Green Taxonomy
Case Study: Bangladesh

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Bangladesh - an innocent victim of extreme vulnerabilities to climate change

- Bangladesh prone to natural disasters like flash flood, monsoon flood, landslide, cyclone, storm surge, salinity intrusion, drought and unpredictable rainfall

- Bangladesh will rise about 40 cm (15 inches) in its sea level by 2080

- Bangladesh ranked ninth among the countries most affected by climate change by German watch in its 2019 Global Climate Change Risk Index over the period 1998-2017

- Bangladesh will experience the annual average rainfall increase about 4 percent, 2.3 percent and 6.7 percent in 2030, 2050 and 2070 respectively with reference to observed baseline period 1961-1990.
Bangladesh - an innocent victim of extreme vulnerabilities to climate change

- According to PRECIS projections, the monthly average maximum temperature will change from $-1.2^\circ$ to $4.7^\circ$ Celsius in 2030, $-1.2^\circ$ to $2.5^\circ$ Celsius in 2050 and $-1.2^\circ$ to $3.0^\circ$ Celsius in 2070.

- SMRC came up with a projection that the average increase in temperature would be $1.3^\circ$ Celsius and $2.6^\circ$ Celsius for the years 2030 and 2070, respectively.

- According to GCM projections for Bangladesh, temperature will increase by $2.4^\circ$ Celsius and annual rainfall will increase by $9.7$ percent in 2100.
Bangladesh - An Innocent Victim of Extreme Vulnerabilities to Climate Change.

- A World Bank (2010) report noted that up to two-thirds of Bangladesh is inundated by floods that cause extensive damage to infrastructure, housing, agriculture, and livelihoods once in every three to five years.

- The Intergovernmental Panel on Climate Change (IPCC) predicts that by 2050, Bangladesh is on course to lose 17 percent of its land and 30 percent of its food production (Planetizen, 2008; The Independent, 2008).

- World Bank study report reveals that since the sixties, the Bangladesh Government has invested US$10 billion on structural (polders, cyclone shelters, cyclone resistant housing) and non-structural (early warning and awareness raising systems) disaster reduction measures.
Bangladesh - An Innocent Victim of Extreme Vulnerabilities to Climate Change.

➢ The 1998 monsoon flood inundated over two-thirds of Bangladesh and resulted in damages and losses of over US$2 billion, or 4.8 percent of GDP. Similarly, cyclone Sidr resulted in damages and losses of US$1.7 billion, or 2.6 percent of GDP in FY2007.

➢ By 2050, total investments of US$5,516 million and US$112 million in annual recurrent costs will be needed to protect against storm surge risk, including that from climate change.

➢ The Government finalized its national strategy called Bangladesh Climate Change Strategy and Action Plan (BCCSAP) in 2009 covering all facets of interventions for building stronger climate resilience.
Climate Change, Hazards, and Their Dimensions

Principal climatic hazards → floods and cyclones
   → increase in frequency, intensity, duration, and extent

Climate Hazards → Different Dimension in Different Seasons
   Summer → monsoon rainfall is projected to increase
      → swelling the main river systems in the wider catchment
      → boosting the rainfall impact
   → More rapid glacial melting in the Himalayan headwaters

   Winter → drought increases --→ may appear in a rude mood
Climate Change, Hazards, and Their Dimensions

- Average Sea Level Rise about 10 kilometers
  - coastline will retreat
  - causing 18% loss of the country’s land area

- Link between poverty and vulnerability crucial
  - affects women disproportionately
  - women increasingly affected by the impact

- Non-economic (‘cultural’) factors
  - gender inequality
Govt. of Bangladesh formulated a Climate Fiscal Framework (CFF) in 2014 aiming at

- Establishing greater national ownership of climate finance
- Promoting Government – NGO–Private Sector Partnership Harmonization
- Enhancing result management
- Increasing mutual accountability
- Broadening the opportunity for resilient development and green growth in Bangladesh.
Bangladesh Moves On-Govt. Initiatives

- Costs and prioritization of climate actions are reflected in the existing national budgetary framework
- Climate-related expenditures are routinely tracked and monitored
- Climate expenditure definition is systematically revised in order to reflect the national priorities and circumstances
- The GoB can more effectively access international climate finance as well as manage national climate funds
- Institutional weaknesses and skills gaps are identified and addressed
Green Taxonomy—BB’s Green Policy Initiatives

- Policy Intervention by Bangladesh Bank for Sustainable finance

  - Green Banking Policy and Strategy Framework issued in February 2011
  - Introduction of Environmental Risk Management Guidelines in January 2011
  - Incorporation of Environmental and Social Risk in Credit Risk Management in 2011
  - Both CRG and ESRR are structurally assessed in the overall credit rating for a Project/Product/Initiative
  - BB’s Low Cost Funding Policy under BB’s BDT 2 billion Refinancing Scheme
BB’s Policy Initiatives - ESRM Guidelines for Banks & FIs

**Components of an ESMS**

**POLICY**
Financial Institution’s environmental and social commitment and standards

**E&S CAPACITY**
Roles and responsibilities
Training

**PROCEDURES**
Evaluating E&S Risk
- Transaction screening
- Risk Categorization
- E&S due diligence
- Conditions of financing

**MONITORING E&S Risk**
- Reviewing client E&S performance
- Managing non-compliance

**REPORTING**
E&S performance of financial institution and clients
Green Taxonomy for Establishing Relationship between ESR and CR in the Overall Credit Assessment

Mental agony of a female worker of a Garment factory because of wage discrimination. She earns less than a male worker for the same working hour.

Or

A young female worker may be mentally tortured /Eve teasing/social exploitation.
• Banks provide information on green products (green technology/environment friendly technology like green software, environment friendly products like jute products) to their borrowers, these activities are termed as green marketing.

• Through green marketing, banks establish **breezing** between the borrower and manufacturer/supplier/service providers of green products/technologies.
BB’s continued coordination and consultations with all concerned Stakeholders and time to time Identification by Technical Advisory Committee (TAC) for 52 Green Products/Initiatives/Projects those belong to 8 green categories:

- Renewable Energy
- Energy Efficiency
- Alternative Energy
- Waste Management
- Recycling & Recyclable Product
- Green Brick Manufacturing
- Green Establishment
- Miscellaneous

Low cost funding under BB’s Refinance Scheme for environment friendly and energy efficient/innovative Green Products in 8 Green Categories
BB’s Policy Initiatives - Green Finance by Banks in different 8 Green Categories in QR2 of 2019

- Renewable Energy: 63%
- Alternative Energy: 3%
- Recycling & Recyclable Product: 2%
- Green Establishment: 8%
- Energy Efficiency: 6%
- Waste Management: 7%
- Green Brick Manufacturing: 11%
- Misc.: 0%
BB’s Green Policy for Driving Green Finance

Green Finance as % of total loan disbursement by Banks

- 2015: 0.44%
- 2016: 0.51%
- 2017: 0.42%
- 2018: 1.04%

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Bangladesh Bank created Green Transformation Fund (GTF) of 200 million USD to facilitate access to financing in foreign exchange by all manufacturer-exporters in export oriented sectors to import capital machinery and accessories for implementing environment-friendly initiatives-

- Water use efficiency in wet processing
- Water conservation and management
- Waste management
- Resource efficiency and recycling
- Renewable energy and Energy efficiency
- Heat and temperature management
- Air ventilation and circulation efficiency
- Work environment improvement initiatives.
BB’s Role as Implementing Agency in ADB Supported Financing Brick Kiln Efficiency Improvement Project (FBKEIP)

- BB’s FBKEIP was established with a view to improving the brick sector especially brick kilns through manufacturing more energy-efficient and environment friendly brick kilns resulting in reduced Green House Gas (GHG) and Suspended Particulate Matter (SPM).

- The total amount of this relending facility is USD 50.0 million. Tunnel Kiln has become the most efficient BKEIP.

- Around USD 34 million has already been disbursed to different participating banks and FIs.
BB for Sustainable CSR Activities

- Indicative CSR Guidelines for Banks for their Contribution towards 8 sectors
- Disaster Management and CSR Fund of Bangladesh Bank
- Creation of Climate Risk Fund by Banks and FIs for addressing Climate Change Resilience and Disaster Management
- Agricultural Credit Facilities in Climate Change Vulnerable Area
  - Cultivating salinity-resistant crops in the salty areas
  - Cultivating water-resistant crops in the water-logged and flood-prone areas
  - Cultivating draught-resistant crops in the draught-prone areas
  - Arrange for irrigation during dry season to avoid low production and loss of crops
  - Using organic fertilizer and insecticide by natural means instead of using chemical fertilizer and pesticides
Role of Financial Institutions in mitigating and adapting to Climate Change

- Needs for capacity development support in Bangladesh
- Assessment of bankable products/schemes taking E&S into due consideration
- Developing financing requirements that encourage implementation of mitigating environmental damage or adaptive initiatives in the proposal.
- Issuance of policies and guidelines promoting best practices towards green financial system
- Develop innovative mechanisms for leveraging private sector funds for green/climate finance
  - Issuance of green bonds
  - Low-carbon initiatives
  - Sustainable development
  - Preferential lending rates and tax rebates for green financing projects
  - Increased awareness and outreach and capacity building in risk assessment for climate finance initiatives
  - Strengthened regulation from the central bank
Contextualizing application of taxonomy

- Identification, measurement and application of taxonomy in various economic sectors

- Taxonomy in General
  - A list of economic activities and relevant criteria
  - Flexible to adapt to different investment styles and strategies
  - Based on latest scientific and industry experience
  - Dynamic, responding to changes in technology, science, new activities and data

- Some examples are:
  - Climate change mitigation;
  - Climate change adaptation;
  - Sustainable use and protection of water and marine resources;
  - Waste management and recycling;
  - All types of pollution prevention and control;
  - Protection of healthy ecosystems.
**Taxonomy activities and criteria**

- Substantial contribution to at least one environmental objective

- Doing no significant harm to the other environmental objectives

**How Taxonomy activities linked**

- The Taxonomy helps to define the universe of activities that will remain in a net-zero emissions economy in 2050 and beyond, and the types of activities that can support the transition to low-emissions, climate resilient economy.
Key Risks Considered by Bangladesh Bank While Defining Taxonomy

- Point sources
- Fugitive sources
- Mobile sources
- Air emissions of concern typically include:
  - VOCs
  - PM
  - Ozone Depleting Substances
  - Greenhouse Gases (GHGs)
  - Sulfur dioxide (SO2)
  - Toxics (mercury)
Water use and conservation
Building facility operations
Cooling systems
Heating systems

Wastewater and Water Quality
Process wastewater
Wastewater from utilities operations
Storm water
Sanitary wastewater

Wastes
- Waste management planning
- Waste prevention
- Recycling and reuse
- Treatment and disposal
- Hazardous waste storage
- Hazardous waste transportation
- Small quantities of hazardous waste
Looking Ahead

- Proper Demand Mapping
- Establish National Level Standard for Identification Green products/Initiatives
- Supportive Policy Framework for all types of Financial Instruments
- Credit Guarantee Fund/Green Instruments
- Sustainability Rating of Banks & FIs.
- Motivation for Green Finance Disbursement Target achievement in a time bound action plan and maintain asset quality through stricter monitoring
- Finalization National Financial Inclusion Strategy-Bangladesh (NFIS-B)
- Effective Regulation for Environment Friendly Governance in Banks and FIs.
- Policy initiatives for Carbon Footprint Measures
- Carbon Trading Mechanism for the institution that it really demands.
- Policy Initiatives for Green Bond /Green Sukuk Approach focusing on development of Capital Market Development and Financial Institutions (Banks & FIs)
- Strengthening coordination with lead and associated ministries, institutions to address SDGs for Climate Change issue
Last Minute Call before boarding to fly for Green Planet

- BB’s major development Policies and Actions are in conformity with Perspective Plan, National Sustainable Development Strategy and concerned SDGs.

- MoF, MoP, MoI, MEFCC, IT Ministry, SREDA, Banks & FIs, BSEC, IDRA, BIBM, MRA, MRA regulated MFIs, IFC, World Bank, Development Partners, and Internationally reputed banks/Multinational Banks, different passionate research institutions, associations are BB’s consultation partners.

- Promoting Green Growth through Green Finance requires uninterrupted coordinated effort (Commitment/Pursue/Trend of Activities/Implementation Process) from BB and BB’s consultation partners.

Let’s be on track

Let’s “Go Green, Live Green, Live For Others”

- --------Thank You--------