

Impact of Sustainable Banking Policies and Products in Bangladesh

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Foreword

As part of the ongoing dissemination of BIBM research outputs, the present research monograph contains the findings of the research project: *“Impact of Sustainable Banking Policies and Products in Bangladesh”*.

Banks and financial institutions of the country are responding to the policy initiatives on sustainable banking and brought visible changes in terms of installing sustainable finance products and processes. It is the investment ventures on social and environmental considerations alongside financial returns that are the ultimate ground to realize the benefits of sustainable banking policy and products. May be at limited scale, there are scattered socially and environmentally sustainable business ventures by drawing sustainable finance facilities of banks and financial institutions throughout the country. Impacts of these initiatives may be captured both at implementation, output, and outcome stages; and outcomes may be assessed at short-term and long-term segments.

It gives me immense pleasure, on behalf of BIBM, to offer this important resource to the practitioners of the banks as well as to the academics and common readers. I hope this monograph will be a useful reference material for banks as well as regulators involved in implementing sustainable banking policies in the banking sector of Bangladesh.

We do encourage feedback from our esteemed readers on this issue which certainly would help us to improve upon our research activities in the years to come.

Md. Akhtaruzzaman, Ph.D.
Director General, BIBM

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We have completed the research project with the immense support from many persons, especially from officers and executives of different banks.

We would extend our gratitude to Dr. Md. Akhtaruzzaman, honorable Director General, BIBM for his valuable guidance and suggestions to complete the study in a comprehensive manner. We are also very thankful to all of our faculty colleagues for their comments and positive suggestions to carry out our research.

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Finally, we would like to thank all of those who extended their support in our teamwork.

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Abbreviations

BB	Bangladesh Bank
CSR	Corporate Social Responsibility
CSRD	Corporate Sustainability Reporting Directives
ERM	Environmental Risk Management
ESG	Environmental, Social, and Governance
ESRM	Environmental and Social Risk Management
FCBs	Foreign Commercial Banks
GTF	Green Transformation Fund
PCBs	Private Commercial Banks
SBFN	Sustainable Banking and Finance Network
SBs	Specialized Banks
SDGs	Sustainable Development Goals
SFD	Sustainable Finance Department
SFDR	Sustainable Finance Disclosure Regulation
SOCBs	State-owned Commercial Banks

Executive Summary

Sustainable banking policies are formulated and products are introduced with the goal of making investment and funding decisions that are mainly undertaken on the basis of Environmental, Social, and Governance (ESG) considerations. For commercial banks and financial institutions, the approach goes beyond profitable business decision making. Commercial banks stand on footing by ensuring financial soundness and ultimately move for sustainability by ensuring environmental, social, and governance framework for sustainability. It is well-recognized that the environmental and social elements of sustainable banking have notable implications for Sustainable Development Goals (SDGs) to be attained by 2030. Sustainable banking follows the principle of taking care of all stakeholders and the activities are within the scope of Corporate Social Responsibility (CSR) of banks. Sustainable banking policies and products received newer impetus in the context of COVID-19 and the global sustainable debt market marked a reasonably high growth rate. However, success of sustainable banking policies and products can truly be assessed and evaluated by their impacts on addressing social and environmental concerns in the society.

In the context of Bangladesh, though several early policy initiatives and banking ventures may be tagged with the social aspect of sustainable banking, environmental issues received focus mainly since 2011 when the central bank of the country issued ‘Green Banking Policy Framework’ and ‘Environmental Risk Management (ERM) Guideline’ to promote green banking in the country. Bangladesh Bank’s refinancing schemes to promote green financing and initiatives for green governance and reporting frameworks added to the central bank’s policy efforts to push banks and non-banks financial institutions to adopt green banking activities. In the sustainable banking policy front, introducing ‘Environmental and Social Risk Management (ESRM) Guideline’ (introduced in 2017 and updated in 2022) and ‘Sustainable Finance Policy’ are notable initiatives to combine social, environmental and transparency issues within the broad gambit of sustainable banking.

Banks and financial institutions of the country are responding to the policy initiatives on sustainable banking and brought visible changes in terms of installing sustainable finance products and processes. It is the investment ventures on social and environmental considerations alongside financial returns that are the ultimate ground to realize the benefits of sustainable banking policy and products. May be at limited scale, there are scattered socially and environmentally sustainable business ventures by drawing sustainable finance facilities of banks and financial institutions throughout the country. Impacts of these initiatives may be captured both at implementation, output, and outcome stages; and outcomes may be assessed at short-term and long-term segments.

On the background, the seminar paper attempts to examine the impact of sustainable finance policies and products in the context of Bangladesh. Implications of sustainable finance policies and products are examined both from demand and supply perspectives. Published papers/studies on the issues are reviewed to capture global contexts of the issues. Data gathered from the Sustainable Finance Department (SFD) of Bangladesh Bank, four primary survey, and case studies are the foundation of the paper. Questionnaire surveys are conducted at bank and branch levels.

For the paper, the concept of ‘Sustainable Banking’ has narrowly been perceived as the sustainable banking policy and products identified as part of ‘Sustainable Finance Policy’ of the Bangladesh Bank. Social and environmental impacts of sustainable ventures regarding changes in individual and community welfare are basically based on interviews/opinions and perceptions of the entrepreneurs and bankers. This seminar paper has been finalized after accommodating the comments of the discussants and participants of the seminar. The major observations and recommendations are summarized below:

Progress towards attaining goals of suitable financing in the context of Bangladesh has been recognized, and despite challenges, there are policy and regulatory interventions supportive of the banks and financial institutions. It is really inspiring that Bangladesh has been placed ahead of all South Asian countries in the ‘Advancing’ category in terms of the progress in sustainable finance by IFC-SBFN, however, policy target should be at least to reach the group of emerging countries like China, Indonesia, etc. that are in the category of ‘Maturing’. And for that Bangladesh’s approach may not match with several other global emerging economies that have relatively strong bond market. Green bonds became increasingly popular, and in several instances developed and emerging economies are heavily relying on these in their green transformation process and for sustainable growth. However, green bond or similar securities and engineered instruments may not deliver in the context of Bangladesh where bond and securities market are to achieve the due mark. It is thus Green Loan that has to play major role, and Bangladesh Bank has a remarkable role to play. It is broadly about customization of regulatory and policy approach considering the country’s financial market. Regarding future product, ‘Sustainability Linked Loans’ tagged with a very attractive cost of fund might help attract entrepreneurs in sustainable ventures.

Despite improvement in the governance framework for sustainable finance, volume of disbursement remained insignificant, and thus impacts may not be distinctively visible in the macro development space of the country. However, there are noticeable impacts of the green and sustainable entrepreneurship on financial and economic inclusion, creation of green jobs, and offering positive externalities at local levels and underserved localities. Despite several policy efforts, appropriate incentive (both positive and negative)

frameworks are yet to be established to inspire banks and entrepreneurs. Especially, sustainable business ventures should be supported with marketing and creating favorable competitive environment through monetary and fiscal support. Success of a number of sustainable finance products heavily rely on the performance of multi-stakeholders. If these stakeholders and service providers fail both the business and the finance would not sustain.

Bankers and their clients need to be aware of the products, businesses, technology, and be convinced of the potential socio-economic and environmental benefits of a green and sustainable venture for expansion of the sustainable entrepreneurship. Sustainable finance can be sustained only when the supported ventures come up with the desired benefits and outcomes. Entrepreneurs appeared to be more vulnerable than bankers in terms of the capacity and awareness of sustainable finance and business. Training and capacity gaps of the bank executives are reflected both at bank and branch level surveys. Top management and board of banks must also be brought under awareness and motivation for noticeable expansion of the sustainable finance portfolio, and for implementing in-house environment management in a big way.

Social and environmental impacts of green/sustainable ventures (impact disclosure) in response to the sustainable financing may come under regular reporting and disclosure. Alongside the current reporting requirements (rural-urban, and male-female composition of the clients), the central may think of identifying other measurable impacts like creation of green jobs, benefits to the low-income people, and other social and environmental benefits to capture outcomes of the sustainable financing and the associated entrepreneurship.

Impact of Sustainable Banking Policies and Products in Bangladesh

1. Introduction

Sustainable banking policies are formulated and products are introduced with the goal of making investment and funding decisions that are mainly undertaken on the basis of Environmental, Social, and Governance (ESG) considerations. For commercial banks and financial institutions, the approach goes beyond profitable business decision making. Commercial banks stand on footing by ensuring financial soundness and ultimately move for sustainability by ensuring environmental, social, and governance framework for sustainability. It is well-recognized that the environmental and social elements of sustainable banking have notable implications for Sustainable Development Goals (SDGs) to be attained by 2030. Sustainable banking follows the principle of taking care of all stakeholders and the activities are within the scope of Corporate Social Responsibility (CSR) of banks. Sustainable banking policies and products received newer impetus in the context of COVID-19 and the global sustainable debt market marked a reasonably high growth rate.¹ However, success of sustainable banking policies and products can truly be assessed and evaluated by their impacts on addressing social and environmental concerns in the society.

In the context of Bangladesh, though several early policy initiatives and banking ventures may be tagged with the social aspect of sustainable banking, environmental issues received focus mainly since 2011 when the central bank of the country issued ‘Green Banking Policy Framework’ and ‘Environmental Risk Management (ERM) Guideline’ to promote green banking in the country. Bangladesh Bank’s refinancing schemes to promote green financing and initiatives for green governance and reporting frameworks added to the central bank’s policy efforts to push banks and non-banks financial institutions to adopt green banking activities. In the sustainable banking policy front, introducing ‘Environmental and Social Risk Management (ESRM) Guideline’ (introduced in 2017 and updated in 2022) and ‘Sustainable Finance Policy’ are notable initiatives to combine social, environmental and transparency issues within the broad gambit of sustainable banking.

Banks and financial institutions of the country are responding to the policy initiatives on sustainable banking and brought visible changes in terms of installing sustainable finance products and processes. It is the investment ventures on social and environmental considerations alongside financial returns that are the ultimate ground to realize the benefits of sustainable banking policy and products. May be at limited scale, there are

¹ The issuance of sustainable debt reached close to USD 750 billion by 2020 by attaining over 23 percent growth rate (UN Environmental Program Initiative, 2021).

scattered socially and environmentally sustainable business ventures by drawing sustainable finance facilities of banks and financial institutions throughout the country. Impacts of these initiatives may be captured both at implementation, output, and outcome stages; and outcomes may be assessed at short-term and long-term segments.

On the background, the seminar paper attempts to examine the impact of sustainable finance policies and products in the context of Bangladesh. Implications of sustainable finance policies and products are examined both from demand and supply perspectives. Published papers/studies on the issues are reviewed to capture global contexts of the issues. Data gathered from the Sustainable Finance Department (SFD) of Bangladesh Bank, four primary survey, and case studies are the foundation of the paper. Questionnaire surveys are conducted at bank and branch levels. Bank level data are gathered from sustainable finance units of the head offices of 37 banks (Table-1.1 and Appendix Table-A1); and 27 branch level data were collected from five districts of five divisions (Table-1.2 and Appendix Table-A2).

Table 1.1: Sample Distribution of Banks [Survey]

State-owned Commercial Banks (SOCBs)	06
Specialized Banks (SBs)	02
Private Commercial Banks (PCBs)	27
Foreign Commercial Banks (FCBs)	02
Total	37

Table 1.2: Sample Distribution of Bank Branches with Locations [Survey]

Dhaka	04
Chattogram	06
Rangpur	05
Bogura	06
Barguna	06
Total	27

Further two surveys are conducted with 50 bank officials (Table-1.3) and 83 entrepreneurs (Table-1.4) to capture data and opinions from supply and demand perspective from Dhaka and four districts of four divisions (Chattogram, Rangpur, Barishal, and Rajshahi) of the country. A FGD has been conducted to validate data, information and cases that were participated by 37 participants from 25 banks (List attached-Appendix 3A). Entrepreneurs are selected consulting local chamber and financing banks.

Table 1.3: Sample Distribution of Bank Employees with Locations [Survey]

Dhaka	10
Chattogram	12
Rangpur	10
Bogura	11
Barguna	08
Total	50

Table 1.4: Sample Distribution of Entrepreneurs [Survey]

Dhaka	08
Chittagong	16
Rangpur	17
Bogura	20
Barguna	22
Total	83

Mini cases are prepared by gathering information/data from selected sustainable/ green entrepreneurs and the financing bank branches to understand the impact of the business ventures and the associated supply-side issues. A multistage process model has been used to assess impact of a sustainable/green business venture: implementation and outcome stages (Table-1.5)².

Table 1.5: Multi-stage Process Model

<i>Implementation Stage</i>			<i>Outcome Stage</i>	
Input	Process	Output/Services	Short-term outcome	Long term Outcome
<i>Inclusivity-engagement of local resources</i>	<i>Sustainable process/Technology/marketing</i>	<i>Consumer groups and social and environmental value</i>	<i>Immediate impact of the consumer and community</i>	<i>Impact on the community society over time</i>

For the paper, the concept of ‘Sustainable Banking’ has narrowly been perceived as the sustainable banking policy and products identified as part of ‘Sustainable Finance Policy’ of the Bangladesh Bank. Social and environmental impacts of sustainable ventures regarding changes in individual and community welfare are basically based on interviews/ opinions and perceptions of the entrepreneurs and bankers. This seminar paper has been finalized after accommodating the comments of the discussants and participants of the seminar.

² Based on <https://www.sopact.com/theory-of-change>; <https://docs.gatesfoundation.org/documents/guide-to-actionable-measurement.pdf>.

The seminar paper is organized into five sections. Following a discussion on the background and methodological issues in Section-1, Section-2 is about global development in terms of sustainable banking policies and products. Section-3 covers sustainable banking policy development and products in the country. Section-4 examined the impacts of sustainable banking policies and products in Bangladesh from demand and supply perspectives with the associated challenges. Finally, section-5 provides certain recommendations.

2. Sustainable Banking Policies and Products: Global Contexts

Sustainable banking market is taking new shape with several incidences and initiatives that have implications for sustainable banking and financing activities. COVID-19 and associated devastations probably is the most critical occurrence to remind the globe of the necessity of addressing sustainability concerns. Policymakers, investors, and financial service providers are becoming increasingly aware on the ‘Net Zero Targets’ typically with a timeline during 2030-50 (Nordea’s Sustainable Advisory Team, 2022). It is inspiring that media, civil society and policymakers became more active and responsive to the green washing activities. Continuous progress and efforts are on targeting the harmonization of the sustainability reporting. The scope of sustainable banking and activities are getting widened following a holistic approach by bringing social issues into the sustainable finance policy and regulatory space by recognizing newer taxonomy. Market demand broadened and there is international call for action with supportive policy framework throughout the globe (Box-2.1).

Box 2.1: Supportive Policy Approach in the Global Context

European Union: Launching of International Sustainability Standard Board, and sets of regulations like Corporate Sustainability Reporting Directives (CSRD), Sustainable Finance Disclosure Regulation (SFDR) have drawn attention in recent times.

EMEA (Europe, Middle East, Africa): EMEA countries are adopting fresher policies; Russian Central Bank adopted Sustainable Investment principles for the usage of green and social bonds in 2020.

United States: Aligning with the global policy trends, USA introduced Disclosure Simplification Act 2021 for further ESG promotion in the financial sector.

China & Singapore: China is actively working on green bond promotion; People’s Bank of China and Monetary Authority of Singapore are amongst funding members of the Central Bank Network for greening the financial system formed at One Planet Summit in Paris in 2017.

Source: Based on Nordea’s Sustainable Advisory Team, 2022; Nicholls, 2021.

Policymakers and central banks of Asian countries are amongst the front runners in introducing and guiding banking and the financial sector to adopt environmental and social

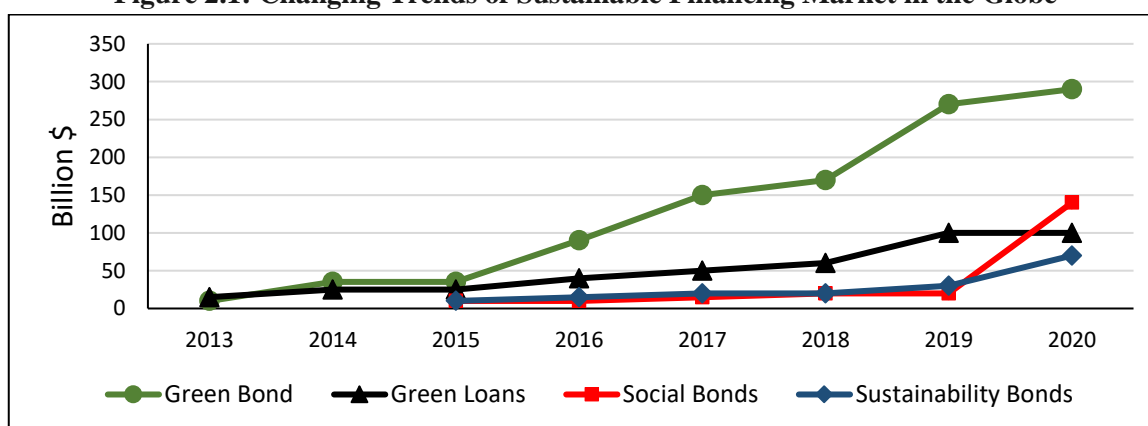
concerns in their banking and financing actions. Bangladesh, China, India, Indonesia, Philippines, Thailand and Vietnam are amongst that have already undertaken concrete policy initiatives to promote sustainable and green finance (Box-2.2).

Box 2.2: Supportive Policy Frameworks for Sustainable Banking Development	
China	<ul style="list-style-type: none"> • Green Credit Policy introduced by a joint effort of China Banking Regulatory Commission, Environment Ministry, and the Central Bank (2007) • Green Securities Policy by the China Securities Regulatory commission (2008) • Green Insurance Policy by the China Insurance Regulatory commission (2008) • Establishment of Green Finance Committee & Guideline on Green Financial System (2016) • Mandatory ESG disclosure for listed companies and bond issuers (2018)
India	<ul style="list-style-type: none"> • CSR and Sustainable Development Guideline; Role of Banks (2007) • Economic, Social and Environmental responsibility voluntary guideline by the Securities and Exchange Board of India-SEBI (2011) • Responsible Financing Guideline by the Reserve Bank of India (2015) • Guidelines on Issuance of Bond and Disclosure by SEBI (2017)
Indonesia	<ul style="list-style-type: none"> • Green Lending Model Guidelines for Mini Hydro Power Plants by Bank Indonesia (2012) • Roadmap for Sustainable Finance in Indonesia by the Financial Services Authority (2014) • Regulatory and Issuance framework for Green Bond by the OJK-Supervisor of Public and Non-bank financial institutions (2015)
Philippines	<ul style="list-style-type: none"> • National Disaster Risk Reduction and Management Law by the Government of Philippines (2008) • Corporate Responsibility Act by the Securities and Exchange Commission of Philippines (2011) • Joint Catastrophe Risk Insurance Facility by the Government of Philippines (2015)
Thailand	<ul style="list-style-type: none"> • Guidelines for Sustainability and CSR Reporting by the Securities and Exchange Commission of Thailand (2008) • Sustainability Development Roadmap for Listed Companies by the Securities and Exchange Commission of Thailand (2014)
Vietnam	<ul style="list-style-type: none"> • Directives on Green Credit Growth and Management by the State Bank of Vietnam-SBV (2015) • Action Plan for Banks for the Implementation of Green credit growth by SVB (2016) • Renewed Commitment to Implement the Green Growth Program for Preventing Climate Change by SVB (2017)
Source: ADB, 2020; ADBI Working Paper (Volz, Ulrich), 2018; SBFN and IFC, 2022	

The policy frameworks have been offered by the government, central banks, financial service authorities, and securities regulators covering securities (green bond) and non-securities (bank financing) segments. These are in the form of acts (Philippines, etc.) or voluntary guidelines (India, etc.). There were scattered (Vietnam, etc.) or integrated (China, etc.) approach (Box- 2.2).

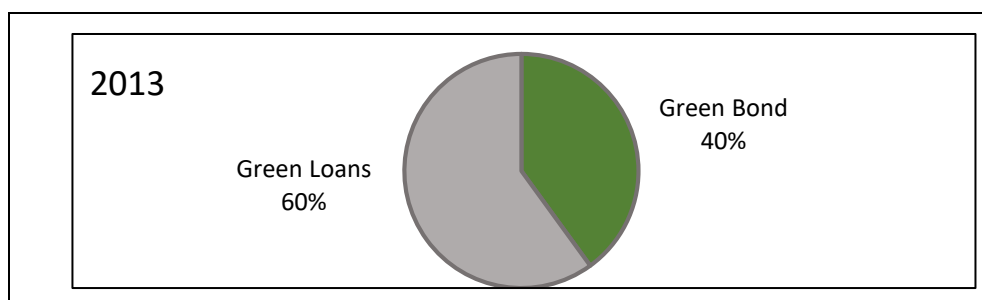
Several green financial products came up and became increasingly popular with the supportive policy framework throughout the globe. Though the growth of Green Loans has been consistent, it is the Green Bond³ that received the highest impetus (Figure-2.1) during last decade and became dominant in the sustainable financing product market (Figure-2.2). Social Bonds and Sustainability Bonds are getting popularity in recent times (Figure-2.1)⁴. Sustainability Linked Financing Products (Loans/Bonds)⁵ is newer form of instruments with the tagged social and environmental obligation.

Figure 2.1: Changing Trends of Sustainable Financing Market in the Globe



Source: Sustainalytics, 2021

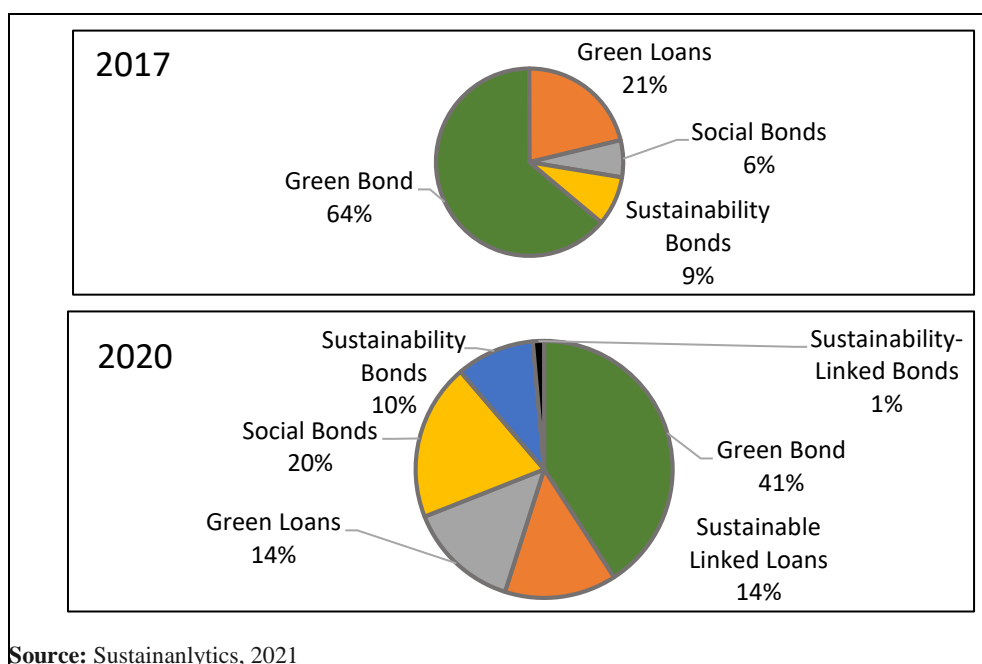
Figure 2.2: Evolution of Sustainable Financing Market



³ Global cumulative issuance surpassing the USD1 trillion mark in 2020 (Climate Bonds, 2020), and issuance is expected to reach Euro 2 trillion in the next three years (The Asset, 2021).

⁴ Issuance of social bonds, sustainability bonds, blue bonds, gender bonds, and most recently Covid-19 bonds gained momentum (Bullard, 2021).

⁵ The interest rates on loans/bonds would go up if pre-determined social or environmental targets are not attained.



Business and entrepreneurs are increasingly showing interest both in developed and developing countries with growing awareness and incentives (Bullard, 2021). This is particularly reflected in the rapidly expanding global green bond market that experienced close to 50 percent year-to-year increase in 2022 (JP Morgan, 2022). According to a projection of Bloomberg Intelligence (2021) total ESG assets may reach USD 53 trillion which is more than one-third of the USD 140.5 trillion of projected assets under management by 2025. International agreements⁶ and compliance requirements⁷ in certain industries became major forces as pressure factors for the banks/financial institutions and entrepreneurs and businesses to go for sustainable/green ventures (UNEP-FI, 2021). Both fiscal authority and central banks have been offering incentives to help transform economy by adopting sustainable financing (Peers, 2022). However, a lot to be achieved, and the commonly identified challenges and required incentives include ‘awareness development amongst regulators, market participants’, ‘developing capacity on environmental and social risk analysis by the service providers’, ‘installing ESG disclosure requirements’, ‘developing green bond market’, ‘introducing green/climate risk insurance’, ‘introducing long term refinancing sources of funds’ (ADB, 2020).

‘Sustainable Finance Impact Disclosure’ are getting growing recognition as part of disclosure and reporting framework of banks and businesses. ‘Categorization of Business

⁶ For example, Paris Climate Agreement, European Union Green Deal, UN SDGs, Principles of Responsible Banking of UN, etc.

⁷ For example, Apparel importers are forcing RMG producers adopting sustainable production process and building green factories.

Activities’⁸ and ‘Stakeholders Engagement’⁹ may offer idea about social and environmental impacts of financing and entrepreneurship activities. There is range of initiatives/approaches that aims at assessing or measuring the impacts of sustainable finance activities. Environmental and social assessments, independent review, and case studies might be important tools to identify the impacts of sustainable finance and the associated entrepreneurship activities (Nicholls, 2021).

3. Sustainable Banking Policies and Products: Bangladesh Contexts

Policy and strategic initiatives by the Bangladesh Bank (BB) related to the green and sustainable financing of the last decade can be linked with the country’s movement towards sustainable banking. The comprehensive circular¹⁰ of BB on ‘Policy Guidelines for Green Banking’ is a remarkable step on the way to develop green banking practices in the country. The policy document is a guiding framework for the banks and NBFIs of the country for addressing environmental risk and upholding energy sustainability in their in-house and financing operations. Formulation and the circulation of the Guideline on Environmental Risk Management (ERM)¹¹ in 2011 is another notable initiative of the BB to streamline solutions for managing environmental risks in the banking and financial sector. This ERM guideline had been expanded and improved by adding social aspects and renaming the document ‘Environmental and Social Risk Management Guideline (ESRM)’ in the year 2017.¹² In 2022 an updated version of ESRM has been circulated for banks and NBFIs that is currently in force.¹³ ESRM prescribed guidance note on Environmental and Social Impact Assessment (ESIA) under environmental and social risk management in the guideline.

Introduction of the ‘Sustainable Finance Policy’ on December 30, 2020, followed an integrated approach to sustainable and green financing under the broader and newer taxonomy that offered greater impetus to both quantitative and qualitative development of sustainable financing ventures by the banks and financial institutions. It is expected that all the concerned stakes including banks and NBFIs will be passionate, proactive and they will concentrate on Sustainable Finance Policy with due consideration in a collaborative and collective manner for making any challenge (if any) into opportunities. In 2020, SFD asked banks to promote sustainable financing through dedicated desks in their potential branches. BB’s refinancing funds for green financing have been extended to BDT 400

⁸ Businesses may be categorized based on their magnitude of environmental and social risks related to inclusion and human rights, climate change and bio-diversity, etc.

⁹ Engagement of local level and vulnerable segments of the society reflects positive sustainability impacts.

¹⁰ BB BRPD Circular No-2, February 27, 2011.

¹¹ BB BRPD Circular No-1, January 30, 2011.

¹² BB SFD Circular No-2, February, 2017.

¹³ BB SFD Circular No-3, June 26, 2022.

crore that covers 55 products under 9 broad categories (SDF, February 2020). In a further initiative, the scope of financing products increased to 68 where ‘affordable green housing’ is a notable inclusion. Installing Green Transformation Fund (GTF), and relatively recent launching of Technology Development/ Upgradation Fund are notable SFD initiatives.

Box 3.1: Key Policy Interventions by the BB for Green and Sustainable Banking		
2011	Green Banking Policy Guideline for Bank	Environmental Risk Management Guideline for Banks
2012	Uniform Reporting Format for Green Banking Activities	
2013	Extending Green Banking Policy Framework for NBFIs	
2014	Assigning Minimum Funded Green Financing Targets for Banks and NBFIs	
2015	Forming ‘Climate Risk Fund’ by the 10% CSR Funds of Banks and NBFIs	
2016	Instruction for Solar Panel, and Green Arrangement in the New Infrastructure of Banks & NBFIs	Renaming Green Banking Unit as ‘Sustainable Finance Unit’ and Forming Sustainable Finance Committee in Banks
2017	Environmental and Social Risk Management Guideline for Banks & NBFIs	Circulation of Green Product List for Banks & NBFIs
2018	New Quarterly Reporting Format on Green Banking by Banks & NBFIs	
2019	Considering Investment in Impact Fund for Green Purposes as Green Finance	
2020	Calculation of 5% Green Finance Target against Total Term Loan Disbursement Instead of Total Loan Disbursement	Green Banking will be Considered in Calculating CAMELS Rating
	Enhancing Refinancing Fund of BB to Support Banks & NBFIs	
	Introduction of Sustainable Banking Policy	Introduction of Sustainability Rating for Banks and Financial Institutions

2021	Technology Development/ Upgradation Refinancing Fund for Export-oriented Industries	Green Transformation Fund to Ensure Sustainable Growth in Export-oriented Sectors	
2022	Circulation of the Updated Version of ESRM Guidelines for Banks and NBFIs	Circulating New Guidelines on Corporate Social Responsibility	Policy on Green Bond Financing for Banks and NBFIs
Source: Compilation Based on SFD Published Infromation			

Sustainable banking products are facilitated from Bangladesh Bank (BB) through their refinancing schemes, and by banks & financial institutions. In case of inclusion of new products/initiatives by BB, the due consideration of its possible impact on Financial Profitability, Environmental and Social Feasibility and Pre-Risk Assessment of the proposed product/initiative is considered. This takes place through a long process of in-house study and research within BB, having technical support from experts (whenever felt necessary), three tier consultation (Mail/E-mail based consultation, web-based consultation and live consultation) with banks and FIs, consultation with development partners working on relevant issues in financial sector. Also, BB has introduced several refinance schemes to promote low-cost financing for these products/initiatives.

On the other hand, structured process for inclusion of new products/initiatives has been mentioned in Chapter E of the Sustainable Finance Policy for Banks and Financial Institutions 2020. Banks and FIs will apply to General Manager, Sustainable Finance Department, Bangladesh Bank, Head Office through the letter signed by the respective Managing Director/Chief Executive Director for the approval before financing to any new products/projects/initiatives as Sustainable Finance (Green Finance or Sustainable linked finance) beyond the products/projects/initiatives mentioned in this policy. A report must be attached with the application evaluating Financial Profitability, Environmental and Social Feasibility and Pre-Risk Assessment of new products. Upon the approval by Bangladesh Bank the proposed products/projects/initiatives will be considered suitable for Sustainable/ Green Finance.

According to SFD of BB, whether it is introduction of a policy or a product – BB takes opinions before and after, and also conducts demand-side surveys. BB has practices for technical support from experts (whenever felt necessary), three tier consultation (Mail/ E-mail based consultation, web-based consultation and live consultation) with banks and FIs, consultation with development partners working on relevant issues.

Regarding the evolution of sustainable financing products, BB commenced 3 products (Solar Energy, Bio-gas, and Effluent Treatment Plant) in 2009. To broaden the financing avenue for green products, BB established a revolving refinance scheme from its own fund in 2009. This list extended to 13 in 2013. The quest of BB was continued and in 2017 the list was widened covering 52 products/initiatives under 8 categories. The product line has been enhanced to 55 under 9 categories which then expanded to 11 categories and 68 products/ initiatives in 2020 (Box-3.2)

Box 3.2: Financing Products under Sustainable Banking		
1. Solar Home System	2. Solar Pico Grid	3. Solar Micro Grid
4. Solar Park	5. Solar Irrigation Pumping System	6. Solar PV Assembly/ Manufacturing Plant
7. Solar Water Heater Assembly/Manuf. Plant	8. Solar Nano Grid	9. Solar Mini Grid
10. Net Metering Rooftop Solar System	11. Solar Pump for Drinking Water	12. Solar Cooker Assembly/ Manufacturing Plant
13. Solar Air Heater & Cooling Manuf. Plant	14. Solar Powered Cold Storage	15. Small size biogas plants
16. Medium size biogas plants	17. Large size biogas plants	18. Integrated Cow Rearing and Bio-gas Plant
19. Wind power plant	20. Hydro Power Plant	21. Energy Auditor Certified machineries
22. Auto Sensor Power Switch Assembly Plant	23. Energy Efficient Cook Stove Assembly Plant	24. LED Bulb Manuf./Assembly Plant
25. Energy Efficiency Lime Kiln	26. Improved Rice Parboiling System	27. Pyrolysis Oil/Bio-crude Fuel Manufacturing Plant
28. Biological ETP	29. Combination of Biological-Chemical ETP	30. Conversion of Chemical ETP into Combination
31. Central ETP	32. Waste Water Treatment Plant	33. Sewage Water Treatment Plant
34. Methane Recovery and Power Production	35. Compost Production from Municipal Waste Plant	36. Hazardous Waste Management Unit/Plant
37. Medical Waste Management Unit/Plant	38. E-Waste Management Unit/Plant	39. Sludge Management Unit/Plant
40. PET Bottle Recycling Plant	41. Plastic Waste Recycling Plant	42. Paper Recycling Plant
43. Recyclable Bag Manufacturing Plant	44. Recyclable Poly Propylene Thread and Bag	45. Battery Recycling Plant
46. Compressed Block-Brick	47. Foam Concrete brick	48. Tunnel Kiln and HHK
49. Establishment of Certified Green Industry	50. Establishment of Certified Green Building	51. Green Featuring' in the Buildings/ Industries

52. Factory working environment and safety	53. Vermicompost production	54. Palm oil production
55. Organic manure production from slurry	56. Forestation (Social/integrated/Agro)	57. Organic Farming
58. Rooftop Agriculture/ Vertical Gardening	59. Fish cultivation in cage	60. Recycling System (IRS) fish cultivation
61. Integrated/ Bottom clean fish cultivation	62. Financing in Coastal Aquaculture	63. Floating system cultivation, Hydroponic
64. Financing in Cottage Industry	65. Community Investment for climate change	66. Financing in Green/Clean transportation projects
67. Sand-witch Panel	68. Eco Tourism	
Source: SFD, BB		

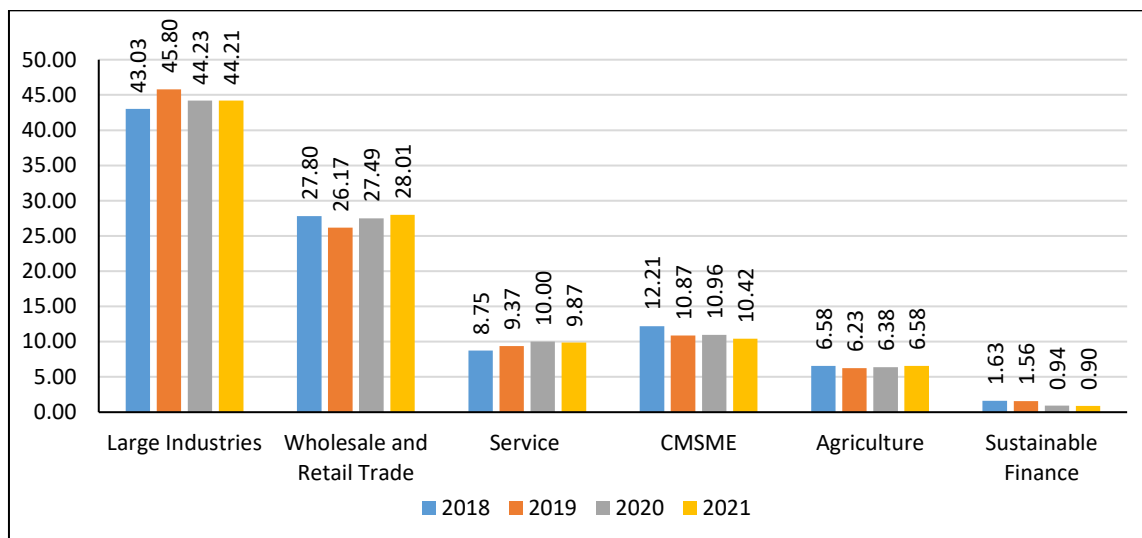
4. Impacts of Sustainable Banking Policies and Products: Supply and Demand Perspectives

Introduction of policies and sustainable banking products brought visible changes in the governance and financing of sustainable banking activities in Bangladesh. Now all banks and NBFIs of the country are having ‘Sustainable Banking Units’ and responsible bank executives are placed in these units to take care of environmentally and socially responsible financing. The overall progress of the sustainable banking activities of the country is comparatively better than the neighboring and emerging economies of the globe. According to the recent Sustainable Finance Progression Matrix¹⁴ of the Sustainable Banking and Finance Network (SBFN), most emerging economies are still at ‘Implementation Stage’ and within sub-category of ‘Developing’ phase (including other South Asian neighbors), whereas Bangladesh is placed as ‘Advancing’ phase (SBFN and IFC, 2022).

The supply side impact of sustainable banking policies and products may be examined from the point of view of changes in sustainable financing, and in-house environment management. Despite increase in the volume of sustainable finance, proportion of these social and environmental credit facilities remained insignificant at around 2 percent, excepting 2020 and 2021 when Covid-19 related stimulus affected credit disbursement under this head (Figure-4.1).

¹⁴ Based on ESG integration, climate risk management, and financing sustainability.

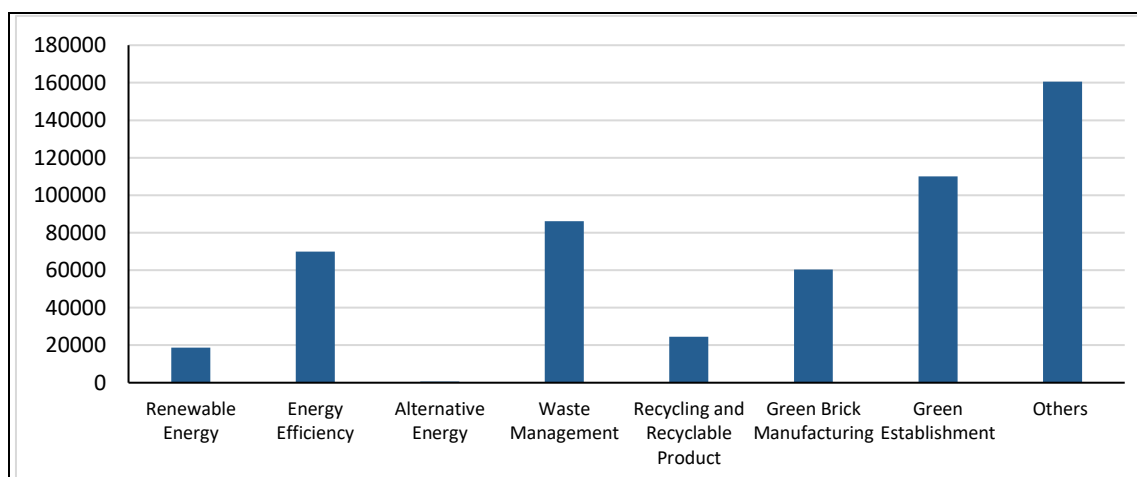
Figure 4.1: Comparative Status of Sustainable Finance by Banks during 2018-2021



Source: BB

Of the total broad categories of sustainable finance, energy efficiency, waste management, and green establishment received notable boosts in terms of volume of sustainable and green credit (Figure-4.2). Though Renewable Energy remained relatively behind in terms of volume, a remarkable number of clients were served under this category. Especially, finance for Solar Home System with relatively smaller volume of credit facilities has achieved remarkable expansion. BB refinancing has been a great source of finance for green industry/building and ETP (Figure-4.3). Green establishment¹⁵ received huge impetus following installing of the Green Transformation Fund by BB.

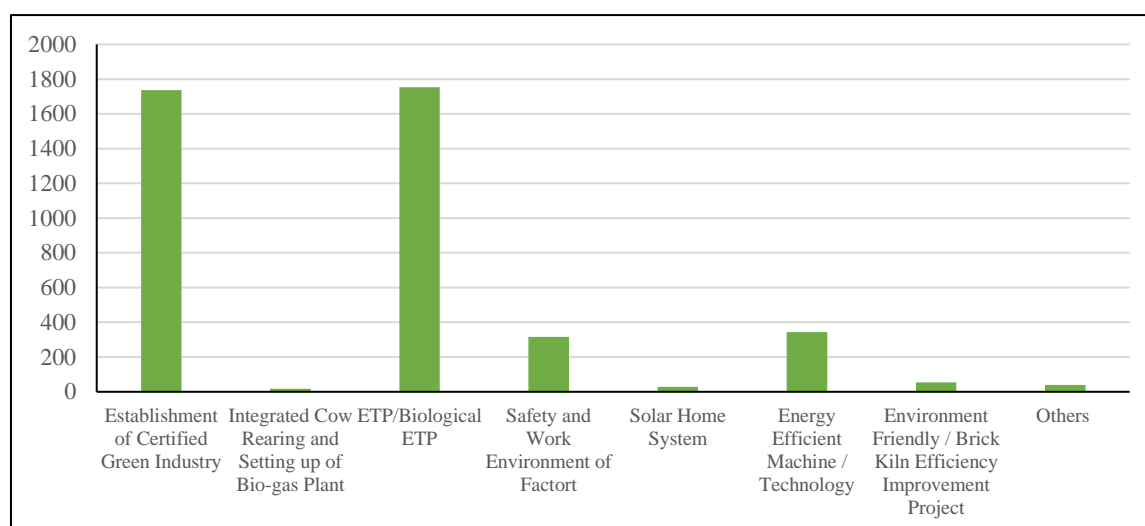
Figure 4.2: Total Sustainable Finance Disbursement by Bank during Last Five Years 2018-2022 [in Million BDT]



Source: SFD, BB

¹⁵ According to the Green Building Information Gateway (2022), Bangladesh has now 180 LEED (Leadership in Energy and Environmental Design) building.

Figure 4.3: Total Sustainable Finance Disbursement during Last Five Years 2018-2022 under BB Refinancing [in Million BDT]



Source: SFD, BB

Sustainable finance targets vulnerable section of society and is expected to contribute in financial inclusion (social aspect of sustainable finance). When only around 10 percent of the total credit portfolio has been disbursed to the rural areas, the figures for sustainable finance allocated to rural Bangladesh have been close to 70 percent (Table-4.1). Moreover, close to one-third of sustainable finance is going to women entrepreneurs (Table-4.2). Thus, sustainable finance has been a remarkable force to address both environmental and financial exclusion concerns of the country.

Table 4.1: Rural-Urban Composition of Clients of the Sustainable Finance

2018		2020		2022 (June)	
Urban	Rural	Urban	Rural	Urban	Rural
24%	76%	32%	68%	37%	63%

Source: BB, SFD

Table 4.2: Male-Female Composition of Clients of the Sustainable Finance

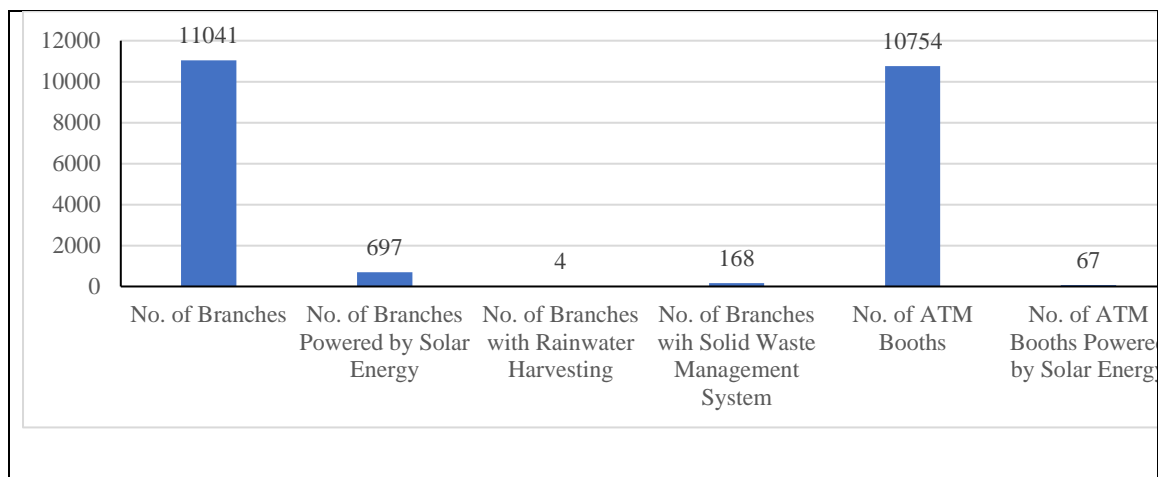
2018		2020		2022 (June)	
Male	Female	Male	Female	Male	Female
73%	27%	74%	26%	72%	28%

Source: BB, SFD

Visible change has also been taking place in terms of in-house environment management. Expansion of online and technology driven banking activities has implications for cost and environmental risk management. Internet banking, app-based banking, and online branches are expanding. Banks are taking steps for environmental conservation in their branches like using solar energy in the branches, ATM booths; a few branches of the PCBs and FCBs are also having rainwater harvesting and solid waste management system

(Figure-4.4). Several banks are having paper and power-saving guidelines and arrangements in their branches and head offices (as pointed out in KIIs)

Figure 4.4: Status in In-house Environment Management of Banks as of June 2022



Source: SFD, BB

Disclosure and reporting framework have crucial implications for the outcome of the sustainable financing activities. SFD issued a new Reporting Format in recent time in line with the new taxonomy and new requirements of compliance. Sustainability reporting is getting popular amongst commercial banks and business firms, and several banks/NBFIs have already adopted globally recognized format like GRI.¹⁶ Impact disclosure should be an integral part of reporting and disclosure format of banks. The reporting requirements by the SFD improved over the years, and currently, the quarterly data requirement on rural-urban, and male-female distribution of clients are associated with the impact disclosure.

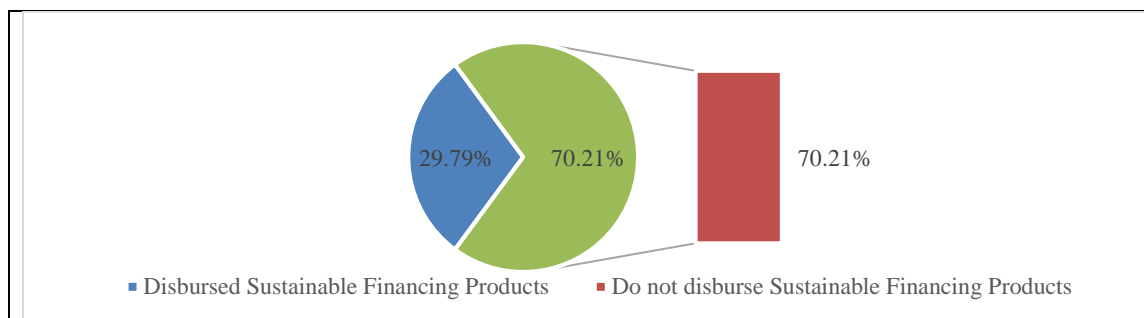
Table 4.3: Sustainable Finance Products financed by Banks [%]

Sustainable Finance Products	Percentage
Solar Products (1-14)	14.22%
Bio-Gas (15-18)	5.28%
Wind Power (19-20)	0.69%
Energy Efficiency (21- 27)	11.01%
Wastage Management ETP (28-45)	27.75%
Environment-Friendly Bricks (46-48)	8.72%
Green Industry/ Building (49-52)	12.16%
Green Agri (53-63)	11.70%
Green Cottage/ SME 64	4.13%
Others (65-68)	4.36%

Source: Survey Data [Bank Level]

¹⁶ As of July 2022, 13 new firms reported using GRI format of which five are banks. Thus, alongside Bank Asia Ltd, Prime bank Ltd and IDLC, Standard Bank Limited, BRAC Bank Limited, Shahjalal Islami Bank Limited, Jamuna Bank Limited, and Lanka-Bangla Finance Limited adopted standard GRI format.

Figure 4.5: Proportion of Branches Disbursed Sustainable Financing Products



Source: Survey Data [Branch Level]

Not all sustainable finance products are equally adopted by the banks. According to the bank level survey data, 28 percent banks disbursed at least one project of the Waste Management category (that includes 17 products noted in box 3.2), and for solar products (includes 14 products) it is around 14 percent banks (Table 4.3). As revealed in the branch level survey, of the branches, around 30 percent have experience in financing at least one sustainable entrepreneurship (Figure-4.5).

Table 4.4: Product Groups Familiarity amongst Bankers (Number)

Sustainable Finance Products	Percentage
Solar Products (1-14)	31.16%
Bio-Gas (15-18)	5.64%
Wind Power (19-20)	4.60%
Energy Efficiency (21- 27)	5.79%
Wastage Management ETP (28-45)	22.70%
Environment-Friendly Bricks (46-48)	2.67%
Green Industry / Building (49-52)	2.23%
Green Agriculture (53-63)	19.73%
Green Cottage/ SME (64)	2.08%
Others (65-68)	3.41%

Source: Based on Survey (Banks)

Table 4.5: Product Familiarity amongst Entrepreneurs

Sustainable Finance Products	Percentage
Solar products (1-14)	43.20%
Bio-Gas (15-18)	12.06%
Wind Power (19-20)	4.39%
Energy Efficiency (21- 27)	4.17%
Wastage Management ETP (28-45)	16.45%
Environment-Friendly Bricks (46-48)	4.39%
Green Industry / Building (49-52)	0.88%
Green Agriculture (53-63)	13.38%
Green Cottage/ SME 64	1.10%
Others (65-68)	0.00%

Source: Based on Survey (Entrepreneurs)

Sustainable finance products vary widely in terms of familiarity among bankers as revealed in the survey of bank executives. Products under the broad category of ‘Solar (43%)’, ‘Waste Management (22%)’, and ‘Green Agriculture (13%)’ are relatively more familiar than that of others (Table-4.4). According to the survey of entrepreneurs, as a whole, level of familiarity and awareness of sustainable finance products are even lower amongst entrepreneurs (Table 4.5). Tables 4.4 and 4.5 indicate the necessity of awareness and information dissemination on sustainable finance products targeting both bankers and entrepreneurs. Entrepreneurs are particularly vulnerable in this context.

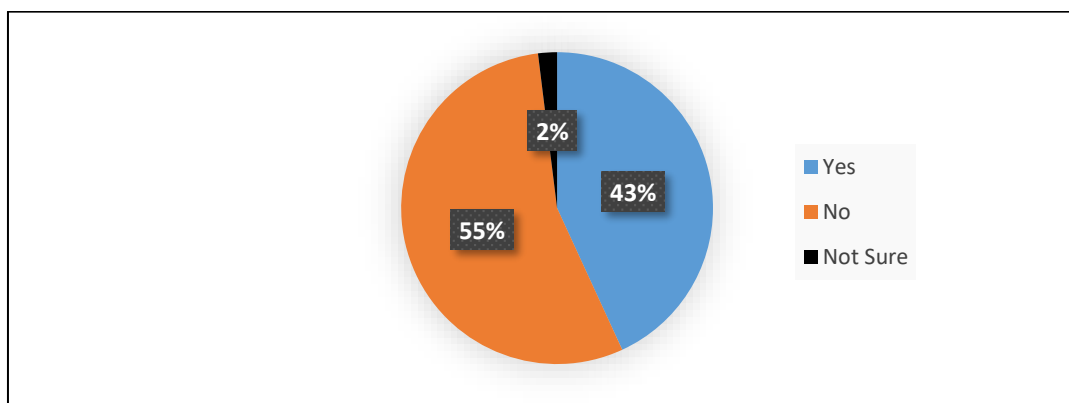
Table 4.6: Sources of Information of the Entrepreneurs (Number)

Sources	Percentage
Banks	39%
Social Media	11%
Relatives	17%
Business Entrepreneurs/ Users of products	17%
Others	17%

Source: Based on Survey (Bank Entrepreneurs)

Risk takers of green and sustainable entrepreneurship receive valuable information in the process of undertaking their sustainable venture. Banks have been their key information sources, as identified in the survey with the entrepreneurs. Of the investors, 39 percent received relevant information/guidance from banks, while relatives and other business entrepreneurs have been among others with 17% each (Table-4.6).

Figure 4.6: Entrepreneurs Future Plan on Sustainable Entrepreneurship



Source: Survey Data

Future plans of the entrepreneurs are critical for the expansion of the sustainable entrepreneurships and the associated financing. Only 43 percent of entrepreneurs have future plans for the transformation of the existing ventures or undertaking new sustainable entrepreneurship projects, while 55 percent have no such plans, as identified in the entrepreneurs level survey (Figure-4.6).

Capacity development of different stakeholders is the key to effective implementation of the sustainable banking policies, expansion of financing products, and ultimately to draw benefits out of these interventions. Capacity development is also crucial to minimize risks of these sustainable and green ventures from the perspectives of both supply and demand side. SFD of Bangladesh Bank has actively been involved in incentivizing banks towards improving the capacity development of banks. It is also directly engaged in offering training services on their regulatory issues, refinancing schemes, and exporting arrangement using its own resources, and also supported by donor agencies. Banks are also undertaking capacity development initiatives for their employees mainly on regulatory and reporting issues (Box-4.1).

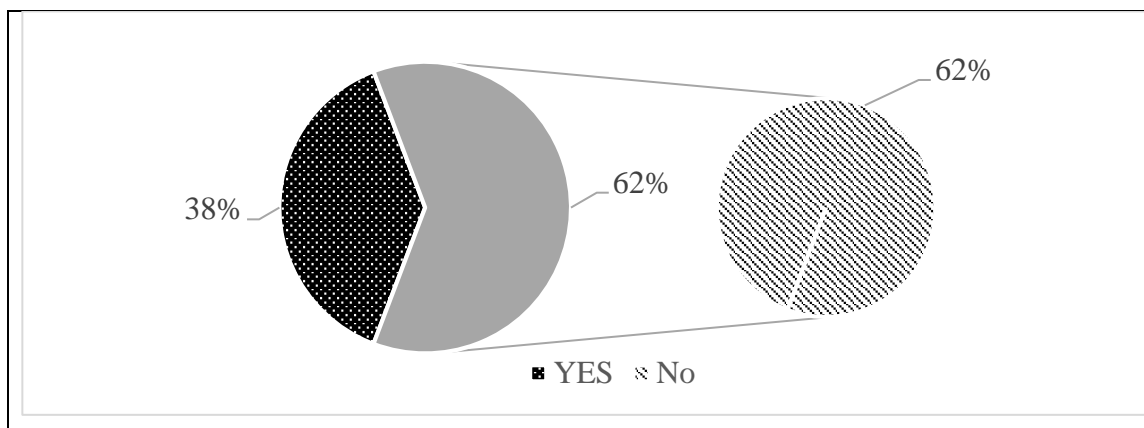
Box 4.1: Capacity Development Initiatives on Green/ Sustainable Finance
<ul style="list-style-type: none"> • Banks are conducting Training/Workshop Environmental & Social Risk Ratings (45%). • Some banks are giving awareness on identification of prospective borrowers through sales/ marketing teams under Business Divisions (25%). • The new Sustainable Finance Policy, criteria for Refinancing schemes, etc. have been circulated among all the bank employees, and training programs were organized (85%). • Banks have established dedicated Sustainable Finance Help Desks in branches where they display sustainable finance products to create awareness, and attract customers to facilitate financing (55%). • Banks are arranging training programs for the capacity development of all level bank employees jointly with their own training institutes and BB, BIBM, NAPD, MTI, etc. (65%). • To keep updated with the senior management, banks arrange meetings with them on sustainable finance policy and the action plan to become fully compliant with the regulatory directive (45%). <p>Source: Survey Data on Banks</p>

Box 4.2: Capacity Development Initiatives on New Reporting System
<ul style="list-style-type: none"> • Different divisions of banks are involved and arrange meetings frequently to get actual figures for sustainable finance so that they can avoid repetition to fill up the new Reporting Format. Besides, banks have been arranging training for the officials to fill up the new reporting format accurately (55%). • Banks often update the top management as well the board about the progress in Reporting (45%). • SFU of some banks very recently launched” SFU portal” data entry application software internally developed by the Bank’s IT division. This portal will help to collect a few data from the app (10%). <p>Source: Survey data on Banks</p>

Bank branches have also been engaged in organizing training programs on sustainable finance, or conducting sessions on sustainable finance in a training event. According to the

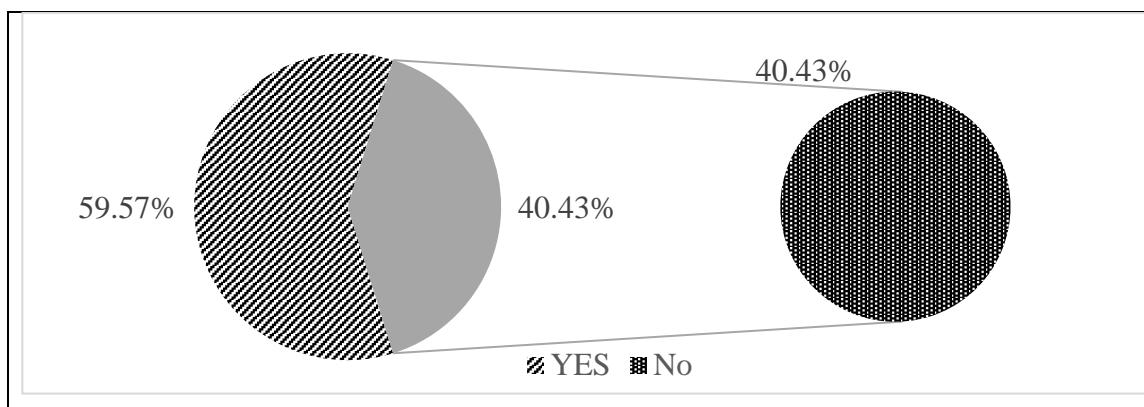
branch level survey data, 38% of bank branches organized specialized training, or sessions on sustainable banking (Figure-4.7). And around 60 percent branch level employees have attended some type of training and awareness development event (Figure-4.8). Practically, a lot is to be achieved in the area of capacity development of bank executives.

Figure 4.7: Training Arranged on Green/ Sustainable Finance for Branch Employees



Source: Branch Level Survey Data

Figure 4.8: Training Attended on Green/ Sustainable Finance by Branch Employees



Source: Survey with Bank Executives

Outcome of the entrepreneurship ventures reflect the ultimate impacts of the sustainable banking policy and products. The paper attempts to collect a few mini cases to identify the impacts of the sustainable entrepreneurship projects by capturing data at implementation and outcome levels. All mini cases (1-7) are having recognized environmental and social benefits. Creation of green jobs for local low income people, supporting local value chain development, and positive externalities are common impacts of these projects. Some green ventures are great sources of foreign currency earnings (Mini Case-7). Some local level small-sized interventions might be great sources of sustainable agricultural and rural transformation in the country (Mini Cases-1, 2, 3). Despite several instances of success in terms of financial sustainability, uncertainties and challenges are commonly expressed by

the entrepreneurs. Some sustainable ventures face tough completion with the traditional businesses due to lack of negative incentives (Mini Case-6). Certain external factors/services might be sources of failure of the projects (Mini Case-5).

Mini Case 1: Clean Fish Cultivation

Mr. Kamal invested BDT 40 lac in a Fish project in a northern district of Bangladesh of which he availed sustainable credit facilities of BDT 20 lac. For a private commercial bank. The credit has increased his income and contributed to business expansion because of which the business is financially sustainable, as he claimed. According to the financing bank, the borrower is repaying loan installment regularly. He employed local workers and fish fry are sourced from local BRAC hatchery. Nearby areas and districts are the consumers of the fish from the clean water when rivers and ponds are getting polluted. Growing transportation cost and rising price of fish fry are cornering to entrepreneurs. The project is replicable.

Source: Based on Interviews with the Entrepreneur and Financing Bank.

Mini Case 2: Vermicomposting-Organic Fertilizer

A private commercial bank offered BDT 1 lac to a small entrepreneur (Mr. Iqbal) who invested a total volume of BDT 5.5 lac in a vermicomposting project. It is said that this organic fertilizer is extremely helpful for organic farming and has remarkable impact on the soil and food/crop quality. Earthworms, and animal dung mostly cow dung and dried chopped crop residues are the key raw materials for the entrepreneur. Local day laborers are employed in the project, and local farmers are the main consumers of the produce of the project. Initially, marketing was a challenge, however, now situations improved and the business is financially sustainable. The entrepreneur is paying back the loan regularly. However, growing labour cost is a challenge to the entrepreneur.

Source: Based on Interviews with the Entrepreneur and Financing Bank.

Mini Case 3: Integrated Organic Farming [Dairy, Poultry, Fish, Biogas]

An enthusiastic young entrepreneur invested BDT 20 crore in an integrated farming project having four segments: dairy, poultry, fish, and biogas. Self-sourced raw materials, local labour force, and some locally made machineries help Mr. Fayez attaining the goal of a financially sustainable entrepreneurs. He borrowed 1.75 crore from the local branch of a government-controlled bank under one-year renewable sustainable agricultural loans. His income increased expectedly during last few years, and local neighborhoods are the beneficiaries of the project. The entrepreneur is however currently facing some difficulties in the existing macroeconomic challenging scenario. His income is decreasing. Repayment rate has been good till date.

Source: Based on Interviews with the Entrepreneur and Financing Bank.

Mini Case 4: Pet Bottle Recycling

Mr. Abul Kashem invested BDT 4 crore in a Pet Bottle Flakes project and obtain credit facilities of total BDT 1.74 crore from Sonali Bank, Prime Bank and BRAC Bank. Raw Materials of the unit are sourced locally, from other places of the country, and also imported. It imported Water Treatment Plant for Waste Water. Around 50 workers are currently working in the enterprise. Most of the workers are locally hired, and the consumers of the product include all classes of people from low to high-income group and there are also foreign customers. Inclusivity and greenness is the key feature of the project. This project is definitely long-term sustainable, because the demand for recycling products is increasing worldwide. The project is financially viable and is paying back the financing facilities regularly.

Source: Based on Interviews with the Entrepreneur and Financing Bank.

Mini Case 5: Solar Home System for Individual Use

A government-controlled bank provided credit facilities to 1239 individuals in a locality for installing Solar Home System that used local technology and locally sourced panels amongst a section of low-income people. People were enthusiastic and benefitted out of the loan facilities and solar power. Over 30 workers were engaged in offering related services amongst the recipients of the loans and solar home systems. Social and environmental benefits of solar home system is well recognized. However, ultimately, the financial model did not sustain because the company supplied low quality accessories and they stop providing technical support. As a result, all the loans become classified as Bad and Loss (BL) categories.

Source: Based on Interviews with the Financing Bank.

Mini Case 6: Environment Friendly HHK

A green brick producer invested 35.34 crore and availed Bank loans for a NRB Bank in 2016 in an Environment Friendly/Brick Kiln Efficiency Improvement Project (Tunnel Kiln and HHK). It uses locally and internationally sourced materials and employed 80 people most of whom are low income local people earning their living from the project. Consumed by all sections of people (rich and poor) the socio-economic and environmental benefits of HHK are well recognized. However, completion with conventional brick manufacturers, and less demand for higher priced green bricks in comparison to conventional bricks are critical challenges to the entrepreneur. In recent time, price of raw materials and fuel got increased and production got interrupted. The repayment rate to date has been good.

Source: Based on Interviews with the Financing Bank and Entrepreneur.

Mini Case 7: Green RMG Factory Building

Prime Bank Limited financed a readymade garment manufacturing industry to construct green factory building. Total Investment (Equity as of audited financials of 2021) volume was BDT 83 crore with bank Loan Amount of BDT 20 crore. Both local and foreign sources were used to collect equipment and materials for realizing the project. Currently a total number of 2820 workers are employed in the factory. Foreign buyers are the clients of the factory, and as an environmentally complainant factory it is financially sustainable and contributing to the foreign currency earnings of the country. Small businesses and shops around the locality also benefitted because of the presence of this beautiful factory building. It is a great source of green job for the local people. Green industry is a recognized contributor to reduce GHG emission. Sustainability of these factory depends upon external demand, and if demand falls then the company might face challenges in the future. Repayment performance of loan is satisfactory.

Source: Based on Interview with the Financing Bank and Entrepreneur.

Regarding challenges from supply perspective, lack of capacity of both demand and supply side, lack of adequate data and information, lack of consumer awareness and demand, involvement of additional costs, high cost of funds, and business challenges are the commonly identified barriers (Box-4.3 and 4.4). Some of these projects are very technical, and experts are not easily available. Some identified challenges also point to the lack of motivation and incentives on the part of the banks as well. Training, awareness, and capacity development of the demand and supply side are the most commonly identified suggestive measures.

Box 4.3: Challenges and Suggestions: Supply Perspective (Bank Level Data)	
Challenges Faced in Offering Sustainable Financing	
<ul style="list-style-type: none"> • Customers, sometimes, cannot provide the documents in time (i.e., Clearance from DOE, Permission from DC Office, Fire Fighting/ Civil Defense Certificate from the proper authority, expense bills/ quotation/ money receipts/ work orders for local procurement) (50). • Customers think that complying with all the processes (i.e. getting different certificates) in availing sustainable finance is time-consuming and costly (45%). • Bank officials lack knowledge about advanced technology to finance projects (35%). • Banks are investing in sustainable products/ projects/ initiatives which are small in size as customers are interested in short-term working capital loans rather than term loans (55%). • Due to non-implementation of projects on time, engineering problems, and lack of technical knowledge; training; and practical experience of the borrowers, projects fail to repay loan installments on regular basis (35%). • In case of opening LC for Green Products/ Projects/ Initiatives (Solar Energy Technology, ETP, Environment-Friendly Technology) the charge/ commission is burdensome (25%). • Some banks feel that the Bangladesh Bank's refinance rate is not that lucrative and refinance claim is procrastinating (35%). • Due to unstable and bad economic conditions, customers face hurdles to pay the installment properly (25%). 	
Suggestions to Handle Challenges	
<ul style="list-style-type: none"> • Banks should arrange awareness programs about sustainable finance so that customers become aware and interested in availing of the financing, and repaying the installment timely (65%). • Banks can appoint skilled personnel and sustain them to monitor sustainable finance units. Moreover, they can arrange training for the employees regarding advanced manufacturing technology to facilitate sustainable financing (55%). • Banks need to formulate their own action plan to meet up the target of the BB (50%). 	
Source: Bank-Level Survey Data	

Box 4.4: Challenges and Suggestions: Supply Perspective (Branch Level Data)
Challenges Faced in Offering Sustainable Financing
<ul style="list-style-type: none"> • Customers are usually unaware of sustainable financing and its products. Though some of them are aware they lack detailed knowledge regarding products and their financing mechanisms (45%). • Customers face problems in documentation (35%). • Lack of business opportunities at the local level to avail of this kind of financing. Besides, natural disasters also pose problems to entrepreneurs (25%). • Short-term loans are not easy to recover (30%).
Suggestions to Handle Challenges
<ul style="list-style-type: none"> • There is a substantial need to increase customer awareness and motivation by arranging different programs. Besides, banks can arrange training programs at the customer level for capacity development i.e. technical and promotional know-how (55%). • Stakeholders need to work on removing middlemen so that end customers come to the branches directly (35%). • Frequent promotional programs can be arranged to remove the traditional mentality of loan non-repayment (25%).
Source: Branch Level Survey Data

5. Major Observations and Recommendations

One, Progress towards attaining goals of suitable financing in the context of Bangladesh has been recognized, and despite challenges, there are policy and regulatory interventions supportive of the banks and financial institutions. It is really inspiring that Bangladesh has been placed ahead of all South Asian countries in the ‘Advancing’ category in terms of the progress in sustainable finance by IFC-SBFN, however, policy target should be at least to reach the group of emerging countries like China, Indonesia, etc. that are in the category of ‘Maturing’. And for that Bangladesh’s approach may not match with several other global emerging economies that have relatively strong bond market. Green bonds became increasingly popular, and in several instances developed and emerging economies are heavily relying on these in their green transformation process and for sustainable growth. However, green bond or similar securities and engineered instruments may not deliver in the context of Bangladesh where bond and securities market are to achieve the due mark. It is thus Green Loan that has to play major role, and Bangladesh Bank has a remarkable role to play. It is broadly about customization of regulatory and policy approach considering the country’s financial market. Regarding future product, ‘Sustainability Linked Loans’ tagged with a very attractive cost of fund might help attract entrepreneurs in sustainable ventures.

Two, Despite improvement in the governance framework for sustainable finance, volume of disbursement remained insignificant, and thus impacts may not be distinctively visible in the macro development space of the country. However, there are noticeable impacts of the green and sustainable entrepreneurship on financial and economic inclusion, creation

of green jobs, and offering positive externalities at local levels and underserved localities. Despite several policy efforts, appropriate incentive (both positive and negative) frameworks are yet to be established to inspire banks and entrepreneurs. Especially, sustainable business ventures should be supported with marketing and creating favorable competitive environment through monetary and fiscal support. Success of a number of sustainable finance products heavily rely on the performance of multi-stakeholders. If these stakeholders and service providers fail both the business and the finance would not sustain.

Three, Bankers and their clients need to be aware of the products, businesses, technology, and be convinced of the potential socio-economic and environmental benefits of a green and sustainable venture for expansion of the sustainable entrepreneurship. Sustainable finance can be sustained only when the supported ventures come up with the desired benefits and outcomes. Entrepreneurs appeared to be more vulnerable than bankers in terms of the capacity and awareness of sustainable finance and business. Training and capacity gaps of the bank executives are reflected both at bank and branch level surveys. Top management and board of banks must also be brought under awareness and motivation for noticeable expansion of the sustainable finance portfolio, and for implementing in-house environment management in a big way.

Four, Social and environmental impacts of green/sustainable ventures (impact disclosure) in response to the sustainable financing may come under regular reporting and disclosure. Alongside the current reporting requirements (rural-urban, and male-female composition of the clients), the central may think of identifying other measurable impacts like creation of green jobs, benefits to the low-income people, and other social and environmental benefits to capture outcomes of the sustainable financing and the associated entrepreneurship.

References

- ADB (2020). The role of central banks in scaling up sustainable finance: What do monetary authorities in asia and the pacific think? No. 1099, March 2020: <https://www.adb.org/adbi/main>
- Volz, Ulrich (2018). Fostering green finance for sustainable development in Asia, No. 814, March 2018, *ADB Working Paper Series*: www.adbi.org
- Bloomberg Intelligence (2021) ESG assets may hit \$53 trillion by 2025, a third of global AUM, <https://www.bloomberg.com/professional/blog/esg-assets-may-hit-53-trillion-by-2025-a-third-of-global-aum/>
- Bullard, N. (2021). The sustainable debt market is all grown up. Bloomberg, accessed (11.09.21) at: <https://www.bloomberg.com/news/articles/2021-01-14/the-sustainable-debt-market-is-all-grown-up>
- Climate Bonds (2020). Climate bonds data intelligence reports. Accessed (16.08.2021) at:

Global Findex Database, July 2022 Globaleconomy.com

GoB (2021). Nationally determined contributions (NDCs) 2021: <https://www4.unfccc.int/sites/ndcstaging>

Government of Bangladesh (2018). Bangladesh delta plan 2100, Strategy-Volume 1, General Economic Division, Bangladesh Planning Commission.

IFC and SBFN (2022). Bangladesh country progress report 2022, A Supplement to the global progress report: <https://www.sbfnetwork.org/>

JP Morgan (2022), Sustainable payments: the next frontier: <https://www.jpmorgan.com/solutions/treasury-payments/insights/earth-day-2022-sustainable-payments>

KPMG (2020). Frontiers in finance. KPMG. Accessed (18.08.2021) at <https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/05/frontiers-in-finance.pdf>

Nordea's Sustainable Finance Advisory Team (2022). Five predictions for sustainable finance in 2022: <https://www.nordea.com/en/news/5-predictions-for-sustainable-finance-in-2022>

Peers, Richard (2022). Responsible risk. <https://www.openbankingexcellence.org/blog/2022-trends-sustainable-finance-meets-the-open-banking-revolution/>

Siddiqui, Javed (2022). Why Bangladesh needs mandatory environmental, social and governance reporting, April: <https://www.tbsnews.net/thoughts/why-bangladesh-needs-mandatory-environmental-social-and-governance-reporting-396206>

Sustainalytics (2021). How sustainable finance is shaping change in banking: www.sustainalytics.com

The Asset (2021). Green bond market expected to hit 2 trillion euros in three years. Accessed (11.09.21) at: <https://theasset.com/article-esg/41949/green-bond-market-expected-to-hit-2-trillion-euros-in-three-years>

UNEP-FI-UN Environmental programme finance initiative (2021). Principles for responsible banking signatories. UN principles for responsible banking. Accessed (04.10.21) at: <https://www.unepfi.org/banking/bankingprinciples/prbsignatories/>

United Nations (2022). Financing for sustainable development report 2022, Inter-agency task force on financing for development, New York, USA.

Nicholls, Alex (2021). Impact measurement and management in sustainable finance, Background Paper, Asian Development Bank.

UN Environmental Programme Finance Initiative (2021). Principles for responsible banking signatories, UN principles for responsible banking: <https://www.unepfi.org/banking/bankingprinciples/prbsignatories/>

Nordea's Sustainable Advisory Team (2022). 5 predictions for sustainable finance in 2022: <https://www.nordea.com/en/news/5-predictions-for-sustainable-finance-in-2022>

Appendix 1A: Bank Level Survey

List of Banks Responded to the Survey Questionnaire

SL. No.	Bank Name
1.	AB Bank Limited
2.	Agrani Bank Limited
3.	Al-Arafah Islami Bank Limited
4.	Bangladesh Development Bank Limited
5.	Bangladesh Krishi Bank
6.	Bank Asia Limited
7.	BASIC Bank Limited
8.	BRAC Bank Limited
9.	Commercial Bank of Ceylon
10.	Community Bank Bangladesh Limited
11.	Dhaka Bank Limited
12.	Dutch Bangla Bank Limited
13.	Islami Bank Bangladesh PLC
14.	Janata Bank Limited
15.	Mercantile Bank Limited
16.	Mutual Trust Bank Limited
17.	National Bank Limited
18.	NCC Bank Limited
19.	NRB Bank Limited
20.	NRB Commercial Bank Limited
21.	One Bank Limited
22.	Prime Bank Limited
23.	Pubali Bank Limited
24.	Rajshahi Krishi Unnayan Bank
25.	Rupali Bank Limited
26.	Shahjalal Islami Bank Limited
27.	Social Islami Bank Limited
28.	Sonali Bank PLC
29.	South-Bangla Agriculture and Commerce Bank Limited
30.	Standard Bank Limited
31.	State Bank of India
32.	The City Bank Limited
33.	The Premier Bank Limited
34.	Trust Bank Limited
35.	Union Bank Limited
36.	United Commercial Bank PLC
37.	Uttara Bank PLC

Appendix 2A: Branch Level Survey

District	Name of Bank
Bogura	BRAC Bank Limited
Bogura	The City Bank Limited
Bogura	Bank Asia Limited
Bogura	Rupali Bank Limited (Corporate branch)
Bogura	Rupali Bank Limited
Bogura	Dhaka Bank Limited
Rangpur	Rupali Bank Limited
Rangpur	Rupali Bank Limited
Rangpur	Mutual Trust Bank Limited
Rangpur	National Bank Limited
Rangpur	ONE Bank Limited
Chattogram	Southeast Bank Limited
Chattogram	Eastern Bank Limited
Chattogram	Pubali Bank Limited
Chattogram	Bank Asia Limited
Chattogram	Jamuna Bank Limited
Chattogram	Dutch-Bangla Bank Limited
Dhaka	AB Bank Limited
Dhaka	Bank Asia Limited
Dhaka	The City Bank Limited
Dhaka	Bangladesh Krishi Bank
Barguna	Pubali Bank Limited
Barguna	Rupali Bank Limited
Barguna	Agrani Bank Limited
Barguna	Janata Bank Limited
Barguna	NRBC Bank Limited
Barguna	Islami Bank Bangladesh PLC

Appendix 3A: List of Banks Participated in the Focus Group Discussion (FGD)

SL. No.	Bank Name
1.	Agrani Bank Limited
2.	Al-Arafah Islami Bank Limited
3.	Bangladesh Commerce Bank Limited
4.	Bank Asia Limited
5.	BRAC Bank Limited
6.	City Bank N.A.
7.	Bangladesh Commerce Bank Limited
8.	Community Bank Bangladesh Limited
9.	Dutch-Bangla Bank Limited
10.	First Security Islami Bank Limited
11.	Global Islami Bank PLC
12.	Islami Bank Bangladesh PLC
13.	Janata Bank Limited
14.	Mutual Trust Bank Limited
15.	NRB Bank Limited
16.	NRB Commercial Bank Limited
17.	Prime Bank Limited
18.	Pubali Bank Limited
19.	Social Islami Bank Limited
20.	Sonali Bank Limited
21.	South-Bangla Agriculture and Commerce Bank Limited
22.	Standard Bank Limited
23.	The Hongkong and Shanghai Banking Corporation Limited
24.	United Commercial Bank PLC
25.	Uttara Bank PLC

Appendix 4A: [Questionnaire Bank]

Name:		
Designation:		
Bank:		
Department / Division / Unit:		
Cell :	Landline :	Email :

1. Initiatives regarding Sustainable Finance Policy implementation of your institution.
.....
.....
.....
2. Initiatives to implement new Reporting Format.
.....
.....
.....
3. Please put **tick mark** on the green products/projects/initiatives that you have/use in your financial institution.

#	List of Green Products/Projects/Initiatives applicable for Term Finance
1.	Solar Home System
2.	Solar Pico Grid
3.	Solar Micro Grid
4.	Solar Park
5.	Solar Irrigation Pumping System
6.	Solar Photovoltaic (PV) Assembly/Manufacturing Plant
...	...
...	...
...	...
66.	Financing in Green/Clean transportation projects (cycles, green vehicles those run on wind, solar energy, electricity, bio-fuels etc.)
67.	Financing in Sand-witch Panel (Floating or Movable Houses in coastal areas or climate vulnerable zone)
68.	Financing in Govt. approved Eco-tourism project

4. Please provide two years financing status (**BDT in Million**) of the **Green Products/Projects** of your financial institution (add column, if needed).

Sl. No.	Name of Green Products/Projects/Initiatives applicable for Term Finance	2020	2021

5. What are the challenges you usually face while financing the Green Products/Projects/Initiatives applicable for Term Finance?

Sl. No.	Name of Green Products/Projects/Initiatives applicable for Term Finance	Challenges

6. Do you have familiarity with other Green Products/Projects/Initiatives (you are not currently financing) applicable for Term Finance?

7. Why do the other (you are not currently financing) Green Products/Projects/Initiatives applicable for Term Finance are not popular?

.....

8. Please provide the contact details of two clients of your institution who are availing financing facilities in the Green Products/Projects/Initiatives applicable for Term Finance.

Name of the Client	Name of the Enterprise	Name of the Green Products/Projects/Initiatives the client is enjoying currently	Year of Agreement to the FI	Amount in Million BDT	Contact Number

Appendix 5A: Entrepreneur Level Questionnaire

Name	Address	Contact Number	Nature of Business

1. Are you familiar with the products (68 products)?
2. Do you know if any businessman/entrepreneur/customer uses the products?
3. If so, what is the source of getting to know the information?
4. Do you know the detail about it?
5. Do you have any future plans to use the products?
6. If anybody uses the product/s, collect the case.

Information for Case

1. Please tell us about the project under which you have taken loan from banks?
.....
.....

2. Please tell us about the loan you have availed from banks?

Name of the loan product, Year of availing loan facility, Loan amount, Description of Business Expansion, Present Status, etc.

.....
.....
.....

3. Have your income affected by consuming this product?
.....
.....

4. Have your consumers benefitted from the loan? **Yes** **No**

5. Have you faced any difficulty in repayment? **Yes** **No**

6. Will you suggest others to avail the loan? **Yes** **No**

Appendix 6A: Local Bank Employees

Name of Bank Officials	Bank Name	Branch Name & Address	Contact Number

1. Do you know about the new ‘Sustainable Finance Policy’ initiated by the Bangladesh bank?
Yes **No**

2. Do you have any training in the related area? **Yes** **No**

3. Do you know about sustainable finance/green finance? **Yes** **No**

4. Are you familiar with the products (68 products)? **Yes** **No**

5. If yes, which one looks familiar to you?

6. Have you sanctioned sustainable finance/green finance to any customer? **Yes** **No**

7. If yes, please provide the details:

Name	Address	Contact Number	Nature of Business

Appendix 7A: Branch Level Questionnaire

Name of Bank Manager	Bank Name	Branch Name & Address	Contact Number

1. Do you know about the new ‘Sustainable Finance Policy’ initiated by the Bangladesh bank?
Yes **No**
2. Have you arranged any training for your branch officials in this area? **Yes** **No**
3. Do you know about sustainable finance/green finance? **Yes** **No**
4. Do your branch sanction this type of loan? **Yes** **No**
5. If yes, please provide the following information:

Number of Customers who availed of sustainable finance/green loan	Amount in BDT	Repayment Rate

6. What are the problems/hurdles you usually face while finance? i.e. sustainable finance/green finance.
.....
.....
7. How to overcome those barriers?
.....
.....
8. Do you think there is a need for growing customer awareness in the relevant field?
Yes **No**
9. How to increase demand of sustainable finance?
.....
.....

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