

# Green Supply Chain Management Practices in the Banking Sector: A Literature Review

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**Received** Apr 20, 2023, **Accepted:** May 08, 2023, **Published Online:** Jun 30, 2023

**Reviewers:** Anonymous Peer Review

**Citation:** Nandy, A. & Habib, M. M. (2023). Green Supply Chain Management Practice in the Banking Sector: A Literature Review. *International Journal of Supply Chain Management*, 12(3), 18-26, <https://doi.org/10.59160/ijscm.v12i3.6188>

**Abstract**— Reviewing the state-of-the-art literature, the authors in this paper have demonstrated how various tactics of Green Supply Chain Management are being practiced in Bangladesh and the prospects of such strategic implication on the banking sector. This paper is based on the secondary data, particularly selected articles published in various online databases from the year 2012 to the year 2023. The study shed lights on many innovative measures of digitalization, while a gap has been spotted between the existing policies and practices. Thus, being a highly systematic and structural business, banks in Bangladesh are yet struggling to adopt a unified green supply chain model to ensure overall green construction. Additionally, the findings may benefit policy makers and managers to formulate strategic decisions regarding the value implying various techniques of greening throughout the supply chain. A conclusion has drawn with the scope of the potential research opportunities to attain a sustainable supply chain which would accelerate the economic inclusion of the economy.

**Keywords**— Green Supply Chain Management (GSCM); Banking sector; Bangladesh; Digitalization; Green Banking; Environmental Supply Chain Management.

## 1. Introduction

Technological fortitude has made people's life trouble free and comfortable in 21<sup>st</sup> century, where any tangible good including money reaches from one corner to another of the globe within a single click. Digitalized and automated banking is such a facility of modern time that promotes improved ecosystem with digital growth of a nation [1]. Since environmental concern like heat waves, recurrent immense forest fires, rising sea-levels, frequent floods, draughts and massive level of earthquakes are turning as burning issues in recent days, the focus has shifted to accomplishing sustainability in supply chain proficiency in contemporary business [2]. Particularly, for a developing nation, where establishment of sustainability is controversial for both environmental and economical growth, the role of bank system is imperative. Through its traditional role of money supplier, bank now-a-days can take part as an advisory, a regulator or even an executor of greening (reducing carbon footprint and wastage or

reusing) the total supply chain which can directly or indirectly influence other business, society and the ecosystem. This whole process can be recognized as the green supply chain of the banking sector where environmental aspects are being prioritized within the supply chain activities to diminish ecological impacts [3]. Despite being studied for over 30 years on the arena of Green Supply Chain Management (GSCM), yet knowledge gap exists regarding what, why and how green initiations need to be done to cure the aggregated environmental impacts of supply chains [4]. Stakeholders' unawareness is another noticeable fact which eventually set hurdles in adopting green cultures during actual applications [2]. Thus, this research has aimed to investigate the current status of green supply chain initiations in Bangladesh where banking industry plays vibrant role in shaping the economy, balancing harmony and changing people's life style.

## 2. Literature Review

### 2.1. Green Supply Chain Management (GSCM)

Green Supply Chain Management (GSCM) or Environmental Supply Chain Management is a great revolution of humanoid's increased environmental consciousness to fight against the emissions which are the by product of all economic activities of modern business [5]. Presently, Green supply chain management (GSCM) practices are being considered a vital approach to handling the environmental concerns faced by businesses [6]. Green Supply Chain Management (GSCM) has emerged as a potential solution to eradicate all emissions and damage to the earth to ensure sustainability [7]. In a supply chain, all the integration phrases- inventory management, organizational assemblies, sourcing, connecting links, intra-enterprise communication, cost management, supply chain synchronization, and production route are carefully assessed [8] as the supply chain's performance depends on the harmonization of all stakeholders of that supply chain to attain the set target [9]. [10] argued that any enterprise can construct a greenery supply chain by incorporating

modularity within each stages of product design, using environmentally beneficial substances and by improving a product's aptitude towards recycling. In the research, [11] denoted that typically the green supply chain differs from the traditional supply chain as it reflects the ecological influence on decision-making.

[12] stressed that GSCM can be applied as a vital instrument in the context of a circular economy to ensure sustainable resource utilization. In a Green supply chain both upstream and downstream supply chains are managed through green practices to minimize the overall outcome of forwarding along with reverse supply flows toward the environment [6]. As a wing of sustainable supply chain management, green supply chain management (GSCM) emphasizes internal environmental management practices in an organization while it initiates external environmental supervision collaborating functions with its customers and suppliers [13]. Through an investigation, [14] argued that besides reduced waste, energy consumption, and air pollution level Green Supply Chain essentially contributes to achieving competitiveness and gaining economic rewards.

Besides environmental performance adaptation of GSCM has different levels of impact on different groups within the organization [15]. A study in Brazil reveals that internal variation of Green Supply Chain Management practices within the industry stimulates innovative ideas towards the GSCM practices based on two conditions: i) organizations' interactions with external actors during the implementation phase and; ii) organizations and external actors mutually influence each other in goal attainment [4]. Another study by [16], in the Indian textile industry, classified five enablers of the green supply chain, which are i) green practices within the supply chain, ii) economic welfare initiatives for communities, iii) setting and conforming to safety standards, iv) considering health and safety issues, and v) ensuring secured employment. Again, a case study in Korea showed that Consumers, pressure from competitors, government regulations, and internal management are key motivators in GSCM practices [17].

Again, [6] testified a regular optimistic impact on financial performance at the beginning stages of implementation of GSCM due to the high cost charged by suppliers for eco-friendly raw materials, packaging, and delivery with lower efficiency. [18] specified that competitiveness and knowledge-based culture have a positive connection with green supply chain management and enhance company performance at large. From the examination of [19], it has been testified that firms usually practice a mix of multiple GSCMS (strategy) to enhance GSCMP (process) by emphasizing collaborative relationships, constructing specialized knowledge, and leveraging innovative technology.

## 2.2. Banking Sector & GSCM

Globalization instigates the banking sector to cross the financial boundaries where banks always scuffle to balance credit (short-term as well as long-term) as a challenge and opportunity [9]. Over time, banks faced

huge pressure and challenge from companies and governments to facilitate more innovation in supply chains through their services [20]. Balancing financial, environmental and operational performance is essential for organizational success and economic growth where implication green supply chain management is measured as an indispensable part [21]. For any banks, the guarantee of efficient cash disbursement is vital for any banks. The transaction of virtual money is another aspect of the bank that has to rise remarkably due to boundary-less business. In addition, banks at present are offering diversified services or support to their clients which are even unthinkable in the traditional banking system. A common portrait of how a bank supports its manufacturer has been drawn in figure 1. With financial in-flows, a bank manager assures proper material flows from supplier to retailers.

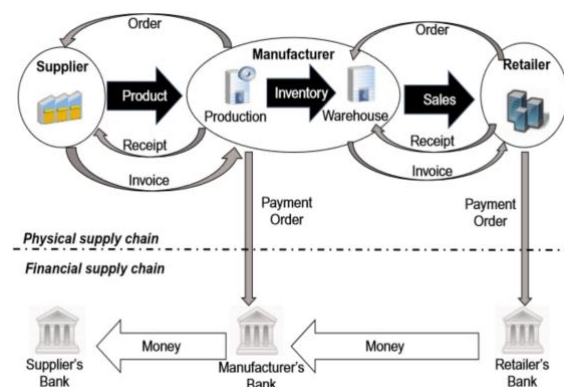


Figure 1. SCM in banking operation [22]

In a cross-sectional study undertaken among Romanian banks, [23] mentioned that GSCM practices in banking are not predicted by the same set of variables as industrial sectors though GSCM and environmental management systems complement each other in endorsing a 'greener' image. Additionally, that research indicated that ownership pattern (i.e. local vs. foreign) does not significantly influence the enactment of GSCM practices in Banks. Further, study of [23] over five multinational banks in Indonesia reveals a causal association between the GSCM practices and the banking sector's performance. A mixed-method approach (structural equation modelling method and thematic analysis) adopted by [24] to assess the green supply chain practices among Sri Lankan commercial banks revealed that eco-friendly collaboration, green purchasing, green legislation and regulation, and e-banking expertise have significant positive impacts on the operational performance while eco-design and reverse logistics have insignificant effects. Additionally, that study identified minimal customer support, lack of proper knowledge and negative attitudes are challengeable issues to implement the GSCM practices. Again, [22] enlisted a number of core practices of commercial banks that have indirect environmental impacts, such as i) integrating environmental criteria into credit policy; ii) assessment of the environmental risk (direct, indirect, and reputational) as part of the credit risk calculation; iii) Focusing on green borrowers (targeting and treating differently from other companies); iv) avoiding (formally or otherwise) loans to companies under certain industries on ecological grounds.

### 2.3. Banking Sector in Bangladesh

Liberalization of monetary policies by introducing foreign commercial banks in recent decades has enhanced competition [25] while it has reduced the level of monopoly power and profitability in the banking operation in Bangladesh [26]. Thus as a process, banks both public and private are compelled to follow “best-practice” or being efficient in terms of providing service [27]. Currently there are 61 scheduled and 5 non-scheduled banks are operating under the guidance of the central bank known as Bangladesh Bank (BB).

**Table 1.** Segmentation of Banks in Bangladesh [28]

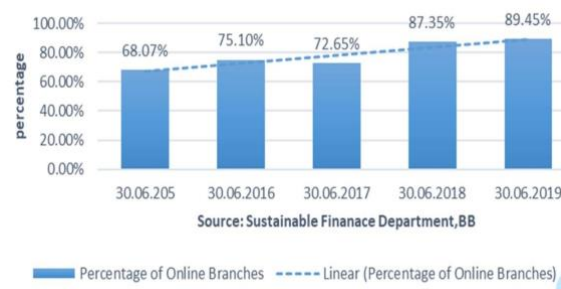
Scheduled banks	Non-scheduled Banks
→ <b>6 State Owned Commercial Banks (SOCBs)</b>	5 Non-scheduled Banks
→ <b>3 Specialized Banks (SDBs)</b>	→ Ansar VDP
→ <b>43 Private Commercial Banks (PCBs)</b>	→ Unnayan Bank,
→ <b>33 Conventional PCBs</b>	→ Karmasha-
→ <b>10 Islami Shariah based PCBs</b>	→ ngosthan Bank,
→ <b>Foreign Commercial Banks (FCBs)</b>	→ Grameen Bank,
	→ Jubilee Bank,
	→ Palli Sanchay
	→ Bank

Banks in Bangladesh are more matured at present where the recent triumph of data technology along with smart phones’ convenience has reshaped its services pattern and operations [29]. Consequently this render further option for banks to initiate greenery practices through its operations as Bangladesh is one of the worst sufferers of global warming in last few decades. Research of [30], defines that economic growth potentiality of any country usually gets reflected through its banking performance. Being one of the major financing source of industrial projects like steel, cement, fertilizers, paper, power, textiles, etc., this sector plays an intermediary role between economic development, environmental protection and socially responsible investment [31]. Banks in Bangladesh harmonizes the economy and the environment through its diversities and innovative schemes like (non-facilitation products like tobacco, opium, to reinforce agri-loan, green financing, supporting cultivation at hill tracts under the strict regulation of BB. The development plan of the government, affirms its commitment to faster economic and social development besides minimizing its carbon emission and green expansion [32]. Thus, over the years, Bangladesh Bank has introduced number of policies, essentially all which direct the banking towards a digitalized financial sector by assuring sustainability.

#### 2.3.1. Digitalization

Bangladesh has been passing through the transitory phase of digitalization, as part of the government’s “Vision 2021” mandate in last few decades [33]. In the research [34] identified that in the last one-and-a-half decades, adoption of digital technology has notably altered the Bangladesh's financial sector. When a bank facilitates its clients to operate all the banking transactions through the internet, using electronic gadgets like cell phones,

computers, laptops, etc. it is then recognized as digital banking of that specific bank [1]. Digital or E-banking (Electronic banking) is a proven and effective way for cost reduction of any financial institution [35]. Besides converting the usual manual or paper based documentation into digital format, digitalization provides flawless end-to-end electronic processing of banking transactions, maximum utility to the customers, usefulness and cost saving for both bank and clients [36]. In recent years, many public and private commercial banks are offering digitalized service to its consumers, however, yet the low-income, rural and short-term borrowers are not accustom with such facilities [37]. Figure 2 highlights the raising trend of digital banking from year 2015 to year 2019.



**Figure 2.** Year-wise Trend of Banking Sector’s Digitalization [38]

#### 2.3.2. Agent Banking

The new digital capability has brought convenience to facilitate round-the-clock banking services and one such initiative is the agent banking. In 2012, Bangladesh Bank launched agent banking [31] in the country offering limited scale banking and financial services to the underprivileged and under-served population through agents under a valid agency agreement to conduct banking transactions on behalf of a bank [39]. Investigation by [34] reveals that in the month June 2022, the number of agent banking accounts reached at 16 million which is nearly 31 per cent higher than previous year. Lately few banks have started disbursing loans through their agents in rural areas.

#### 2.3.3. Green Banking

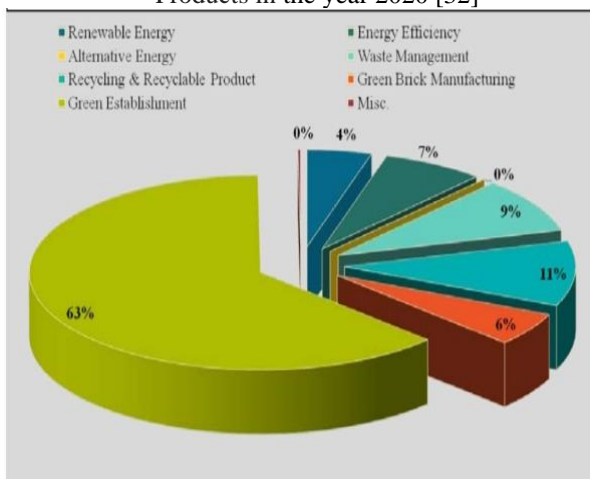
According to [40], Green banking denotes such banking business that works to overall diminution of external carbon emission and internal carbon footprint. Within the frame of normal banking operations, a green bank prioritizes all the social and environmental or ecological factors to uphold the Earth's environment, populace or resources [31]. According to the BB’s guidelines, many banks in Bangladesh has green banking facilities at certain branches and mostly they patronize green projects having zero or less environmental impact.

**Table 2.** Green Banking Policy in Bangladesh [31]

Phase1	Policy formulation and governance
	Incorporation of environmental risk in core risk management (CRM)
	Initiating in-house environment management
	Introducing green finance
	Creation of climate risk fund
	Introducing green marketing
	Online banking
	Supporting employee training, consumer awareness and green event
Phase2	Disclosure and reporting of green banking activities
	Sector specific environmental policies
	Green strategic planning
	Setting up green branches
	Improved in-house environment management
	Formulation of bank specific environmental risk management plan and guidelines
	Rigorous programs to educate clients
Phase3	Disclosure and reporting of green banking activities
	Designing and introducing innovative products
	Reporting in standard format with external verification

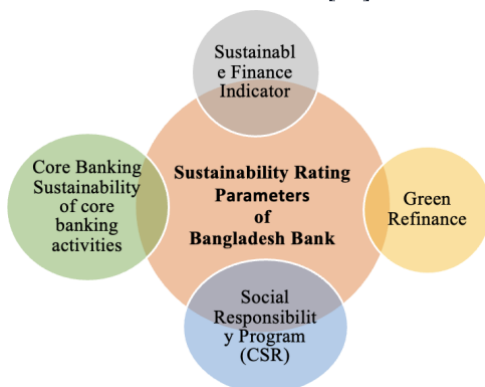
Figure 3 displays various products patronized under green banks in the country. Remarkably, huge proportion (63%) of the fund goes in green establishment. 11% of the total financing goes under waste management and 9% investment of green banking covers recycling activities.

**Figure 3.** Investment Proportion of Green Financed Products in the year 2020 [32]



Usually, the central bank recognizes the greenery approaches of banks by offering yearly awards and tax wavers like Green IB Champions, Sustainability Rating; based on certain criteria. Figure 4 displays the parameters of sustainability rating award.

**Figure 4.** Sustainability Rating Standards of Bangladesh Bank [41]



**Table 3.** Sustainability Rating Award - Year 2020 [41]

Awarded Banks (Top 10)	Awarded Financial Institutions (Top 5)
→ Al-Arafah Islami Bank Limited	→ Hajj Finance Company Limited
→ Bank Asia Limited	→ IDLC Finance Limited
→ BRAC Bank Limited	→ IPDC Finance Limited
→ Dutch-Bangla Bank Limited	→ Saudi Bangladesh industrial and Agricultural Investment Company Limited
→ EXIM Bank Limited	→ United Finance Limited
→ Islami Bank Bangladesh Limited	
→ Mutual Trust Bank Limited	
→ Prime Bank Limited	
→ The City Bank Limited	
→ United Commercial Bank Limited	

Table -3 display ward winning banks and financial institutions name while in Table-4 , some special steps initiated by banks in recent days has been shown in Table-4. All these highlights the rising awareness among banks regarding sustainability which simultaneously influencing their market image and altering the society indirectly. Interestingly, it also highlights the absence of standard initiatives that are followed countrywide among all branches of each bank in Bangladesh.

**Table 4.** Special Events/Features of Banks under Green Banking [31]

	Special Events/ Features of Banks
AB Bank	Switching off all air conditions and unnecessary lights during 3-4 PM of each Sunday.
Bank Asia	Workshop on "Green Banking" to commemorate the World Environment Day on June 5, 2012. All members of Human Resources Department worked using Day light and without Air conditioning on June 30, 2012 E-learning (OLT)
Standard Chartered	Observed Earth Day / Environment Day
Mutual Trust Bank	Introduction of Earth Hour
Commercial Bank of Ceylon	Acceptance of utility bill through internet

**2.3.4. Green Supply Chain Drive**

Being a key financial institution, the role of banks are imperative on social development, As banks provide financial assistance to others, plays advisory role at cases, essentially it can influence others and set a milestone. Consequently, as a core business, banks in Bangladesh need to emphasize "greening" that will highly contribute to the economy (through services and other businesses) and the society (through people) as well. At present, a few

banks have undertaken technological facilities to serve the customers and to assure green operations partially in their supply chain. Besides, banks need to cohere other environmental practices like recycling and reusing all which altogether will continue on cost reduction and profitability. So far only limited research has been undertaken to explore the actual condition and time demand of the banking industry in Bangladesh. On the other hand, though contemporary banking institutions are serving the nation at large with various upgraded facilities, yet gap exists to access the actual technological adaption at the individual bank and in industry practice. Hence, this research targets to identify technological implementations that put a remark towards the implementation of green supply chain management

Recently, many banks in Bangladesh are following a set of general instructions under “Green Office Guide”. Table 5 has summarized some in-house environmental management practices

**Table 5.** Various In-house Environmental Management Practices [31]

Maximum use of natural light	Use of scrap paper as notepads
Tele-Conference	Both-side paper printing
System implication of auto shutdown of computers, fixing timer at air coolers	Installation of energy efficient electronic equipments
Eco-font in printing	Use of renewable energy
Use of energy saving bulbs and other equipments	Reduced water and electricity consumption
Online communication	Use of recycled water

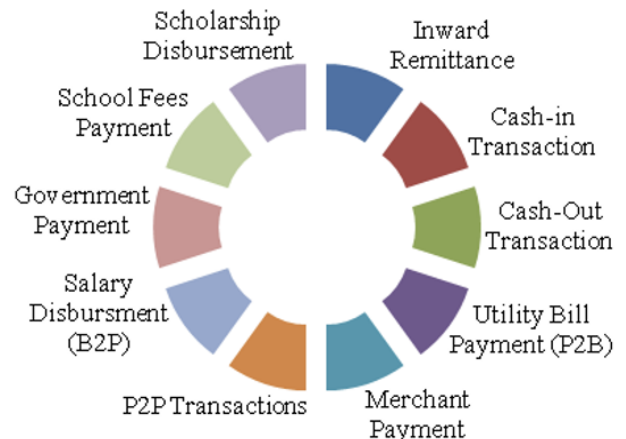
**2.3.5. Covid-19 and the New Era of Banking**

The COVID-19 pandemic has ironically brought about a revolution in digital banking when banks quickly adopted technology-based products, thereby allowing customers to access banking services from remote corner of the land. In short, the pandemic has drastically shaped the banking service in Bangladesh. It was the excellence of banking through which the government of Bangladesh successfully accomplished all its incentive packages to help people in need, to serve distance populace and to sustain the economy even in havoc period. Following discussion is highlighting outstanding achievement undertaken through the banks on the verse of this pandemic.

**(a) MFS (Mobile Financial Service)**

Expansion of Mobile Financial Service (MFS) was a boon in the pandemic, while people were hesitant to avail such service despite of its prior establishment in Bangladesh [33], due to vigorous reasons like unfamiliarity, cyber security etc. MFS brought millions under banking services through its numerous facilities where the banking sector excelled its magnetism. Such facilitation signifies the role of efficient supply chain in Bangladesh financial sector for the first time where the whole system ran smoothly under digitalization, minimizing the wastage and ensuring safety for mass community. Again, the study of [33] recognized that MFS business increased the number of sole proprietors in that period as many natives joined that commerce as MFS agents .Figure 5 exhibits major

services carried out through MFS in the harsh phrase of covid-19. Persisting trend of MFS in post-pandemic era confirms people’s positive notion towards MFS because of its safe and environment friendly trade ambiance.

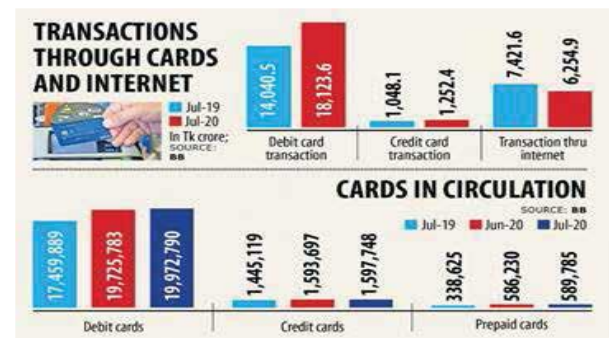


**Figure 5.** MFS Facilities Amid Covid-19 in Bangladesh [33]

**(b) Triumph of Cards Usage**

Resembling to global trend, people of Bangladesh opted for the digital money over cash to restrain the virus. Thus, along with MFS, internet banking upholds the economy during the hard time of pandemic. Even after reopening the country’s economic wheel, the people choose to pay various bills and payments by using credit cards [42], which further specifies the existence of an efficient supply chain in the banking industry in Bangladesh. Figure 6 portrays the emerging trend of cards usage and Internet banking during and after pandemic period.

**Figure 6:** Transactions through Cards and Internet [43]



**(c) Introduction of CRM (Cash Recycling Machines)**

Recently, Bangladesh bank has introduced the Cash Recycling Machines (CRM), a technology which provides faster deposit and cash withdrawal services, reduce the clients reliance on branches and extends the level of freedom in banking activities [34]. While the previous cash deposit machines (CDMs) only allow receiving cash and replace automated teller machines (ATMs), CRMs allow cash receive, counts and authenticates them, and automatically adjust the account. Till July, 2020 total CRMs summed up at 1907 which was 208 in the year 2019 [44].

#### (d) *Establishment of e-KYC*

e-KYC or the electronic Know Your Customer (e-KYC), afresh initiative of Bangladesh Bank started in January, 2020 [34] which is a faster mechanism to verify client's identity, calculating risk and generating quick service for both bank and client's end [45]. The mechanism has lessened the institutional cost around 80 per cent by securing data, minimizing the error and rendering prompt service. [46] reveals that applying e-KYC, bank can promptly determine customer's risk grade by using client's NID (National Identification) Card. Once banks adopt this facility in large scale, e-KYC will push the digital financial services forward which will enlarge the country's financial inclusion [47].

#### (e) *Prologue of Digital loan*

For the first time, clients can seek for "digital loan" through MFS platform in Bangladesh, which is a collateral-free digital product, whereby customers can request and receive loans of up a certain amount [48]. The loan repayment behaviour will determine whether the applicant will be eligible for further loan in future. Thus, digital loan has the ability to serve micro-entrepreneurs, marginalized people, students or people on emergency personal or business needs.

### 3. Methodology

The paper is derived from secondary data and information. Information were collected from several secondary data such as books, journals, research publications, annual reports, and from various websites of public and private commercial banks, as well as from the Bangladesh Bank (BB). Nearly 80 research papers were extracted from renowned databases. Keywords were selected based on previous literature review, aligning to the aim of covering various business functions, particularly on the banking sector and on recent timeline (year 2011-2023). The keywords like green supply chain, green banking, and digitalization in Bangladesh were used to follow the query and to access scholarly articles. The primary search criteria yielded nearly 115 papers.

### 4. Discussion

Through reviewing broad literature, this study ascertains the influence of GSCM on contemporary business. Now-a-days, the concept of GSCM has grabbed immense attention from diversified industries, academicians, regulatory institutions, and customers; as the practice-performance relationship of GSCM works to build positive image and market reputation [49]. In his paper [50], argued that by minimizing environmental impact, GSCM aims to fulfilling customer needs and to attain profitability. From the view of [51], banking industry is the backbone of each economy which plays substantial role for economic expansion and sustainability. Thus, even if the implication of such mechanism incurred cost at initial stages, the underlined benefit of such approach lies in both environmental and social sustainability.

Additionally, this investigation emphasizes on the essentiality of altering the traditional SCM to GSCM in banking sector. According to [30] despite its heavy reliant on Bangladesh's economic progression, the banking

industry is facing plentiful hurdles, like inefficiency, liquidity concerns, capital shortages, and non-performing loans. Irrespective of the central bank's strict monitoring, yet many banks (public and private) are lagging behind in digitalization or in formulating green strategies. Nevertheless, because of the flexibility of Bangladesh bank, banks under green banking are mostly inventing limited tactics to be competitive in the market. Drawing several exemplars, this literature review further supports the hidden benefits and its environmental amplification under GSCM in this industry. Over again, with environmental succession, GSCM can hasten transparency, accountability, rise of revenue collections, process simplifications and safeguards against cyber-securities and data privacy or protections. Adaptation of GSCM through digital banks, useful regulations, and a resilient technological background will eventually work to stabilize the financial sector, bringing even low-income people under the coverage of formal banking system.

### 5. Conclusion

With economic prosperity, success of supply chain has become necessary for many industries. Over the years, the global supply chain has evolved into a more extensive interconnected complex network with multiple suppliers, manufacturers, and customers [2]. Besides, modern managers are looking for greening each internal and external process to sustain the business and to act in socially responsible manner as a sustainable supply chain automatically turns as a less wasteful supply chain eventually [49]. The banks in Bangladesh have reached at the era of digitalization, especially during and post pandemic period, that again pressuring banking industry to consider green or sustainability issues.

In this study, several aspects of green supply chain management have been addressed which elaborate its strategic implications. Future studies may investigate timely change in performance and profitability in banking industry due to technological up gradation. Additionally, the work represents few momentous evidence of the association between green practices and performance progression in banking. Yet additional theorization is required for detail understanding of GSCM practices heterogeneity on performance and to what extent this heterogeneity is contingent on the industrial sector and country. An assessment can be drawn evaluating the strengths and weaknesses based on implied green supply chain strategies to formulate proper training and awareness plan for stakeholders. Further, development of a cohesive model is a time demand for complete transformation of this financial sector which will enhance customers' satisfaction, organizational profitability and promote environmental sustainability in long run.

#### 5.1 Limitations and Implications

The study is not free from its limitation. During the inclusion/ exclusion process, many papers may have been dropped based on the precise keywords which may cause misclassification. Moreover, some valuable works may be missed out because of the fixed timeframe (year 2011-year 2023). Again, it is plausible that some recent data were not been highlighted because of its unavailability or

due to the failure of updating the websites on timely manner.

The paper provides insights to managers and supply chain practitioners regarding the underlined potentiality of GSCM in banking sector. Additionally, it assists the banking professionals to consider proper resource utilization, redefining technology in credit scoring, analysis, and granting processes to minimize the overall risk, to reduce operating costs, and to enhance customers' satisfaction. Findings of this research may encourage industry professionals and decision-makers in formulating proper strategic policies to support GSC establishment. Furthermore, this investigation may encourage academicians to develop multi-dimensional GSC model that it suitable for the banking sector in Bangladesh.

## References

- [1] Mohanty, S., Singh, S. and Mohanty, J., "A Systematic Literature Review of Customer Satisfaction on Digital Banking", IGI Global, 2023.
- [2] Asha, L. N., Dey, A., Yodo, N., and Aragon, L.G., "Optimization Approaches for Multiple Conflicting Objectives in Sustainable Green Supply Chain Management", Sustainability, vol. 14, pp. 1-24. <https://doi.org/10.3390/su141912790>, 2022.
- [3] Shi, V.G.; Koh, S.L.; Baldwin, J.; Cucchiella, F., "Natural resource based green supply chain management", Supply Chain Manag. Int. J. 17, 54–67, 2012.
- [4] Assumpç ao, J, J, Campos, L, M, S, Plaza-Úbeda, J, A, Sehnem, S and Vazquez-Brust, D, A., "Green Supply Chain Management and business innovation", *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2022.132877>, 2022.
- [5] Dubey, R, Gunasekaran, A, Wamba, S, F, and Bag, S, "Building Theory of Green Supply Chain Management Using Total Interpretive Structural Modeling (TISM)", IFAC-PapersOnLine, vol. 48, no. 3, pp. 1688–1694, 2015.
- [6] Hashmi, S,D., and Akram, S, "Impact of Green Supply Chain Management on Financial and Environmental Performance :Mediating Role Of Operational Performance and the Moderating Role of External Pressures," *Scientific Journal of Logistics*, vol.17, no. 3, pp. 359-371, 2021.
- [7] Hejazi, M. T., Bader A. B., and Ahmed B., "The Influence of Green Supply Chain Management Practices on Corporate Sustainability Performance", Sustainability, Vol. 15, no. 6, <https://doi.org/10.3390/su15065459>, 2023.
- [8] Mukhamedjanova, K., A., "Concept of Supply Chain Management", *Journal of Critical Reviews*, vol.7, pp. 759-766, 2020.
- [9] Majumder, M., I. and Habib, M., M. "Supply Chain Management in the Banking Industry: A Literature Review", *American Journal of Industrial and Business Management*, vol. 12, pp. 10-20, 2022.
- [10] Sundram, V. P. K., Rajagopal, P., Atikah Shamsul Bahrin, A. S., and Subramaniam, G. "The Role of Supply Chain Integration on Green Practices and Performance in a Supply Chain Context: A Conceptual Approach to Future Research", *International Journal of Supply Chain Management*, vol. 7, no. 7, pp. 95-104, 2018.
- [11] Rupa, R. A. and Saif, A. N. M. "Impact of Green Supply Chain Management (GSCM) on Business Performance and Environmental Sustainability: Case of a Developing Country", *Business Perspectives and Research*, pp. 1-24, 2021.
- [12] Mangla, S.,K., Luthra, S., Mishra, N., Singh, A., Rana, N.,P., Dora, M., and Dwivedi, Y. "Barriers to effective circular supply chain management in a developing country context", *Production Planning and Control*, vol. 29, no. 6, pp. 551-569, 2018.
- [13] Feng, M., Yu, W., Wang, X., Wong, C., Y., Xu, M. and Xiao, Z., "Green supply chain management and financial performance: The mediating roles of operational and environmental performance", *Business Strategy and the Environment*, vol. 27, no.7, pp. 811-824, 2018.
- [14] Tumpa, T. J., Ali, S.A., Rahman, M. H., Paul, S. K., Chowdhury, P. and Khan, S. A. R. "Barriers to green supply chain management: An emerging economy context", *Journal of Cleaner Production*. <https://doi.org/10.1108/BIJ-10-2016-0165>, 2019.
- [15] Zhu, Q. , Sarkis, J. and Lai, K. H. "Institutional-based antecedents and performance outcomes of internal and external green supply chain management practices", *Journal of Purchasing and Supply Management*, vol. 19, no.2, pp. 106-117, 2013.
- [16] Diabat, A., Kannan D. and Mathiyazhagan, K. "Analysis of enablers for implementation of sustainable supply chain management in A textile case", *Journal of Cleaner Production*, vol. 83, pp. 391-403, 2014.
- [17] Choi, S., Min, H., Joo, H. and Choi, H. , "Assessing the impact of green supply chain practices on firm performance in the Korean manufacturing industry", *International Journal of Logistics Research and Applications*, Vol. 20, No. 2, pp. 129-145, 2017.
- [18] Fantazy, K. and Tipu, S., A., A., "Exploring the relationships of the culture of competitiveness and knowledge development to sustainable supply chain management and organizational performance", *Journal of Enterprise Information Management*, Vol. 32, no. 6, pp. 936-963, 2019.
- [19] Bag, S., Gupta, S., Kumar, S., and Sivarajah, U., "Role of technological dimensions of green supply chain management practices on firm performance", *Journal of Enterprise Information Management*.DOI.10.1108/JEIM-10-2019-0324, 2020.
- [20] Popa, V., "The Financial Supply Chain Management: A New Solution for Supply Chain Resilience", *Amfiteatru Economic Journal*, vol. 15, pp. 140-153, 2013.
- [21] Fawzia, D., "The Influence of Green Supply Chain Management on Financial, Environmental and Operational Performance", *International Journal of Supply Chain Management*, vol. 9, no. 5, pp. 1448-1455, 2020.

- [22] Anggraini, D, Hamiza, A, Doktoralina, C, M and Anah, S., "Application of Supply Chain Management Practices in Banks: Evidence from Indonesia", *International Journal of Supply Chain Management*, vol. 7, no. 5, pp. 418- 430, 2018.
- [23] Ketikidis, P. H., "Environmental practices in the Romanian banking sector: an exploratory study", *International Journal of Enterprise Network Management*, Vol. 5, no. 3, pp. 239- 253, 2012.
- [24] Adhikari, A.A.E, D, Siyambalapitiya, J and Silva, P.O.D., "Green Supply Chain Management Practices and Operational Performance of the Commercial Banks in Sri Lanka", 5th International Research Conference, UvaWellassa University, Sri Lanka, 2021.
- [25] Mirzaei, A., Moore, T., & Liu, G. , " Does market structure matter on banks' profitability and stability? Emerging vs. advanced economies" , *Journal of Banking & Finance*, Vol. 37, No.8, pp. 2920-2937, 2013.
- [26] Banna, H. , Ahmad , R. and Koh, E. H. Y. (2017). "Determinants of Commercial Banks' Efficiency in Bangladesh: Does Crisis Matter?", *Journal of Asian Finance, Economics and Business*, Vol. 4, No. 3, pp.19-26, 2017.
- [27] Rashid, M. H. U., Zobair, S.A.M., Chowdhury, M.A.I. and Islam, A., "Corporate governance and banks' productivity: evidence from the banking industry in Bangladesh", *Business research*, Vol. 13, pp.615-637, 2020.
- [28] Banks and Fls. <https://www.bb.org.bd/en/index.php/financialactivity/bankfi>, Last accessed (10/05/2023)
- [29] MetLife Bangladesh customers receive Tk 2,548 crore as claims in 2022, <https://www.newagebd.net/article/193722/metlife-bangladesh-customers-receive-tk-2548-crore-as-claims-in-2022>, Last accessed (1/05/2023)
- [30] Yesmine, T., Hossain, M. E., Khan, M.A., Mitra, S., Saha, S.M. and Amin, M. R., "Benchmarking the banking sector of Bangladesh: a comprehensive analysis of performance and efficiency" , *Asian Journal of Economics and Banking*, Vol. 7 No. 1, pp. 121-145, 2023.
- [31] Green Banking in Bangladesh, Fostering Environmentally Sustainable Inclusive Growth Process, <https://www.bb.org.bd/pub/special/greenbankingbd.pdf> , Last accessed (11/05/2023)
- [32] Quarterly Review Report on Green Banking Activities of Banks & Financial Institutions and Green Refinance Activities of Bangladesh Bank, [https://www.bb.org.bd/pub/quarterly/greenbanking/greenbanking\\_janmar2019.pdf](https://www.bb.org.bd/pub/quarterly/greenbanking/greenbanking_janmar2019.pdf), Last accessed (7/05/2023)
- [33] Nandy, A., Biswas, M. and Akhter, S., "A Change In Lifestyle Through The Mobile Financial Services Amid COVID-19: A Systematic Review In South-Asian Context", Vol. 3, 2022.
- [34] How innovations are transforming banking in Bangladesh, <https://www.thedailystar.net/business/news/how-innovations-are-transforming-banking-bangladesh-3127411> Last accessed (01/05/2023)
- [35] Mohiuddin, M. "Trend and Development of E-Banking: A Study on Bangladesh", *Journal of Business and Management*, Vol. 16, No 5, pp. 16-24, 2014.
- [36] Prospects of digital banking, <https://thefinancialexpress.com.bd/views/prospects-of-digital-banking-in-bangladesh-16118492343127411> Last accessed (23/04/2023)
- [37] BB looks to promote, <https://www.thedailystar.net/business/economy/news/bb-looks-promote-digital-banking-32220763127411> Last accessed (11/04/2023)
- [38] Alam, M. J., Jesmin, F., Faruk, M., and Nur-Al-Ahad, M. , "Development of E-banking in Bangladesh: A Survey Study", *Financial Markets, Institutions and Risks*, Vol, 5, No. 2, pp. 42-51, 2021.
- [39] Brac Bank launches Bangladesh's first ever digital loan app 'Shubidha', <https://www.bracbank.com/en/agentbanking#:~:text=Agent%20Banking%20means%20providing%20limited,on%20behalf%20of%20a%20bank> Last accessed (17/04/2023)
- [40] Green Banking: An Approach for Sustainable Banking. <https://www.studocu.com/row/document/bangladesh-open-university/financial-statement-analysis/green-banking-report-2016/25462386> Last accessed (01/05/2023)
- [41] Sustainability Rating 2020, [https://www.bb.org.bd/finansys/sustainability\\_rating\\_2020.pdf](https://www.bb.org.bd/finansys/sustainability_rating_2020.pdf) Last accessed (9/04/2023)
- [42] Bangladesh sees surge in credit card use, <https://thefinancialexpress.com.bd/trade/bangladesh-sees-surge-in-credit-card-use-1603423758> Last accessed (12/05/2023)
- [43] Bangladesh Bank Regulations and Guidelines, <https://www.bb.org.bd/en/index.php/about/guidelist> Last accessed (12/05/2023)
- [44] Bangladesh Bank releases 100C for digital nano loans, June 4, 2022, <https://www.dhakatribune.com/banks/2022/06/04/bangladesh-bank-releases-100c-for-digital-nano-loans> , Last accessed (12/04/2023)
- [45] MBL e-KYC system, <https://www.mblbd.com/digitalbanking/mbl-e-kyc-system> , Last accessed (3/05/2023)
- [46] Central bank releases e-KYC guideline, <https://thefinancialexpress.com.bd/economy/bangladesh/central-bank-releases-e-kyc-guideline-1578548271> Last accessed (22/05/2023)
- [47] e-KYC vital for digital financial inclusion: Experts, <https://www.tbsnews.net/economy/e-kyc-vital-digital-financial-inclusion-experts-290677> , Last accessed (1/05/2023)
- [48] MTB, TallyKhata launch first end-to-end digital loan for small businesses, [tbsnews.net/economy/banking/mtb-tallykhata-launch-first-end-end-digital-loan-small-businesses-532590](https://www.tbsnews.net/economy/banking/mtb-tallykhata-launch-first-end-end-digital-loan-small-businesses-532590) , Last accessed (27/04/2023)
- [49] Geng, R., Mansouri, S. A. and Aktas, E. "The relationship between green supply chain management and performance: A meta-analysis of empirical evidences in Asian emerging economies", *International Journal of Production Economics* Vol. no. 183, pp. 245–258, 2017.



- [50] The Benefits of Green Supply Chain Management, kyinbridges.com Last accessed (30/04/23)
- [51] Sufian, F. and & Kamarudin, F., (2015). "Determinants of revenue efficiency of Islamic banks: Empirical evidence from the Southeast Asian countries", International Journal of Islamic and Middle Eastern Finance and Management. Vol. 8, pp. 36-63, 2015.