Environment & Climate Change

Importance of climate change & Environmental degradation

- Being one of the richest countries in terms of bio-diversity like other developing countries Bangladesh is facing crucial challenges related to environmental degradation.
- Concept of Environmental protection got widely popularity from the UN conference on human environment held in Stockholm in 1972.
- United Nations Environment Program was formed from the “Stockholm Conference.”

Conference & Protocols regarding environmental issue

- Earth –Summit held on 1992 in Brazil considered as a landmark in the environment conservation.
- The United Nations Climate Change Conferences are yearly conferences of the UNFCCC (United Nations Framework on convention on climate change)Parties (Conference of the Parties, COP) to assess progress in dealing with the climate change issues.
- COP is the supreme decision making body of the convention.

- All states that are parties to the convention represented at the COP to review the implementation and legal instruments that COP adopts.
- COP meets almost every year, COP-1 was held at Berlin 1995 and COP-26 will be taken place from 31st October -12 November in 2021 in Scotland.
- “Kyoto Protocol- 1997” was signed to propose decrease of Carbon dioxide.

- Montreal Protocol was made in 1987 to stop production and import of Ozone depleting substances.

- In 1989 an international treaty was designed to reduce the movement of hazardous waste between nations & specifically to prevent transfer of hazardous waste from developed to less developed countries.

- The COP 21 was held in Paris in 2015 and a climate change agreement called ‘Paris Agreement’ was accepted by 195 countries.

- Paris Agreement is a legally binding international treaty on climate change adopted by 196 parties on 12 December,2015.
- Goal of the Paris Agreement is to limit global warming below 1.5 degree Celsius implementation of Carbon tax.

- COP 24 held at Katowice, Poland, accepted a ‘Paris Agreement Work Program ’ where all the participant countries agreed to reduce carbon emission in the conference.
- COP 25 was intended to finalize the ‘rulebook’ of the Paris Agreement- the operating manual needed when it takes effect in 2020 - by settling on rules for carbon markets and other forms of international cooperation under ‘Article 6’ of the deal.

Threats to Bangladesh due to climate change

- The rise in sea-level poses a big threat to the lives and livelihood of the huge population living in the coastal areas of Bangladesh.
- ‘Hadley Center for Climate Prediction and Research (HCCPR)’ estimates that sea level in Bangladesh will rise about 40 cm by 2080.
- According to the projection of General Circulation Model (GCM) the annual average temperature of Bangladesh will increase by 2.4 degree Celsius and annual average rainfall will be increased by 9.7 percent within 2100.

- ‘Inter-governmental Panel on Climate Change (IPCC)’ predicts that by 2050, Bangladesh will lose 17 percent of its land and 30 percent of its food production because of negative impact of climate change.
- The report ‘Economics of Adaptation to Climate Change in Bangladesh, 2010’ of the World Bank estimates that Bangladesh will be required US$ 5,516 million for investment and US$ 112 million for recurrent cost until 2050 to protect against storm surge risk only.

Measures taken to tackle down the negative impacts of climate change

- Bangladesh is developing a ‘National Adaptation Plan (NAP)’ under UNFCCC in order to formulate an integrated adaptation strategy and activities to meet long-term impact of climate change.
- Bangladesh has prepared ‘Nationally Determined Contribution (NDC)’ plan to reduce 5 percent carbon emission voluntarily and additional 10 percent reduction if international assistance is available by 2030.
- A ‘Climate Change Unit’ has also been established at Ministry of Environment, Forest and Climate Change.

- In order to facilitate green products/sector financing such as solar energy, bio-gas plant, effluent treatment plant, Bangladesh Bank established a revolving refinancing scheme of Tk. 200 crore in 2009 for green products.
- During FY2020-21, a total of Tk. 50.70 crore has been disbursed as refinance facility in green products/initiatives such as Biogas Plant, Green Industry etc.

- The Department of Environment (DoE) works for establishing energy saving, effective in air pollution and modern technology based environment-freindly brick kiln instead of traditional brick kiln to reduce brick kiln emision.

- A comprehensive 'Air Pollution Control Rules, 2021’ has been drafted with a view to effectively controlling overall air pollution.

- According to Environmental Protection Act,1995(amended at 2010) it is mandatory for all types of projects and industries to take environmental clearances.
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- Zero Discharge Plan is being implemented by the DoE in the industrial establishments discharging liquid waste under which the industrial enterprises are reusing the generated liquid waste without discharging it in nature.

- According to Section 7 of the Bangladesh Environmental Protection Act, 1995, there is a provision to collect compensation by conducting enforcement activities against polluting industrial establishments.

- In the newly adopted National Environmental Policy 2018, out of 9 more sectors/areas including the previous 15 sectors, mountain environment, biodiversity and environment conservation and life security, eco-friendly tourism, etc. sectors have been included with special emphasis.

- According to Bangladesh Environmental policy Act 2018 a union biodiversity management committee has been formed in order to implement biodiversity conservation activities at grass root level.
- The National Biodiversity Strategy and Action Plan 2018-2021 (NBSAP) has been formulated in the light of the UN-announced Biodiversity Strategic Plan 2011-2020, setting targets for biodiversity conservation at the national level.

Focus point of Delta plan 2100

- The vision of ‘‘Bangladesh Delta Plan 2100’’ is to combat climate change impact by ensuring following six specific goals :

  1.Ensuring safety from floods and climate change related disasters

  2.Enhancing water security and efficiency of water usages

  3.Ensuring sustainable and integrated river systems and estuaries management.

  4.Conserving and preserving wetlands and ecosystems and promoting their appropriate use

  5.Developing effective institutions and equitable governance for in-country and trans-boundary water resources management

- 6. Achieving optimal and integrated use of land and water resources.

Bio-safety and blue economy implementation activities

- Bangladesh, as a member of the Cartahena Protocol 2003,on Biosafety in the Biodiversity Charter, has enacted regulations on biodiversity.
- Biosecurity Rules 2012 under the Bangladesh Environmental Protection Act, 1995 (Amended 2010) to ensure the safety of life in research, development, transfer and cross-border transportation of Genetically Modified Organisms (GMOs) has been formulated.

- The DoE has adopted a blue-economy action plan to conserve marine environment, prevent marine pollution, ensure marine resource extraction and environmental management .
- The action plan includes activities like including the marine biodiversity conservation and management activities in the mainstream of development, strengthening the legal framework to control marine pollution, monitoring the effects of various pollutants on the marine ecosystem.
- The government is working for the implementation of the environment and climate related goals and targets of SDGs. Among 17 goals of SDGs, 3 goals are directly linked with environment and climate.

Disater Mangement

- The Ministry of Disaster Management and Relief has been contributing importantly to the country's disaster risk reduction and the implementation of disaster response rehabilitation programmes.

- Cyclone Shelters Construction, Maintenance and Management Policy, 2011 is approved to keep the cyclone shelters built by different departments/agencies/authorities at various times in coastal areas useable and maintain and manage them.

- National Disaster Management Policy 2015 has been published.
- Post Disaster Dead Body Management Guideline, 2016 is published.
- Draft Post-disaster Waste Management Guideline has been finalized.

- Use of Interactive Voice Response (IVR) Technology on Mobile Phones for Sending Disaster Messages
- Detailed information about the cyclone shelters created in coastal areas has been preserved in website based database.
- Establishment of the Multi Hazard Risk and Vulnerability Assessment, Modeling and Mapping (MRVA) Cell

- Electronic Libraries have been created so that all publications related to disaster and disaster management are available from one place.

- Disaster Map or Risk Atlas is a map of risk of a place, a summary of the risk index, a collection of information on risk organisations, infrastructure, etc.

Climate financing

- Bangladesh is pioneer among the developing countries regarding the enactment of climate finance for adaptation and mitigation of climate change that has been causing natural calamities and disasters.
- The budget allocation of these 25 ministries accounted for 56.69 percent of the total national budget of FY2020-21and out of their total allocation 7.55 percent is climate relevant.
- The government formulated ‘Bangladesh Climate Change Strategy and Action Plan’- 2009 to cope with the adverse effects of climate change.

- Green Climate Fund (GCF) is the largest source of climate finance globally which is governed by a 24-member board, comprised equally of developed and developing countries, representing the United Nations Regional Groups .

- Promoting private sector investment through large scale adoption of energy saving technologies and equipment for Textile and Readymade Garment (RMG) sectors of Bangladesh

- Enhancing adaptive capacities of coastal communities, especially women, to cope with climate change induced salinity (total project value US$ 33 million).

- Climate Resilient Infrastructure Mainstreaming (CRIM) (total project value US $81 million).