil society, and media equally in this respect.

#### **Benefits of the Bangladesh Delta Plan:**

1. Enabling the Bangladesh government to integrate climate change adaptation, in order to optimize the efficient use of limited resources.
2. A plan for a future delta that ensures water safety, food security and economic growth.
3. Making Bangladesh's short-, medium- and long-term planning robust for a future uncertain with climate change and rapid up-river and socio-economic developments.

**Challenges to achieve Delta plan 2100:** Challenges mainly lie with its successful implementation. There are few challenges which should be addressed in a systematic and articulated manner. The challenges are namely, financing of its investment plan; capacity building of the implementers who will take the plan in the field; coordination among/between/within agencies and ministry/divisions; aligning planning, implementation and financing activities of Delta ministries/divisions with BDP 2100; aligning delta implementation works with Annual Development Programme (ADP); designing the appropriate mode of financing for PPP related projects under investment plan; climate financing under BDP 2100; practising appropriate feasibility studies before taking up delta investment works; rationalization and effective functioning of water management infrastructures keeping climate change and ADM principle in view; funding and effective O&M suggested under BDP 2100; and designing new projects taking climate change impacts into consideration.

**Solution to achieve Delta plan 2100:** Successful implementation of BDP 2100 is earmarked as the major concern in the coming days. Successful implementation mainly lies with the appropriate skills and technical capacity of the relevant organizations. To address this challenge, GED is currently working on a project to support the implementation of BDP 2100. The project aims to support capacity building, institutional strengthening, facilitating implementation, supporting investment planning and financing, validating investment plan, reviewing and updating of BDP 2100, if deem necessary with continuously evolving new knowledge and tools.

**Coordination and cooperation:** Coordination and cooperation among implementing agencies as well as cooperation with upper riparian countries are considered crucial for the successful implementation of BDP 2100. The cooperation is vital in the following areas namely-- strong regional cooperation for Trans-boundary water management issues; basin wide water management and sharing approach for the Ganges, Brahmaputra and the Meghna basin; continuing efforts for signing treaty for sharing water of the Teesta and all other trans-boundary rivers; pursuing construction of the Padma Barrage in suitable location following basin wide Approach through mutual cooperation for retention of water in the dry season; international cooperation on water uses and development in the next 12 years; realising the potentials of blue economy; supporting the Delta Coalition formed by 13 countries for mutual benefits and exchanging/accessing water technologies for improved production and consumption for both home and industrial use; sensitising development partners for mobilising support to the implementation of BDP 2100 Investment Plan.

**Holistic plan for Bangladesh Delta:** The government of Bangladesh, in cooperation with the government of the Netherlands, aims to create the Bangladesh Delta Plan 2100. The Delta Plan integrates planning from delta-related sectors and from all across the country to come to a holistic plan for the Bangladesh Delta. The Delta Plan will be grounded in a long-term vision of the Delta's future. This long-term vision, combined with the use of scenarios, allows planning to be adaptive and dynamic by constantly taking into account uncertainties in future developments in e.g. climate change, socio-economic development, population growth and regional cooperation. The Delta Plan is more than just a one-time planning exercise and aims to provide the foundation for permanent delta governance in Bangladesh through the outlining of a delta framework.

**Conclusion:** It is a guideline to harness the huge potentials of Bangladesh as a Delta country through extensive water resources management, ensuring food and water security and tackling natural disasters. Implementation of the plan successfully could underwrite the security and viability of Bangladesh well beyond the next 100 years.

### Key-Notes of the Essay

**1. Introduction:**

**✎ Important points:**

Deltas form from deposition of sediment carried by a river as the flow leaves its mouth. This deposition builds a dynamic geographic social pattern of the delta and its features.

**2. Perspective of delta plan:**

**✎ Important points:**

The government would spend \$37 billion by 2031 for ensuring food and water security. The Delta Plan will be grounded in a long-term vision of the Delta's future.

**3. Bangladesh on Delta plan:**

**✎ Important points:**

Bangladesh is the largest delta of the world. There is already high pressure on the available land and water resources in the delta.

**4. The formulation of Delta plan 2100:**

**✎ Important points:**

The formulation of the plan is led by the General Economics Division of the Ministry of Planning. Technical assistance is provided through the Dutch-Bangladeshi consortium.

**5. Key Points of the Bangladesh Delta Plan:**

**↘ Important points:**

It enables the government to integrate climate change adaptation.

The Delta Plan enables coordination of the funding process among the different government.

The Delta Plan creates an opportunity to harmonize regional and local development plans.

**6. Time span to achieve Delta plan**

**↘ Important points:**

The plan took four years to formulate with the help of local, national and international experts.

It went through the scrutiny of technical experts and also the policy makers in the government.

**7. Benefits of the Bangladesh Delta Plan:**

**↘ Important points:**

Enabling the Bangladesh government to integrate climate change adaptation.

A plan for a future delta that ensures water safety, food security and economic growth.

**8. Challenges to achieve Delta plan 2100:**

**↘ Important points:**

There are few challenges which should be addressed in a systematic and articulated manner.

The challenges are namely, financing of its investment plan; capacity building of the implementers.

**9. Solution to achieve Delta plan 2100:**

**↘ Important points:**

Successful implementation of BDP 2100 is earmarked as the major concern in the coming days. Successful implementation mainly lies with the technical capacity of the relevant organizations.

**10. Holistic plan for Bangladesh Delta:**

**↘ Important points:**

The government of Bangladesh aims to create the Bangladesh Delta Plan 2100.

The Delta Plan will be grounded in a long-term vision of the Delta's future.

**11. Conclusion:**

**↘ Important points:**

It is a guideline to harness the huge potentials of Bangladesh as a Delta country.

Implementation of the plan could underwrite the security and viability of Bangladesh.

## Blue Economy in Bangladesh

**Introduction:** Blue Economy is one of the most salient factors contributing to the socio-economic development of a coastal country like Bangladesh. Recently, Bangladesh has gained a vast area in the Bay of Bengal through the settlement of maritime disputes with India and Myanmar. So, now Bangladesh can claim to be a country of blue economy. This maritime settlement has blessed Bangladesh with the expansion of Territorial Area and Exclusive Economic Zone in the Bay of Bengal. The Territorial area comprises more than 1,18,813 square kilometres of water including 200 nautical miles across the sizeable area and sovereign right in the sea-bed extending as far 354 nautical miles of Chittagong Port. Now, since the settlement of the suit has opened a vast opportunity for our country, various discussions are going on with emphasis on farming the strategies of how sustainable development may be acquired through utilizing the potentials of our new sea economy or blue economy.

**Blue Economy and Its background:** Blue economy refers to the sea economy. It encompasses all economic activities associated with the oceans, harbors, ports, coastal zones and other sea based activities. It is related to sea borne trade and commerce, ocean science and such other economic aspects. Really, blue economy is a designed theory, initiated by Gunter Pauli, which he developed over the last 30 years. Blue economy was brought into light with the book 'The Blue Economy 10 Years-100 Innovations-100 Million Jobs'. It was written by Gunter Pauli after 16 years of experiences. With the arrangement by UN, Rio+20 was held on 20-22 June 2012 in Rio de Janeiro, Mexico. In this summit, the idea and importance of 'Blue Economy' were explained and its base was firmed up strongly by the coastal countries and Islands. Since then, blue economy has been a revolutionary phenomenon in economy. The Bay of Bengal can emerge as a highly prospective source of the blue economy. Bangladesh can take a full advantages of its sea borne resources like oil and gas exploration, fisheries, ship building and ship breaking, salt collecting, developing tourism etc.

**Exploration of Oil and Gas:** There would be international bidding for exploration of oil and gas. There will be a major breakthrough to enrich our economy and generate economic growth in real terms. The primary assessment indicates few trillion gas in a few zones available within our premises. It fact, profit sharing contract will be a major challenge for the country at this stage. Of course, the experience of our concerned ministries and experts in this area might act as great advantage to gain the benefits.

**Fisheries Sector:** Regarding the fisheries sector, as reported, about 800 million metric tons of fishes are caught every year in the Bay of Bengal. Bangladeshi fisherman can fish only 0.70 million metric tons and the rest are taken away by Thailand, India and others. There are about 435 species of costly and attractive fishes available in this area. In such situation, our fisherman should be helped with financial support and industrial fishing trawlers.

**Ship Building and ship breaking:** Bangladesh is one of the promising countries in the field of ship building and ship breaking as it stands on the 13th position in ranking. An estimate indicates that Bangladesh contributes around 24.8% of world growth in this industry. In Chittagong and Narayanganj, there are abundant opportunity to flourish this industry and the expansion of our coverage over territorial seas will surely promote this opportunity to gain strength in this sector. Presently, around 2600 ships arrive in Bangladesh in every year and anchor in the ports of Chittagong and Mongla and thus earning from this sector must increase significantly. There will be many shipping agencies to operate and activate with freight forwarding resulting in huge growth in our banking and insurance sectors as well.

**Salt Collecting:** Blue economy will open an extended opportunity to export salt to the extent about 1.5 million tons that can be a spirit in our economy.

**Marine Tourism and Generation of Jobs:** Presently, the sea coast environment is not tourism friendly. Besides, tourism in beaches and Islands are not at all sensible with regard to protecting marine environment. The activities directed towards coastal area development and creation of Marine Protected Area (MPA) will open up new avenues of tourism. People would be attracted to visit these special places to enjoy their favorite coastal activities. In turn, their visits will benefit the local economy. The blue economy can generate jobs for the millions of people and bring about significantly tangible changes in the lives and livelihood of the millions of people living in coastline, Islands and across Bangladesh.

**Importance of Blue Economy:** The blue economy advocates for a new economy. It is exactly a kind of tool. We need to repair our broken economy and create a more sustainable model. The world has been racked by food, fuel, environmental, financial and economic crises. Ecosystem and biodiversity loss have led to an emerging climate crisis and a looming natural resource calamity. A blue economy is able to deal systematically with these many challenges. It is an exceptional vision of what is truly possible in the context of sustainable economy. The blue economy plays a vital role for our country. Because more than 70% of our planet is covered by ocean and about 90% of the world's trade of goods is conducted by sea. They connect all of us to each other. The ultimate aim of the business model of blue economy is to transform the country from scarcity to abundance by tackling issues that cause environmental and related problems in new ways (Gunter Pauli 2010). The potential benefit of Blue economy is to address economic problems with innovative solutions that are environmentally beneficial and which have financial and wider social benefits. Blue Growth is the long-term strategy to support sustainable growth in the marine in the marine and maritime sectors as a whole. Seas and oceans are drivers for the blue economy while technology and knowledge are the twin resources to take control over the resources. The blue economy has created roughly 5.4 million jobs in EU alone. Blue sectors are numerous, consisting of aqua culture, coastal tourism, marine biotechnology, ocean energy, seabed mining etc.

**Blue Economy and Bangladesh:** Bangladesh has won maritime boundary cases with India and Myanmar by placing just demand in the international maritime courts to end the long-standing dispute on the issue. as a result, Bangladesh's sovereign rights on the sea have been established through the verdicts of the international courts against India and Myanmar. It has created huge scopes to explore mineral resources from the seabed without any obstacle. Sustainable development of blue economy is possible through the utilization of the existing natural and mineral resources in the Bay of Bengal and its adjoining oceans. A huge stock of living and non-living resources is available under the seabed and water column. But we have a dearth of skilled manpower to ascertain the availability and explore the resources. Besides, there is also a lack of proper technology for exploiting deep sea fishes and seabed resources. To build skilled manpower in this sectors, we have taken steps to import higher education on oceanography at Dhaka University and Chittagong University. We also need to better utilize sea routes by using the port. We know that talks about formation of a new regional economic forum are in progress which would include Bangladesh, Myanmar, India, Thailand and China. It will also increase the use of sea trade and ports to bring prosperity not only to Bangladesh but to all coastal countries.

**Conclusion:** It is high time, Bangladesh prepared to use the sea resources and equipped its manpower with knowledge and technology to bring prosperity to the nation. The rising sea level and salinity are two big challenges to the coastal population and we have to enhance our capacity to protect ourselves in such situation. There must be continuous monitoring and vigilance for prevention of marine pollution. We expect that the Blue Economy will create a new horizon of hopes and aspirations to turn Bangladesh into a developed country in near future.

## Key-Notes of the Essay

### 1. Introduction:

#### ✎ Important points:

Blue Economy is one of the most salient factors contributing to the socio-economic development. Bangladesh can claim to be a country of blue economy.

### 2. Blue Economy and Its background:

#### ✎ Important points:

Blue economy refers to the sea economy.

It encompasses all economic activities associated with the oceans, harbors, ports, coastal zones.

### 3. Exploration of Oil and Gas:

#### ✎ Important points:

There would be international bidding for exploration of oil and gas.

There will be a major breakthrough to generate economic growth in real terms.

### 4. Fisheries Sector:

#### ✎ Important points:

There are about 435 species of costly and attractive fishes available in this area.

Our fisherman should be helped with financial support and industrial fishing trawlers.

### 5. Ship Building and ship breaking:

#### ✎ Important points:

An estimate indicates that Bangladesh contributes around 24.8% of world growth in this industry. There will be many shipping agencies to operate and activate with freight.

### 6. Marine Tourism and Generation of Jobs:

#### ✎ Important points:

Presently, the sea coast environment is not tourism friendly.

Tourism in beaches are not at all sensible with regard to protecting marine environment.

### 7. Importance of Blue Economy:

#### ✎ Important points:

The blue economy advocates for a new economy. It is exactly a kind of tool.

We need to repair our broken economy and create a more sustainable model.

The world has been racked by food, fuel, environmental, financial and economic crises.

A blue economy is able to deal systematically with these many challenges.

### 8. Blue Economy and Bangladesh:

#### ✎ Important points:

It has created huge scopes to explore mineral resources from the seabed without any obstacle.

A huge stock of living and non-living resources is available under the seabed and water column.

We have a dearth of skilled manpower to ascertain the availability and explore the resources.

### 9. Conclusion:

#### ✎ Important points:

There must be continuous monitoring and vigilance for prevention of marine pollution.

We expect that the Blue Economy will create a new horizon of hopes and aspirations.