

THE CONCEPT OF GREEN BANKING IN PAKISTAN

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Abstract. *The paper portrays the development of green banking in Pakistan, the concept not much developed and needs more attention of higher authorities due to globalization, intense competition in global markets and an increase in environmental issues across the country. Green banking practices may include eco-friendly light system, implementation of Solar Powered ATMs, Solar Power as an alternate source of Energy in Rural and remote branches and digitalization of the branches to reduce paperwork. The study suggests that banking sector is an important stakeholder in the Pakistan economy and can play a prominent role in reducing environmental problems. As Pakistan is currently facing high environmental risks, banks might contribute to reduce environmental issues by adopting green and sustainable banking practices such as the implementation of environmental standards for lending.*

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Introduction

Pollution emanate from business operations especially the emission of toxic gases such as carbon dioxide, methane and nitrogen are one of the alarming concerns across the globe. According to Hayward (2013), 67% of the studies conducted on CEOs show that the global economy does not meet and address the challenges related to sustainability issues. The banking sector is considered as one of the most important segments of the global economy and prevails as a major stakeholder in the industrial sector. Banks also play a vital role in the provision of funds and finances to commercial projects, which can affect the environment adversely. Therefore, banking sector is key stakeholder in promoting eco-friendly and sustainable investment, these practices mainly known as green banking. These environmental and sustainable investment initiatives enable factories and commercial projects to use appropriate technologies and also motivate them to adopt a proper environmental manage-

ment system. The concept of green banking evolved in the western world aimed to encourage banks to reduce the carbon footprint, waste and to introduce environmentally friendly practices such as to alter their lending principles and policies in order to reduce industrial pollution (Sahoo & Bibhu, 2007). Globalization and intense competition in global market are drives that make green banking unavoidable (Islam & Prohallad, 2013). Green banking is a new and least developed concept in Pakistan, in 2017 for first-time state bank of Pakistan issued green banking guidelines under the influence of Pakistan environmental protection act 1997 (State Bank of Pakistan, 2017).

This paper is organized as follows. Section 2 addresses the general overview of Green banking; section 3 provides insight into the environmental situation in Pakistan. Section 4 shows the progress of Pakistan in the field of green banking and different perspectives on green banking in Pakistan and section 5 concludes the article.

Green Banking

Green Banking is not a distinct bank. The term Green Banking is famous around the world nowadays to minimize the environmental risks and make this planet inhabitable. Global warming and climate variation are now having a direct impact on biodiversity, agriculture, forestry, dry land, water resources, and human well-being. Pakistan, India, and Bangladesh are among the most vulnerable countries facing the impacts of climate change. Therefore, these countries have a concern about environmental degradation. Pakistan being a developing country is suffering from vast social, political, economic and environmental issues and these issues needed to be considered for the overall development of this country. The notion of Green Banking developed in the western world has been adopted by many developing countries. It means, the environment-friendly banking and it also refers to ethical banking or sustainable banking. The banking sector is not generally considered as a polluting industry, but it may have effects on the environment in terms of growing energy consumption (lighting, air conditioning), paper consumption. Banks and financial institutions can play a vital role in global efforts to alleviate the environmental risk and make this planet livable. The environmental impact of banks is related to consumer activities rather than the bank's physical activities. Green banking is an umbrella term that refers to those practices and guidelines that make banks environmentally, socially and, economically responsible. Therefore, the banking industry can play an important intermediary role between economic development and environmental protection, for promoting environmentally sustainable and socially responsible investment. Green banking commonly refers to the efforts of the Banking industry to keep the environment green and to curtail the greenhouse effects

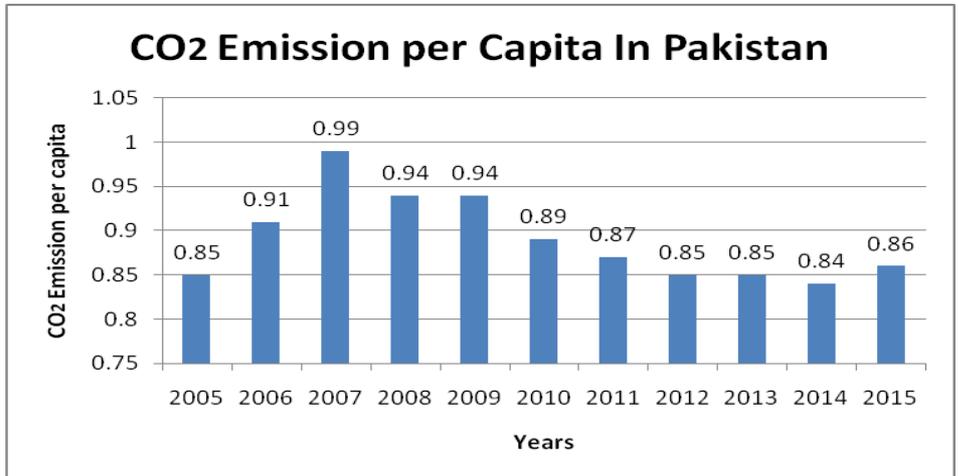
through vindicating their strategies, policy, decisions, and activities regarding banking services, business, and operational activities. Green banking is seen as a module of the global initiative from the bank's end to save and raise the awareness related to the environment. On the other hand, Green banking is defined as encouraging environment-friendly banking to stop environmental deterioration to make this planet green and more livable. The key objective of green banking is to reduce filthiness and give more importance to the environment and society. Rahman (2010) asserted that Bangladesh Banks are struggling to forward with technology-driven, innovative, environment and low-cost banking approaches; propagating a qualitative change in banking, preparation of monetary policy, application of unconventional banking technologies, and use of Information and Communication Technology (ICT) to outspread the financial services to the doorstep of general public. Various initiatives have been adopted like trade finance; digitalization of the financial sector; directing liquidity into productive investments which include agriculture, SMEs, Green Banking and CSR activities to ensure easy access to financial services for all. Mani (2011) opined that banks have a major role and responsibility in the enhancement of governmental efforts towards a substantial reduction in carbon emission and become Socially Responsible Corporate Citizens (SRCC) Banks can initiate and practice Green Banking for sustainable development of the community and national economy. Bihari (2010) explained that the main aim of Green banking includes the promotion of corporate social responsibility (CSR). CSR mainly focuses on shielding the environment and the community, where banks are responsible to analyze and investigate the project before financing whether it is environment-friendly or not and has any worse impacts on the environment in the future. A firm will be considered for loans in such a case when all the environmental safety standards are followed.

Environmental Situation in Pakistan

Air pollution is a fast-growing environmental issue in Pakistan. Extremely inefficient energy use, increase in vehicle population and growing industrial activity without passable air (gases) emission treatment, the carelessness in burning solid waste, mainly plastic, and usage of ozone-depleting substances (ODSs) are some of the key causes of air pollution in the region. According to Khwaja and Shaheen (2005). The emission of sulfur dioxide across main emitting divisions such as industry, transport, and power has been increased up to 23-fold, nitrogen oxide up to 25-fold and carbon dioxide increases with an average of fourfold in the last two decades. Pakistan faces severe deterioration of surface and groundwater quality because of unabated industrial, municipal and agricultural pollution. The connected unfavorable health and productivity

impacts are significant, poor bearing the brunt. Hence, polluted water causes a rising incidence of water-borne diseases in a country (GoP, 2012).

Graph: 1



Source: Created by Author based on Data of World Data Atlas

In 2005 the CO₂ per Capita was 0.85 metric tons and the emission of CO₂ in 2015 was 0.86 metric tons while in 2007 the emission was high i.e. 0.99 metric tons.

Baig and Aqeel (2014) investigated the relationship between the emission of carbon dioxide per capita, GDP per capita, growth in population and energy consumption in Pakistan. The results of their study indicate that if GDP per capita, population, and energy consumption increase by 1 %, the emission of CO₂ per capita will raise by 0.46%, 9.70%, and 0.005 %. According to the Government of Pakistan report (2015), the annual rate of deforestation in the country is 4-6 percent while the emission of carbon dioxide is increasing annually at the rate of 8-10 percent. The residents and industries in the Karachi region dump almost 250 million gallons of contaminated water into the Arabian Sea every day, which is a threat to the ecosystem. One of the major threats to public health in Pakistan is water pollution. The management and monitoring of clean drinking water are very poor and among 122 nations Pakistan ranks 80 in clean drinking water quality. The Drinking water sources, both surface and groundwater are contaminated with coliforms, toxic metals, and pesticides throughout the region. The parameters set by WHO regarding the quality of drinking water are frequently violated (Azizullah, Khattak, Richter & Häder, 2011). Khan, Zaman, Irfan, Awan, Ali, Kyophilavong, & Naseem (2016) studied association amongst energy consumption, air pollution

and water resources in Pakistan and asserted that the presence of Carbon dioxide in large amounts in the air is one the causes of water pollution in Pakistan and the government should take some serious steps regarding the issue. According to WHO Global Health Observatory estimates that about 200 deaths per 100,000 population are due to different environmental factors in Pakistan. According to World Bank (2018), Yale's Environmental Performance Index 2018 shows that Pakistan is ranked 169 out of 180 countries on basis of various factors including population growth, industrialization, urbanization, growing environmental degradation, and pollution. Environmental health sub-index (air quality, water and sanitation, and exposure to heavy metals), ranked Pakistan 177 showing better performance only against India, Nepal, and Bangladesh. In Pakistan annually around 340,000 deaths caused due Pollution and the contribution of air pollution is above 70 %.

Green banking in Pakistan

A developing economy like Pakistan has a deliberate need to introduce the concept of the green economy in their policies (Samad & Manzoor, 2011). Green growth for Pakistan can proclaim the efficient and well-organized use of natural resources and signify the reduction of climate change susceptibilities (Khan, 2002). Planning of Green Economy is to be amalgamated into policies and discourses of the firms. Association of the Green Economy and growth needs to be observed in an innovative and focused means in accordance with the national economy along with productivity. Green Financing is a fairly a new concept in Pakistan. Some of the commercial banks in Pakistan have incorporated green financing into their operations with energy-efficient technologies. Here, the part of microfinance banks in Pakistan is worth mentioning, since they literally opened up the scope of Green Financing for the large banks (Farrukh, 2014). However, constructing green financing in Pakistan can be a complex procedure because it is still unconventional, and demands more legal creativeness related to conventional financing. Responding to the problem, State Bank of Pakistan (SBP) has recently revised its regulations of housing finance to let banks sanction loans to customers, who provided affordable solar power solutions at their residence as a part of home loans. These newly revised regulations of SBP may create grounds for Green Finance to develop in Pakistan (Thombre, 2011). State Bank of Pakistan has taken some important measures to increase the activities of Green Banking in the whole banking industry and advised them to follow the said concept. SBP Annual Performance Review (2014-15) determined the vision of sustainable and Green Banking by integrating resource efficiency, renewable energy, and environmental protection not only in banking operations and activities but in their

products/services. In this regard, SBP has prepared a concept paper on "Green Banking" which provides several commendations for future initiatives. The banking and other financial services industry of Pakistan should provide their best efforts towards Green Financing for making the customer more aware of the meaning and significance of Green Financing and sustainable banking activities to boost the Green Banking practices (Samad & Manzoor, 2011). According to the Pakistan Economic Survey (2015), the following are banks that practice green banking.

Table 1 *Banks using Green Banking practices in Pakistan*

#	Name of Bank
1.	National Bank of Pakistan
2.	Bank Alfalah Limited
3.	Allied Bank
4.	MCB

Source: Pakistan Economic Survey (2015)

Green Banking Guidelines 2017 issued by State Bank of Pakistan

1. The Green Business Facilitation Policy and Strategy: The green banking policy of a bank/DFI should include policy statements for allocation of funding resources to those businesses, who directly or indirectly want to improve the carbon footprint, be more resource-efficient and use other means to reduce the environmental impact. Indirect impacts are facilitated by such clients as providers of environmental services and equipment manufacturers while direct impacts are achieved by those who implement them. Supply and demand-side both may use innovative technologies and structures which should be considered for financing as well. These green banking strategies should have long term focus on all aspects including bank/ DFI's core principles, growth objectives, and its existing and potential future client interests.

2. Green Product Development: The Green Business Officer should examine and evaluate all available prospects to finance. These opportunities arise in all business segments i.e. for consumers, agricultural borrowers, SMEs, Corporate clients, and infrastructural projects.

3. Green Advisory Service: As the banks/DFIs integrate the evaluation of environmental implications/costs in their credit appraisals, they should also develop a mechanism of suggesting green and resource-efficient alternatives to their clients. The clients may not always accept the advice/recommendation of banks/DFIs (for example, due to higher initial outlay). Nonetheless, this mechanism of highlighting the potential benefits of green alternatives to clients will educate them and also sensitize field staff of banks/DFIs on the strategic importance of green investments.

4. Water Conservation in Agriculture: The banks/DFIs should explore ways and means to encourage optimal usage of renewable water resources and adoption of modern efficient agriculture water management techniques (Drip/Trickle Irrigation System & Sprinkler Irrigation System) through their working capital and term finance facilities to farm and non-farm sector activities in line with the Guidelines for Efficient Agriculture Water Management Financing issued by Agricultural Credit & Microfinance Department of SBP.

5. Earmarking of Funds: Banks/DFIs should consider earmarking funds for financing of green investments commensurate with the overall financing and investment portfolios and implement comprehensive procedures for regular utilization.

6. Green Marketing: The banks/DFIs are encouraged to highlight the environmental causes for the marketing of their products/services specifically designed to support environmental friendly activities/businesses.

7. Multilateral Resources for Environmental activities: The banks/DFIs should explore international funding options for investment in green projects and development of their Green Financing Portfolio, such as the UN's Green Climate Fund (GCF).

8. The opportunities for financing environmentally friendly activities: These opportunities exist in almost all sectors and sizes of businesses and households. For example,

- a. The agricultural clients may be financed for farming techniques based on lesser use of chemical fertilizers & pesticides, efficient water usage, drought resistant and water-resistant crops, etc.
- b. The consumers may be financed for the installation of energy and water-efficient equipment in households etc.
- c. SMEs may be financed for modern resource-efficient technologies as alternatives to traditional technologies etc.
- d. The corporate clients may develop and produce equipment for resource efficiency and waste disposal etc.

IFC to boost green banking in Pakistan

The International Finance Corporation (IFC) and the State Bank of Pakistan (SBP) have signed an advisory agreement to promote and support the green banking Practices in Pakistan. The agreement signed on August 29, 2018, comes as part of IFC's current commitments to assist developing nations

transition to green and low carbon sustainable economies. Moreover, it was discussed in the agreement that IFC's advisory services team will assist the SBP and Pakistan's banking sector in refining their environmental risk management practices and also ensuring ethical lending practices. SBP has already taken an initiative towards green banking with the issuance of its green banking guidelines in October 2017 (The Asset ESG Forum, 2018)

IFC is an international institution and leader in green banking, providing both advisory and investment assistance to financial institutes to shape their policies and regulations to initiate and develop their green banking practices. In the last two decades, IFC has initiated more than 200 projects with 150 financial institutions in 15 countries with the provision of nearly US\$5.7 billion in financing, including developing green banking business models and issuing green bonds. SBP is also part of the IFC-supported project, Sustainable Banking Network. Over the past three years, IFC has invested US\$1.2 billion to back the development of Pakistan's private sector, especially in power, infrastructure, micro-credits, small and medium enterprises (The Asset ESG Forum, 2018).

Banking Perspective on Green Banking In Pakistan

The banks being commercial entities strive to escalate the wealth of its shareholders and investors while remaining sustainable on a long-term basis. Although, the step towards ethical banking has been embraced by some banks around the globe, the banks have lag behind and timidly implemented infrequent measures only to avoid undesirable consequences. The SBP has emphasized on three rational reasons to go for green banking (SBP green banking, 2015).

- a) Corporate Social Responsibilities
- b) Economic Benefits
- c) Sustainability Risks

Corporate Social Responsibilities

The idea of green banking originates from the basic principle that distinguishes all businesses as corporate citizens and entails them to have responsibilities towards the community like the normal citizens. This concept differs from the traditional school of thought according to which businesses are organized to maximize the profits of their shareholders. As the majority of the businesses and governments are reliant on the financial services of private banks, these financial institutions play a vital role in every segment of human activity. The banks, therefore, stand at an important position where they can be dominant means of change towards a more sustainable future by responsibly diverting

their financial services to businesses that are more beneficial and responsive to the environment, human rights, and society (SBP Green Banking, 2015).

Economic Benefits

Economic benefits are linked to green banking activities in terms of promoting their image as a socially responsible bank to attract customers who are more socially motivate and the firm also strives for savings on their operational activities. To reduce the operation costs of the banks, the firms have adopted the use of energy-efficient technologies, on-site renewable power generation, and paperless banking. In a paperless environment, storage, handling, retrieval and sharing of documents become quite efficient increasing speed, security, and accuracy of banking operations. The on-site power generation from renewable resources is becoming a cost-effective and continuous source of power (SBP Green Banking, 2015).

Sustainability Risks

Taking sustainability risks into account as a part of a bank's credit portfolio will improve the bank's understanding of its financial risks and its ability to deal with these risks in a significant manner. The level of sustainability of the firm's operations has a direct connection with the probability of default. Ignoring sustainability risks can lead to upsurges in raw material prices, plant diseases and other environmental problems, conflict with civil society and the local community and reputational mutilation of the firm. The State bank of Pakistan elaborated three types of sustainability risk i.e. credit risk, legal risk, and reputational risk. Credit Risk; may arise if expected commitments of the borrowers in relation to social and environmental protections are not properly considered at the time of approval of the loan for a project. This may increase the costs of fulfilling the mandatory standards which can severely hamper the cash flow of the borrower and thereby reduces the firm ability to repay. The legal risk; arises from the fact that the lending bank may end up in custody of collaterals which is pollution-causing and could not be easily disposed of. A company engaged in extraction may be legally responsible to clean up the site to minimize the possible damages. Reputational risk; in recent years become the main concern for the financial firms as environment and human rights groups have become much more aware of the unethical practices of the companies and briefing the public regarding insufficient safeguards of lending banks. Banks are always at risk and lose their reputation if they are part of some big projects which negatively affect the environment and society (SBP green banking, 2015).

Conclusion

Green initiatives of banks adopt and implement environmental standards for lending, which is really a great idea that would enable eco-friendly business practices which would benefit our future generations. The ease and advancement in online/electronic transitions for processing and placing the orders will reduce the paperwork. The banking industry in Pakistan has also adopted various Green initiative practices such as more energy and eco-friendly light system, implementation of Solar Powered ATMs, Solar Power as an alternate source of Energy in Rural and remote branches. Now-a-days many banks have started giving incentives to eco-friendly projects in Industries so as to make use of the opportunities to clean the environment, Carbon emissions reduction, effective use of renewable energy for the sustainability of the environment and society.

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