Green Financing: An Emerging Form of Sustainable Development in Bangladesh

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Abstract: Green financing is a term that refers to sustainable development projects and initiatives, environmentally friendly products and policies that encourage financial investment to stimulate more sustainable economy. This paper mainly determines the allocation of green financing to the various green projects by categorized banking and non banking sectors in Bangladesh. This study shows the trend of the refinancing project for the green products by the Bangladesh Bank. The research is based on the secondary data in the descriptive and analytical nature. This study observes that the Private Commercial Banks (80.4 percent) contribute more funds to the green project and the tendency to reinvest in green projects is increasing day by day. This study recommends in order stimulating the advancement of sustainable development in Bangladesh, it is important to review the policies related to green financing.

Keywords: Green financing, Sustainable development, Environment friendly, Sustainable economy, Green products.

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I. Introduction

Green Finance is a proponent that combines money and business with environmental friendly behavior. It is a regional, individual and business consumer, producers, investors, and financial lenders for many participants. Green Finance can be expressed differently based on the participant, and it can be driven by financial incentives, a plan to preserve the planet or both may be managed in combination. Contrary to traditional financial activities, green economy emphasizes environmental benefits and provides greater attention to the environmental protection industry [1]. Green Financing is not in the interest of investment through the systematic checklist under Environmental Risk Management (ERM); rather it is sustainable for financial reasons. Under green banking, green financing can contribute to transistors for the efficient and low-carbon industries, such as green industries and green economics. A green economy can be thought of as an alternative vision for development; one that can increase and improve the lives of people in a consistent way with sustainable development; a green economy promotes a triple low line: Maintaining and advancing economic, environmental and social well-being [2]. Environmental protection and economic development are the main objectives of sustainable development, all in the world Focus on financial instruments for the development of environmentally friendly environments so that is provided for allocated environmental standards and reasonable resources [3]. There are market-based methods and financial products on the Green Finance Market which can control the emissions of pollution and realize the interconnected system and avoid enterprise from unexpected changes; Existing emissions are represented by trading and later there are various types of environmental funds, weather derivatives, nature-linked securities and environmental options. Green finance environmental protection and sustainable use resources [1]

Objectives of the study II.

The objectives of the study are as follows:

- 1. To show the overall green finance allotment by the categorized financial sector.
- To show the disbursement trend of refinance scheme for green product. 2

III. Rationale of the study

In 2015, it is considered as a historical turning point to combat climate change. The world's first global climate agreement has not been agreed solely, but the United Nations has established the Agenda 2030 for stable development. Implementing Paris's commitment means that global warming is reduced to 2 degrees centigrade, even 1.5 degrees Celsius. In fact, this refers to the radical decarburization of our economy, which is called the "Green Finance" with the fundamental changes in the financial world. Green Finance represents a positive change in stability through the funding of the universal economy and the funding of individual green investments and public policies that support green initiatives. To reduce risk assumptions to include investment in environmental benefits, and to provide environmental benefits, the two main functions of green money include environmental externals. The main reasons for the development of green financing are banks, institutional investors and international financial institutions and central banks and financial regulators. Some of these actors have implemented policy and regulatory measures for various asset classes for the losses of some financial institutions, such as the need for pre-lending, interest rate subsidies or the refinancing of the preferred central bank through refinancing. [4] Bangladesh is one of the least developed countries (LDC) where a common phenomenon of natural disasters, which often causes huge losses. Even the effects of climate change are higher in our country, which requires proper behavior and management, especially effective quarterly from the banks. The Green Bank is following the financial and business policies that are environmentally friendly. Bangladesh Bank is firmly committed to ensuring sustainable economic development by carrying out policies and guidelines for reducing the impact of environmental degradation and implementing financial institutions.

IV. Methodology of the study

The research is the descriptive and analytical nature based on the secondary data. Secondary information has been collected from the Bangladesh Bank annual report, Bangladesh Bank website and reviews. In the literature review, various work-paper, journals and articles have been followed.

V. Review of Literature

Wang and Zhi (2016) discovered the elasticity of green money for renewable energy and find some insufficiency. They pay attention to the development of the market and policy formulation. Expressing internal conflicts between green finance and environmental conservation, they are spontaneously proposed for better achieving environmental balance.

Koscielniak and Gorka (2016) showed that Public and private partnership processes (PPP) scale and nature in the development of the Silesia region PPP solutions as a framework determinant of sustainable development based on the decision on the above subjects. The study presented the PPP project implemented in the study areas for sustainable urban transportation.

Choudhury et al. (2013) highlighted the final challenge with two main objectives, the maximum benefits facing the strategic aspects of Green Banking. For the first time in Bangladesh, the green banking system is developed and the other is to identify the forces of stakeholders of the regulatory, manager or environmental person who can influence the deliberate environmental behavior of the bank managed by Bangladesh. They advised that banks will play active role in green environment and to actively adopt environmental aspects of banking and to change the client's practice of banking business. The use of appropriate environmental technology and management methods will not only be suitable for the environment, but will provide benefits as a more effective functioning. After using both descriptive and accredited statistics analysis, this study recommends the requirements of stakeholders in the Green Banking system and some hints for the government, the entire banking sector and the business community.

Lalon (2015) focused on the green banking activities of the commercial banks of Bangladesh and why this policy was adopted and compared it with the commercial bank's green banking practices. He focused on policy guidelines of green financing as well as regarding green banking related regulations will be discussed.

Islam et al. (2014) highlighted the green banking challenges and opportunities by examining published information like stability report, empirical papers, published information from several banks and environmental organizations including Bangladesh Bank published documents and bankers. In addition to the present green banking system in Bangladesh, the letter also provides major challenges such as environmental parameters, formulation of effective policies, creating eclectic atmosphere and other aspects. The results of this research create opportunities for the green banking system, such as online financing, banking improvement, various green financing banking units, environmental risk adjustment with the main risk and other opinion formulation policies.

Masukujjaman and Aktar (2013) compared the activities of the global green banking initiative to find out the activities of commercial banks. They use second information from related websites, published reports and articles. They concluded that Bangladesh was far away from the developed countries. But the general diagram presents a transformation of green banking with a well-organized method for most banks. Enhancing its

infrastructure and accelerating its existing green movement, the banks can ensure for themselves and the green communities worldwide.

Islam and Kamruzzaman (2015) focused on green banking as a modern concept of banking business considering corporate social responsibility (CSR) as well as environmental issues. Nowadays it is the greenest bank's most acceptable and popular practice in the banks because it leads to global competition. On average, in 2012, for the green banking, the bank was allocated two million Tk. for green banking. The concept of green banking is relatively new and still dynamic, but it is in a mature stage in developing countries compared to Bangladesh. They conclude that green banking methods in Bangladesh are not satisfactory.

Shah and Habib (2013) evaluated the relevance of green banking practices to achieve electricity capacity in Dhaka city. They have shown that through the green operation the banks can play an important role in achieving the stability of the city of Dhaka city.

Khan and Ali (2016) stated that green banking is done to ensure the use of organizational resources for the environment and society. Our only spaceship of green banking as an idea is to activate and think smart way with a vision for the future stability of the world. The Bangladesh Bank is the world's first central bank which has taken real initiatives to open the way of the Green Banking approach. With certain guidelines and legal framework, the central bank of Bangladesh called on all the commercial banks of Bangladesh to develop their own green banking policies.

Nabi et al. (2016) showed the trend of green financing up to 2014Q4; finally the trend seems to stabilize. Despite the significant publicity of green banking, despite the fact that the share of the green division is not more than 2 percent in the total bank progress, the guidelines of the Bangladesh Bank suggest at least 5 percent of the proportion of the ratio. They recommend that reviewing the detailed policy on green funding for rapid progress in greening the environment for sustainable growth in Bangladesh is important.

Islam and Das (2013) published the practice of green insect in Bangladesh. The study was based on the second information based on mobile banking, online banking, green funding and green banking system as well as guidelines for green banking unit. The concept of green banking is relatively new in Bangladesh and still gets the speed, but in developing countries it is passing through a mature stage. Studies have shown that green banking methods in Bangladesh are not satisfactory.

Shakil et al. (2014) worked with the aim of analyzing green banking practices among the SCBs, SDBs, PCBs and FCBs of Bangladesh. The empirical data was based on analytical and theoretical nature of secondary data. They have seen that 47 banks have adopted Green Banking policy, formed a green banking unit, allocated and used budget for green banking. But budget allocation and use of budget for SCBs and SDBs budget is not satisfactory. SCBs and SDBs online banking and ATM facilities are very poor. This has increased the difference in banks by providing loans to the environment-friendly projects. The researcher said that some banks still do not have and some banks are in the first stage of policy guidelines prescribed by Bangladesh Bank. Perhaps the biggest reason for not accepting green banking is that it often requires a large initial cost. Bangladesh Bank must strengthen the SCBs, SDBs, PCBs and FCBs, so that they can evaluate sensitive issues like weaker sections; Unintentional displacement, etc. while investing or financing projects.

Uddin (2016) revealed that Shari'ah has made important contributions to green banking, based on which it promotes the preservation of natural resources and to respect all the living things. After participating in some research in this region, they tried to carry a great academic value. The results may be suitable for government, Bangladesh Bank, NGOs, donors, international agencies; The World Bank, the IMF, the academic researchers and the national policy makers who are trying to fully conserve the environment in developing countries and also to fully contribute to Bangladesh.

Sharma (2013) explored for existing literature about green banking. Secondly, the products, process and technology that the top leading public sector banks and public sector undertakings promote, help reduce the amount of carbon pad print in the environment. They have selected top leading banks from ICICI, HDFC and Executive Private Sector from SBI, PNB and Mumbai Public Sector (BBE and NSE and 2013-2012 Annual Report). Also, compared to the selection, public banks are more active or selected private sector banks and ultimately to know the latest steps taken by the Reserve Bank to promote such products.

Wakeford et al. (2017) surveyed based on nine half-structured interviews conducted by researchers investigating nexus investigations in the country's green innovation and industrialization, and a survey of 117 companies, this article examines Ethiopia's cement, skin and textile sectors, invented system, green With a view to understanding their effectiveness toward supporting industrialization. The results showed lower rates of products and process innovation among companies in Ethiopia. The main obstacles to innovation are the high cost of technology, insufficient money and limited information. Competitive growth is the main driving force of the new innovation of the strong, the reduction in environmental impact and the reduction of environmental regulations, among the least important motivations, and encourages the development of interaction between the strong government and other actors. Studies have shown that coordination among leading actors, financial support for organizations and environmental regulation.

VI. Present scenario of green financing in Bangladesh

In 2011, the Bangladesh Bank introduced green banking policy policies for banks. For the progress of the ongoing initiatives of the Bank and NBFIs at the fastest pace to maintain climate consistent with the climate change risk, a policy guidelines for the 2013 green banking 2013 and new banks (fixed in 2013) were issued. From January 2013 for all banks and NBFIs, the target of 5% direct balance distribution is directly set to the target of high finance. According to the above guidelines for Green Banking, for the sustainable development of climate change, banks and NBFIs have been asked to form 'Climate Risk Fund'. Renewable energy, energy efficiency, solid waste management, liquid waste management, alternative fuel, fire bricks, non-block bricks, recyclable and recycled products, green industries, safety and security, funding for banks and other financial institutions. Institutional Green Finance is given through various banking and non-banking institutions Table 1 [19].

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Category of Green Finance	SCBs	DFIs	PCBs	FCBs	NBFIs	Total		
Renewable Energy	44.40	4.20	1605.00	182.00	3660.20	5495.70		
Energy Efficiency	10.10	0.00	2394.30	0.60	125.30	2530.30		
Solid Waste Management	0.00	0.00	12.20	0.00	0.00	12.20		
Liquid Waste Management	26.30	0.00	4326.50	36.20	449.00	4838.00		
Alternative Energy	160.00	0.00	164.80	0.00	9.20	334.00		
Fire Burnt Brick	1003.80	25.30	5353.90	0.00	775.00	7157.90		
No Fire Block Brick	0.00	0.00	169.80	0.00	40.00	209.80		
Product	99.10	0.00	4179.60	80.00	518.80	4877.40		
Green Industry	380.00	0.00	4106.20	283.60	256.00	5025.80		
Safety and Security of Factory	0.00	0.00	1817.10	34.80	95.50	1947.40		
Others	290.10	0.60	467.90	151.70	19.30	929.60		
Total	2013.70	30.10	24597.40	768.80	5948.20	33358.20		

Table 1	Green	Finance i	in	different	products	in	F	Y1	6	(Million	Taka)
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Source: Bangladesh Bank Annual Report-2015-16

6.1 Disbursement of green finance

Total amount of money was distributed to 503 billion Tk. 46 banks and NBFIs are involved in Green Finance. The field-based contribution of total Green finance shows that the PCBs played a major role (80.4 percent), FCBs (15.6 percent), NBFIs (3.4 percent), SCBs (0.6 percent) and DFIs (0.01 percent). Direct and indirect Green Finance is given through banking and non-banking financial institutions in Table 2 [19].

Table 2 Direct and indirect green finance in FY16								
Type of Banks/NBFIs	Direct Green Finance	Indirect Green Finance	Total Green Finance	Sector Wise Contribution				
SCBs	2013.70	1234.50	3248.20	0.60				
DFIs	30.10	0.00	30.10	0.01				
PCBs	24597.40	379887.50	404485.00	80.40				
FCBs	768.80	77547.30	78316.10	15.60				
NBFIs	5948.20	11193.80	17142.00	3.40				
Total	33358.20	469863.10	503221.30	100.00				

Source: Bangladesh Bank Annual Report-2015-16

6.2 Bangladesh Bank Refinance scheme for green product

In order to expand the financing avenue for green products such as solar power, organic gas plant and emission treatment plant, Bangladesh Bank created a rotating reinvestment project from its own fund for a total of six green products in 2009, at a cost of 2.0 billion Tk. In FY16, Bangladesh Bank has increased the product line of 6 to 50 under this scheme and these products are divided into 11 categories, including renewable energy, energy efficiency, solid waste management, liquid waste management, alternative fuel, fire brick, non-fire block brick, Recycling & recycling products, ensuring safety and work environment of green industries, factories and miscellaneous. The adjusted amount of reconstruction of the project till June 2016 has stood at 2811.7 million Tk. and the total distribution of green products through the Bangladesh Bank increased by 133.7%, which was

919.7 million Tk. in the year 2011-12, which was 393.5 million Tk. in the financial year 2013-2015. The distribution flow of this fund is given in Table 3 and Figure 1 [19].

				(Million Taka)		
Green Product Category	FY12	FY13	FY14	FY15	FY16	
Bio-gas	133.20	113.60	212.80	83.30	84.80	
Solar Home System	10.50	40.20	32.20	87.50	114.70	
Solar Irrigation Pump	8.40	0.00	17.90	26.50	0.60	
Solar Assembly Plat	248.80	122.70	49.60	148.10	16.30	
Solar Mini Grid	0.00	0.00	0.00	0.00	10.00	
Effluent Treatment Plant	22.20	57.40	10.00	0.00	58.00	
HHK Technology in Brick Kiln	55.00	172.20	59.00	47.00	177.80	
Vermi-compost	0.00	0.00	0.00	1.10	1.60	
Green Industry	0.00	0.00	0.00	0.00	400.00	
Safe Working Environment for textile and garments industry	0.00	0.00	0.00	0.00	35.70	
Organic Manure from Slurry	0.00	0.00	0.00	0.00	0.20	
Paper Waste Recycling	0.00	0.00	0.00	0.00	20.00	
Total	478.10	506.10	381.50	393.50	919.70	

Table 3 Disbursement trend of Bangladesh Bank refinance scheme for green products

Source: Bangladesh Bank Annual Report-2015-16



Fig. 1 Shares of green products in refinancing in FY16

Source: Bangladesh Bank Annual Report-2015-16

6.3 Environmental Risk Management (ERM)

Environmental risk can be an easy element of credit risk due to environmental conditions and connectivity with climate change. The ECM guidelines for banks and NBFIs are mandatory to address environmental risks (ERR) on marginal quality as mentioned. Applicable for ERR projects as well as credit facilities that fall above the threshold limit. All banks determine financial risk in the financial year. Over the years, the number of environmental sustainability (EDD) applicable to the project was 70707. In the financial year 60175 rating projects, the total amount of 222.28.8 billion Tk. was distributed to 52776 rating projects [19].

6.4 Climate Risk Fund and Green Marketing

In FY16, the total amount of 455.7 million and respectively 53.5 million Tk. respectively for climate risk funds and green marketing of banks. The total consumption of climate risk funds for NBFIs, 3.9 million and the total expenditures for green marketing was 2.7 million Tk. in FY16 [19].

6.5 Online Banking and Energy Efficiency

At the end of FY16, 55 out of 56 banks were online branches which were like previous years. At the same time, 75.1 percent of the total branches were 68.1 percent in the previous year, at the end of the previous fiscal year, online branch. Green banking policy has followed banks to establish a branch operated by solar energy. The number of solar powered units was 493 at the end of 2011, which were 416 at the end of the previous fiscal year [19].

6.6 Bangladesh Bank's own CSR Activities

In order to address CSR activities like activities like education, health, environment, empowerment, human resources development etc. Bangladesh Bank has set up disaster management and corporate social responsibility fund' by transferring 50 million Tk. annually from its annual profit. The fund was raised to Tk. 100 million in 2015. In the fiscal year 2012, the Bangladesh Bank approved 75.9 million Tk. (contribution from the Bangladesh Bank's profit and bank interest) to the fund of 51.3 million Taka. [19]

6.7 CSR Activities of Banks and NBFIs

The total CSR expenditure was Tk. 5607.7 million by the bank and NBFI in 2016 and this was 5400.7 million TK. in the 2012-13 fiscal year [19].

VII. Findings

- PCBs play a vital role in green projects contributing (80.4 percent) of total green finance.
- DFIs have lowest contribution (0.01 percent) of total green finance.
- Disbursement trend of refinancing in green projects by Bangladesh Bank in increasing.
- Green industry shares more (44 percent) of green products in refinancing in FY16.
- Online banking and energy efficient branches are progressive in FY16 than previous year.
- Bangladesh Bank has sanctioned more amount of money in FY16 than FY15 in CSR activities.

VIII. Recommendations & Suggestions

- Government should take necessary steps to raise the public awareness about sustainable development utilizing the borrowing funds.
- Bangladesh Bank should review the policies on green financing that is urgent to stimulate the progress of sustainable development in Bangladesh.
- Bangladesh Bank must monitor the financial and non-financial institutions about the application of green banking guidelines.
- Bangladesh Bank should ensure to apply green banking and use environmental risk management (ERM) guideline in efficient manner.
- Bangladesh Bank should raise refinancing fund in different green project efficiently.
- Coordination between the Bangladesh Bank and financial institutions is necessary for green financing to attain sustainable development.
- Bank should ensure finance in different environment friendly projects and investment should be increased for sustainable development.
- Bank should disburse the funs in a project after assessing the risk consequences on environment and climate.
- Bank should be taken initiative to discover environment friendly products.

IX. Conclusion

South Asia is the most risky area due to the effects of climate change in the world. The position of Bangladesh in the list of the world's most vulnerable countries is higher [20]. In this context, green funding is necessary for environmentally friendly projects to reduce the risk of climate change for sustainable development. Although we are at risk of climate change, green financing is not satisfactory in Bangladesh. To combat global warming, the Bangladesh Bank and other financial, non-financial institutions should focus on investing in green projects. This paper is based on second information and is the main limitation of this study. In Bangladesh this study can be helpful for banking, non-banking institutions and students to get the summary of green financing.

List of terms and acronyms:

ATM- Automated Teller Machine ETP- Effluent Treatment Plant ERM- Environment Risk Management HHK- Hybrid Hoffman Kiln

SCBs- State Owned Commercial Banks

PCBs- Private Commercial Banks

DFIs- Development Finance Institutions

NBFIs- Non-Banking Financial Institution

FCBs-Foreign Commercial Banks

CSR- Corporate Social Responsibilities

References

- Y. Wang and Q. Zhi, The role of green finance in environmental protection: Two aspects of market mechanism and policies, Energy Procedia, 104(2016), 311 – 316.
- [2]. M. A. Islam and M. Kamruzzaman, Green Banking Practices in Bangladesh, IOSR Journal of Business and Management, Volume 17, Issue 4.Ver. V (Apr. 2015), PP 37-42
- [3]. L. Kaifeng and L. Chuanzhe, Construction of Carbon Finance System and Promotion of Environmental Finance Innovation in China, Energy Procedia 5 (2011) 1065–1072.
- [4]. K. Berensmann and N. Lindenberg, Green Finance: Actors, Challenges and Policy Recommendations, German Development Institute / DeutschesInstitutfürEntwicklungspolitik (DIE), briefing Paper 23/2016.
- [5]. H. Koscielniak and A. Gorka, Green Cities PPP as a Method of Financing Sustainable Urban Development, Transportation Research Procedia, 16 (2016), 227 – 23
- [6]. T. T. Choudhury, M. Salim, M. Mamoon, A. Bashir and P. Saha, Influence of Stakeholders in Developing Green Banking Products in Bangladesh, Research Journal of Finance and Accounting, Vol.4, No.7, 2013.
- [7]. R. M. Lalon, Green Banking: Going Green, International Journal of Economics, Finance and Management Sciences. Vol. 3, No. 1, 2015, pp. 34-42.
- [8]. M. A. Islam, S. Yousuf, K. F. Hossain and M. R. Islam, Green financing in Bangladesh: challenges and opportunities a descriptive approach, International Journal of Green Economics, Vol. 8, No. 1, 2014.
- [9]. M. Masukujjaman and S. Aktar, Green Banking in Bangladesh: A Commitment towards the Global Initiatives, Volume VIII, Issues 1 and 2, January-June, July-December, 2013.
- [10]. P. Shah, and S. M. A. Habib, Green banking practices and sustainable energy in Dhaka city, The Sustainable City VIII, Vol. 2, 815.
- [11]. M. S. R. Khan and M. A. Ali, Present Scenario of Green Banking Practices Followed by Private Commercial Banks in Bangladesh: A Descriptive Analysis, The Millennium University Journal; Vol. 1, No. 1; 2016.
- [12]. M. G. Nabi, M. M. R. Khan, M. S. Islam, and M. J.Uddin, Are We Greening the Economy? Recent Trends of Green Financing in Bangladesh, Research Department, Bangladesh Bank, Working Paper Series: WP No 1618.
- [13]. M. S. Islam, and P. C. Das, Green Banking practices in Bangladesh, IOSR Journal of Business and Management, Volume 8, Issue 3 (Mar. - Apr. 2013), PP 39-44.
- [14]. M. H. Shakil, M. K. G. Azam, M. Tasniaand and Z. H. Munim, An Evaluation of Green Banking Practices in Bangladesh, IOSR Journal of Business and Management (IOSR-JBM), 7668. Volume 16, Issue 11. Ver. IV (Nov. 2014), PP 67-73.
- [15]. M. N.Uddin, Shari'ah Based Banking and Green Financing: Evidence fromBangladesh, IOSR Journal of Business and Management (IOSR-JBM), Volume 18, Issue 1 Ver. III (Jan. 2016), PP 79-90.
- [16]. N. Sharma, R. Chaudhary, and H. Purohit, A Comparative Study on Green Initiatives Taken By SelectPublic and Private Sector Banks in Mumbai, IOSR Journal of Business and Management (IOSR-JBM), 319-7668. PP 32-37.
- [17]. J. J. Wakeford, M.Gebreeyesu, T.Ginbo, K.Yimer, O. Manzambi, C.Okereke, M. Black, and Y.Mulugetta, Innovation for green industrialisation: An empirical assessment ofinnovation in Ethiopia's cement, leather and textile sectors, Journal of Cleaner Production, 166 (2017) 503e51.
- [18]. Bangladesh Bank Annual Report-2015-16<www.bb.org.bd.
- [19]. J.J. McCarthy, O.F. Canziani, N.A. Leary, D.J. Dokken, and K.S. White, Climate Change 2001: Impacts, Adaptation. and Vulnerability, Inter-Governmental Panel on Climate Change (IPCC), Work Group II Input to the Third Assessment Report, Cambridge University Press, Cambridge.

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