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Recent Trends of Green Financing in Bangladesh

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Abstract

Green banking has attained worldwide attention since it plays a vital role in financing economic activities in attaining the objectives of sustainable growth and development for the economy. Following immense importance of green financing, Bangladesh Bank, the central bank of Bangladesh, has introduced green banking activities in 2009 and issued guidelines on green banking in 2011. This type of initiative in Bangladesh has been the first of its kind in South Asia. Using quarterly data from 2013Q1 to 2016Q2, the present paper analyzes recent trend of green financing in Bangladesh. While the trend of green financing was encouraging until 2014Q4, of late the trend seems stagnant. Despite considerable publicity in green banking, the share of green finance in total bank advances remained poorly over 2 percent, whereas the Bangladesh Bank guideline suggests the ratio to be at least 5 percent. This paper recommends that a thorough policy review on green financing is urgent to enforce a rapid progress in greening the environment for the sake of sustainable growth in Bangladesh.

JEL Classification : G21, O16, Q01

Key Words: Green banking, green financing, sustainable development, Bangladesh

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1. Introduction

Green banking has attained worldwide attention since it plays a vital role in financing economic activities in attaining the objectives of sustainable growth and development for the economy. Green banking has also become a buzzword in the banking arena in Bangladesh. Simply, green banking means an 'eco-friendly socially responsible banking' which plays the role of financing intermediary in financing economic activities and operates all other activities in line with attaining objectives towards a healthy environment for the present generation as well as the future generation. Green banking has also been motivated to include ethical investment, socially responsible investment, and corporate social responsibility in addition to sustainable investment and day-to-day eco-friendly operational procedures. Following immense importance of green banking, Bangladesh has introduced green banking activities in 2009 and issued guidelines on green banking in 2011 as a first nation in South Asia. In order to enhance green banking activities, Bangladesh bank as a Central Bank of the country has undertaken various initiatives. The present paper assesses financing under green banking in Bangladesh.

The objective of the paper lies in reviewing trends of financing under green banking in Bangladesh and putting forward policy options to enhancing green banking activities. More specific objectives of the proposed study project includes: (a) to analyze concepts and importance of green banking; (b) to review trend of financing under green banking in Bangladesh; (c) to investigate the existing challenges of green financing and (e) to design ways and means for smooth expansion of green banking in Bangladesh.

The remaining portion of the paper has been organized as follows. Following introduction, the second chapter provides review of literature on green banking; the third chapter deals with data and research methodology; the fourth chapter analyses present programs of green banking and trends of green financing in Bangladesh; the fifth chapter investigates challenges and finally, the sixth chapter contains policy options and conclusion.

2. Literature Review

As green banking activities is a new issue in Bangladesh and other countries, there is dearth of quality research papers on different issues related to green banking activities. The present paper reviews available papers on green banking in Bangladesh and other countries.

Sahoo and Nayak (2008) explore the importance of Green Banking, sites international experiences and highlight important lessons for sustainable banking and development in India. Biswas (2011) has made an attempt to highlight the major benefits, confronting challenges, strategic aspects of

Green Banking in the context of India. It has also presented the status of Indian banks as far as Green Banking adoption is concerned.

Bangladesh Bank (2011) issued policy guidelines for green banking policy in a formal and structured manner in line with global norms so as to protect environmental degradation and ensure sustainable banking practices in Bangladesh. With a view to developing green banking practices in the country, an indicative Green Banking Policy and Strategy framework has been developed for banks which contain three phases. The major portions of first phase include policy formulation and governance, incorporation of environmental risk in credit risk management, initiating in-house environment management, introducing green finance and creation of climate risk fund. The major parts of second phase incorporate sector specific environmental policies, green strategic planning and setting up green branches. The major components of third phase include designing and introducing innovative products, reporting in standard format with external verification and reporting green banking practices on quarterly basis.

Rahman, et al. (2013) analyze the prospects of green banking in Bangladesh. The authors mention that banks can be green through bringing changes in six main spheres of banking activities which include Change in Investment Management, Change in Deposit Management, Change in House Keeping, Change in the Process of Recruitment and Development of Human Capital, Corporate Social Responsibility (CSR), and Making Consciousness Among Clients and General Mass. Ullah (2013) presents a comparative analysis about the green banking issue among SCBs, SDBs, PCBs and FCBs in Bangladesh.

3. Data and Methodology

To attain the objectives of the study, the required information/data has been collected from secondary sources. The secondary source contains data gathered from reports of Bangladesh Bank and articles on green banking and country experiences. Descriptive analytical method based on table, graphs and charts has been used in the paper. We collected data from Annual Report of Bangladesh Bank, Economic Trend, Quarterly Review Report on Green Banking Activities of Banks and Financial Institutions from the website of Bangladesh Bank www.bb.org.bd. Due to limitations, data on green banking are available since 2013. Hence, our observations run from 2013Q1 to 2016Q2.

4. Present Policies and Programs of Green Banking in Bangladesh

Bangladesh Bank launched Policy Guidelines for Green Banking for banks for green banking activities in 2011. In 2012, banks were provided with a uniform reporting format for reporting green banking activities in a structured manner. In 2013, Policy Guidelines for Green Banking was also issued to the Non-bank Financial Institutions (NBFIs). To expedite the ongoing initiatives of banks and NBFIs at

faster pace for sustaining the environment compatible to climate change risk, minimum target of direct green finance as certain % of total funded loan to be disbursed/invested in each year effective from January 2015 onwards. So far, 55 banks out of 56 and 27 financial institutions (NBFIs) out of 30 have undertaken green banking programs by establishing green banking unit. Green banking activities include financing green projects, using climate fund, turning bank branches online, enhancing CSR activities, promoting mobile banking etc. Provision of loans with financial concession for environment friendly products and projects has been adopted to promote green banking in Bangladesh.

Green banking initiatives of Bangladesh Bank broadly can be categorized into some aspects: policy initiatives, monitoring of green banking activities of banks and NBFIs, refinance support from Bangladesh Bank (BB) in diverse green products/sectors and BB's own initiatives in environmental management. Major Green projects financed by banks and other financial institutions include renewable energy, energy efficiency, solid waste management, liquid waste management, alternative energy, fire burnt brick, non fire block brick, recycling and recyclable product, green industry, safety and security of factory and others (Sustainable Finance Department, Bangladesh Bank, 2016). Product-wise green finance by banks are given in Table1.

Table 1 Green finance in different products: FY16

Category of green finance	SCBs	DNBFIs	PCBs	FCBs	NBFIs	Total
Renewable energy	44.4	4.2	1605.0	182.0	3660.2	5495.7
Energy efficiency	10.1	0.0	2394.3	0.6	125.3	2530.3
Solid waste management	0.0	0.0	12.2	0.0	0.0	12.2
Liquid waste management	26.3	0.0	4326.5	36.2	449.0	4838.0
Alternative energy	160.0	0.0	164.8	0.0	9.2	334.0
Fire burnt brick	1003.8	25.3	5353.9	0.0	775.0	7157.9
Non fire block brick	0.0	0.0	169.8	0.0	40.0	209.8
Recycling and recyclable product	99.1	0.0	4179.6	80.0	518.8	4877.4
Green industry	380.0	0.0	4106.2	283.6	256.0	5025.8
Safety and security of factory	0.0	0.0	1817.1	34.8	95.5	1947.4
Others	290.1	0.6	467.9	151.7	19.3	916.6

Note : Figures are in million Bangladeshi Taka.

Source: Bangladesh Bank, Sustainable Finance Department, financial year 2015-2016.

4.2. Green Finance

A total amount of Taka 504.22 billion has been disbursed during FY16 by all banks and 30 NBFIs having exposure in green finance. Sector-wise contribution of the total green finance shows that

the PCBs play the main role (80.4 percent) followed by FCBs (15.6 percent), NBFIs (3.4 percent), SCBs (0.6 percent) and SDBs (0.01 percent). Direct and indirect green finance by banks are given in Table 2.

Table 2: Direct and indirect green finance

Types of banks	2014-15				2015-16			
	Direct green finance	Indirect green finance	Total green finance	Sector wise contribution	Direct green finance	Indirect green finance	Total green finance	Sector-wise contribution
SCBs	30.7	0.9	4.0	0.854	2.01	1.23	3.25	0.6
SDBs	0.1	0.3	0.3	0.075	0.03	0.00	0.03	0.01
PCBs	20.1	346.1	366.2	78.61	24.60	379.89	404.49	80.4
FCBs	3.3	68.2	71.5	15.35	0.77	77.55	78.32	15.6
NBFIs	8.3	15.5	23.8	5.111	5.95	11.19	17.14	3.4
Total	34.8	431.0	465.9	100	33.36	469.86	503.22	100.0

Note : Figures are in billion Bangladeshi Taka.

Source: Bangladesh Bank, Annual Report and Sustainable Finance Department. Financial year 2014-2015 and 2015-2016.

4.3. Environmental Risk Management (ERM)

Environmental risk can be a facilitating element of credit risk because of its connectivity with environmental condition and climate change. Environmental Risk Rating (ERR) is obligatory above the threshold as mentioned in Guidelines on ERM for banks and NBFIs. ERR is applicable for the projects as well as the credit facility that fall above the threshold limit. According to guidelines, all banks and NBFIs have started environmental risk rating for projects. Total amount of Taka 1242.76 billion was disbursed in 52776 rated projects out of 60175 rated projects in FY16 (Table 3).

Table 3 : Environmental risk rating of banks and NBFIs

Type of banks	2014-15			2015-16		
	No. of projects rated	No. of rated projects financed	Amount disbursed in rated projects	No. of projects rated	No. of rated projects financed	Amount disbursed in rated projects
SCBs	1804	1718	28.8968	1967	1916	48.40
DFIs	225	225	3.8243	38	50	2.35
PCBs	40575	33897	1281.5271	52182	46531	1944.82
FCBs	2855	1375	109.2305	2974	1717	134.84
NBFIs	2467	2398	76.5783	3014	2562	112.34
Total	47926	39613	1500.057	60175	52776	2242.76

Note : Amount disbursed figures are in billion Bangladeshi Taka.

Source: Bangladesh Bank, Annual Report and Sustainable Finance Department. Financial year 2014-2015 and 2015-2016.

4.4. Climate Risk Fund and Green Marketing

Total amount of utilization from climate risk fund by twenty two banks and for green marketing by 29 banks were Taka 455.7 million and Taka 53.5 million respectively in FY16. For the financial institutions total amount of utilization from climate risk fund was Taka 3.9 million and total expenditure for green marketing was Taka 2.7 million in FY16.

4.5. Online Banking and Energy Efficiency

55 banks out of 56 banks have online branches in FY16 whereas the number of banks was same in FY15. Online branches are 75.1 percent of total branches in FY16 which were 68.1 percent in FY15. Green banking policy has pursued the banks to establish branches powered by solar energy. The number of branches powered by solar energy stood at 493 in FY16 and this was 416 in FY15.

4.6. BB's Refinance Schemes for Green Products/Sectors

To promote renewable energy and environment friendly financial activity of Bangladesh, BB has formulated a revolving refinance scheme from its own source amounting Taka 2.0 billion in 2009. Refinance facilities are extended to the Participating Financial Institutions (PFIs) in this purpose. To avail refinance facility till 30 June 2015, 37 banks and 15 NBFIs have signed participation agreement with BB. Initially only 5 products were eligible for refinance. BB has increased the green product lines under the scheme to 50 in FY16. BB segregated these products into 11 categories which are: renewable energy, energy efficiency, solid waste management, liquid waste management, alternative energy, fire burnt brick, non fire block brick, recycling and recyclable product, green industry, ensuring safety and work environment of factories and miscellaneous. The cumulative refinanced amounts of the scheme up to June 2016 have been Taka 2811.7 million.

Total disbursement of refinance scheme for green products through BB increased by 133.7 percent to Taka 919.7 million in FY16 in comparison with Taka 393.5 million in FY15. Product-wise total disbursement for green products under refinance scheme increased in. The disbursement trend of this fund is given in Table 6.4 and Chart 6.1. In September 2014, BB has introduced a refinance scheme funded by liquidity of Shariah based banks and NBFIs in excess of their requirement which will be explicitly utilised for direct green finance of the said banks and NBFIs. These banks and NBFIs can utilise this fund for financing in the 50 products identified under BB refinance scheme.

Table 4. Utilization trend of BB refinance scheme for green products

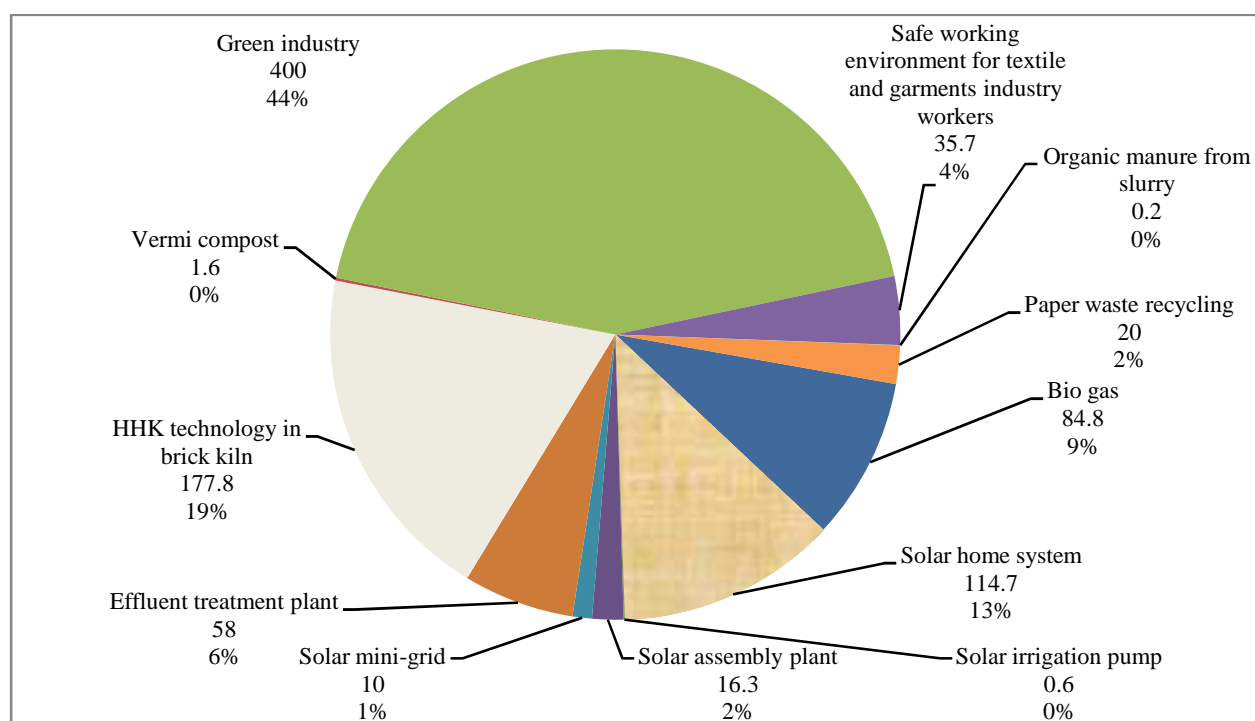
Sectors	FY12	FY13	FY14	FY15	FY16
Bio gas	133.2	113.6	212.8	83.3	84.8
Solar home system	10.5	40.2	32.2	87.5	114.7
Solar irrigation pump	8.4	0	17.9	26.5	0.6
Solar assembly plant	248.8	122.7	49.6	148.1	16.3
Solar mini-grid	0	0	0	0	10
Effluent treatment plant	22.2	57.4	10	0	58
HHK technology in brick kiln	55	172.2	59	47	177.8
Vermi compost	0	0	0	1.1	1.6
Green industry	0	0	0	0	400
Safe working environment for textile and garments industry workers	0	0	0	0	35.7
Organic manure from slurry	0	0	0	0	0.2
Paper waste recycling	0	0	0	0	20
Total	478.1	506.1	381.5	393.5	919.7

Note : Figures are in billion Bangladeshi Taka.

Source: Bangladesh Bank, Annual Report, 2014-15 and Sustainable Finance Department

The shares of financing among green product have been depicted in Figure 1.

Figure 1 Shares of green products in refinancing: FY16



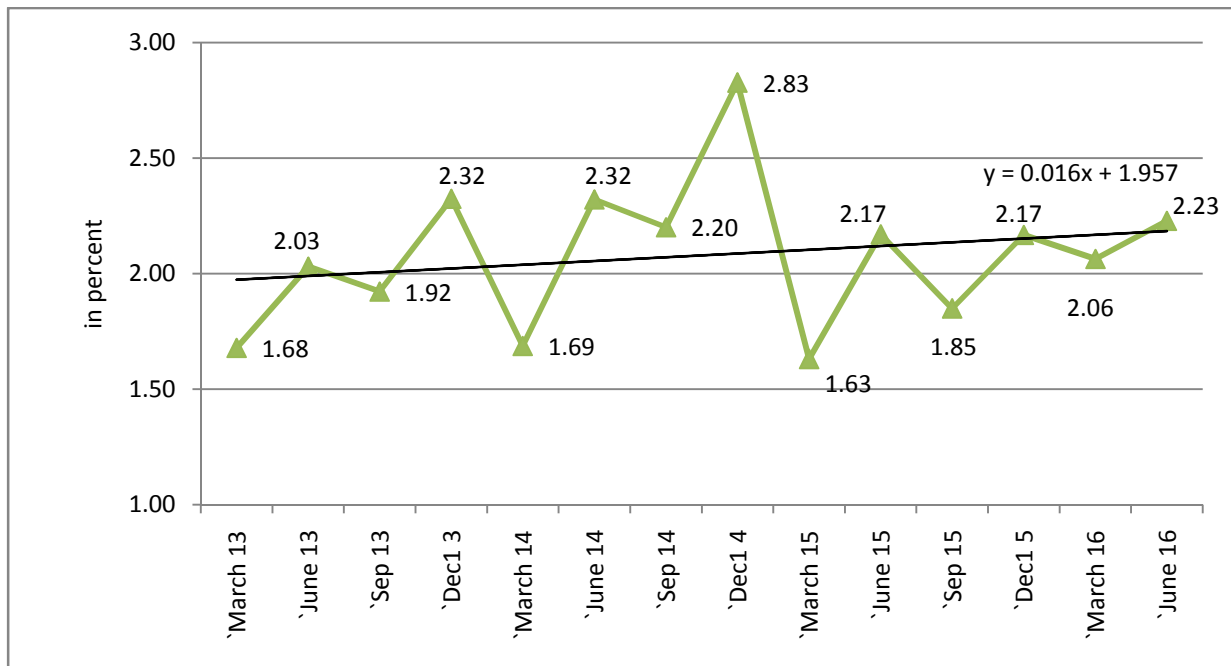
Source: Bangladesh Bank, Sustainable Finance Department. Financial year 2015-2016

To improve the efficiency of the brick kiln through efficient use of technology and energy including reducing Green House Gas (GHG) and Suspended Particulate Matter (SPM) on lending facilities namely “Financing Brick Kiln Efficiency Improvement Project”, has been established in BB financed by Asian Development Bank (ADB) in 2012. In this disbursement process, total amount of loan from ADB is about USD 50.0 million or equivalent Taka. It has two parts: Part-A: USD 30.0 million (approximately)/equivalent Taka will be provided for conversion of Fixed Chimney Kiln (FCK) to improved zigzag kiln and Part-B: about USD 20.0 million/equivalent Taka for establishment of new Vertical Shaft Brick Kiln (VSBK), Hybrid Hoffman Kiln (HHK) and Tunnel Kiln. On lending facilities are extended to the PFIs in this purpose. Till 30 June 2016, 35 banks and 19 NBFIs have signed participation agreement with BB. Up to June 2016, USD 16.21 million has been disbursed under this project.

4.7. Trend of Green Financing as Share of Total Bank Advances

The share of green financing to total bank advances ratio was 1.68 percent in first quarter of 2013. Then it started increasing gradually and reached at 2.83 percent in q4 of 2014. Later it showed mixed trend. It stood at 2.23 at the end of q2 of 2016. Green banking as a share of total bank advances and its trend are depicted in figure 2.

Figure 2 Quarterly green finance and total bank advances ratio and its trend



Source: Bangladesh Bank, Sustainable Finance Department., Financial year 2012-2013 to 2015-2016.

5. Challenges in financing under Green Banking in Bangladesh

Financing under green banking in Bangladesh faces some challenges which includes diversification of Green banking products, lack of energy consciousness in adopting effective office time management and green building, paucity of adequate financing for mass transportation system' and want of motivation for more social responsibility services.

6. Policy Options and Conclusion

Following policies may be adopted in enhancing green financing

- (i) Promoting diversification of green products: Undertaking bold steps for diversification of green products by participatory banks and NBFIs
- (ii) Promoting energy consciousness: Mass awareness should be created for adopting effective office time management, green office, residential and factory building
- (iii) More funds in green projects: Banks should be encouraged to allocate more funds in green projects
- (iv) Arranging green fares: Attracting attention of entrepreneurs about green finance and projects, fares may be arranged at district levels.

As green banking has become a vital tool for sustainable financing, Bangladesh Bank has undertaken different initiatives to promote green banking activities in Bangladesh. Motivated by Bangladesh Bank, banks and NBFIs have started to implement different programs of green banking. The state-owned banks are lagging behind private banks in terms of making branches online. The present paper has used secondary data to attain its objectives. Further research needs to be conducted using data based on field survey in designing and implementing proper policies for smooth expansion of green banking activities in Bangladesh.

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