

A STUDY ON POSSIBLE INITIATIVES, SIGNIFICANT CHALLENGES, VIABLE OPPORTUNITIES AND MAJOR AVENUES FOR GREEN BANKING IN INDIAN CONTEXT

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Abstract:

Sustainable development and change is the need of the hour for survival in all spheres and it can be best achieved by allowing markets to work within an appropriate framework of economic viable instruments and cost effective regulations. As such one of the major economic agents influencing overall economic growth and industrial activity are the financial institutions such as banking sector. The present era of globalization and industrialization has added a lot of luxury and comfort to human life but has also lead to an alarming situation of huge environmental degradation incorporated with all involved activities. The world today has seen much focus on economic progress, the side effect of this has resulted in climate change, environmental damage. Banks can certainly play an important role between economic growth and environmental protection. Banking of this kind is termed as "Green Banking" which means combining technology and changing client attitude and habits in dealing with banking business. Green banking initiatives and practices will be useful not only for environment but also lead to cost reductions in banking related activities. In an emerging economy like India environmental management needs to be the key focus area of business fraternity and especially banking industry being the major intermediary. Green banking concept would help banks and firms in emerging economies utilize their limited resources in an optimum way without harming the natural environment and face the global challenge of sustainability in successful manner. To reduce external carbon emissions, banks should finance green technology and pollution reducing projects. Green banking is a part of green initiative taken by stakeholders to save environment. In order to understand the importance of green banking some case studies in Indian context are also discussed in detail. This paper tries to make an attempt on importance of green banking, sites international experiences, opportunities, challenges and benefits of green banking in India. The paper focuses on the current practices and the gaps in the same in relation to green banking practice

Keywords : Sustainable development, Green Banking, Green technology, carbon emissions, challenges, opportunities, economic growth

Introduction:

As of today majority of the enterprises are interested in implementing strategies that which help to address environmental issues. Also since last few years Global warming is increasingly becoming a National and International concern. It will be unwise for many enterprises to ignore the concern for society and environment. Today we are recklessly consuming all the available resources on earth which has given rise to a question as to what we will leave for our future generation. Some of the major reasons to go for green banking may be the growing interest of consumer in environmentally friendly goods and services, higher expectations of general public as well as regulatory compliance requirements. Green banking thus refers to the sustained and prolonged efforts of the banking sector to keep the environment clean and also to minimize greenhouse efforts through rationalizing their strategies, decisions, policy and activities pertaining to various banking services, business related and in-house operational

activities. Ecological balance has been affected by global environmental problems like pollution, problems of natural resources, population growth, greenhouse effect and other such effluents. Green banking can promote environmental friendly practices and also reduce carbon footprint from banking activities. It can be implemented in many forms like using online banking instead of branch banking, paying bills online instead of mailing them, opening accounts at all online banks instead of multi branch banks and finding local bank in your area which is taking biggest steps in supporting local green initiatives. Banking and financial sector should be made to work for sustainable development. Even tough, many of the banks have started adopting green practices, still lot of channels are unutilized by Indian banks for greening their activities. Green bank considers all social and environmental factors which is also called as an ethical bank. With an aim to reduce external carbon emission, banks should finance those projects which are considered to be environmentally friendly by means of promoting environmental-friendly practices which can reduce the carbon footprint from banking activities. Banks can go ahead and also provide incentives to industries by offering cheaper funds for adopting green technologies which will have a long term beneficial impact on the environment. As major implementers of technology, banks themselves can adopt green technological practices thereby leading the way in this global initiative. Majority of the banks in India have started green banking practices such as mobile banking, online banking, green channel counters, green loans, e-statement, solar ATM's. The need of the hour is not restrict global warming to a debate but also to be dealt with going green. There is need to involve key stakeholders in creating awareness about environmental friendly banking. India's largest commercial bank State Bank of India (SBI) was the first bank to go green which took initiative in setting high sustainability standards and also completed the first step in 'Green banking' with Shri. O.P.Bhatt Chairman, SBI, inaugurating the bank's first wind farm project in Coimbatore. In recent years SBI green bank initiative included ATM's, paperless banking for customers and also building of wind mills in rural India. Thus green banking helps to create effective solutions to a range of environmental problems and also at the same time identify opportunities that which benefit the customers.

WHAT GREEN BANKS ARE?

Banks contributing to conservation of environment through Biodiversity, utilizing environment friendly products, conservation of natural resources, carbon footprint climate and paper etc. Green Banking itself insinuates promoting environmental-friendly banking rehearses and tumbling carbon impression from banking undertakings. To add plainness to this term, it is a form of banking which ensures less exploitation of natural assets and optimal lessening of surplus of paper/carbon impression. Green Banking is being adept by all banks, which ponder all the social and environmental/ecological factors with an ambition to shelter the milieu and conserve natural possessions. Green Banking practices are also labeled as "Ethical Banking". The vital linking behind this lending concept is to augment the conservation of earth's environment/habitats/resources.

Green Bank and Banking:

Across the world today green is becoming a symbol of eco consciousness. According to Indian Bank Association (IBA, 2014) Green bank is like a normal bank which considers all the social and environmental factors with an aim to protect the environment and also conserve natural resources. Major purpose of green banking is to perform banking activities with an additional plan towards taking care of earth's ecology, natural resources as well as environment. Today in banking sector green banking is making technological improvements, operational improvements and also changing client habits. Banks

should promote those products, technology and process which sustainably reduce the carbon footprint from banking operations. Green banking as such is not only a CSR activity of an organization but it is also about making the society habitable without any considerable damage. However to a certain extent there is general lack of adequate awareness on above mentioned issues and there is a urgent need to promote certain urgent measures for sustainable development as well as corporate social responsibility.

The Common Characteristics of Green Banks are

- Promoting the usage of online banking instead of branch banking.
- Paying bills online.
- Minimum use of plastic material; use recyclable paper and carbon footprint materials.
- Opening up CDs and coinage arcade accounts through accessible banking, instead of hefty multi-branch banks.

Review of literature:

Green banking certainly aims at greener and clean future. Creating consumer awareness is the importance of green banking

Sharma, Gopal et.al. (2014) attempted to stud the level of consumer awareness of Green banking initiative in India with specific reference to Mumbai. By conducting primary survey they found out that surprisingly that even those people who are using online facilities certainly provided by their banks nearly three fourth of them were unaware of the term green banking. Further based on their findings they came to know that those who were aware of green banking term considered it mainly related to cash deposit system and online bill payment. Consumers were not aware of other green banking aspects like Green CD's, solar powered ATM's, bonds for environment protection etc. During the course of their study they also made an attempt to analyse the gender based differences in awareness of green initiatives by banks especially net banking, e-statements and green loans. By using chi square test for hypothesis testing they arrived at a result that both male and female respondents had the same level of awareness with respect to green banking. The researchers also stated that the major obstacle in green banking is technical issues involved in it followed by lack of education.

Jaggi (2014) studied the initiatives taken by ICICI and SBI on green banking. Green products and services providing initiative of ICICI bank included instabanking (anywhere, anytime) home finance and vehicle finance. SBI too has introduced a green channel counter, online money transfer, wind farms, no queue banking, enhanced commitment towards achieving carbon neutrality in its day to day operations. Besides the above mentioned initiatives these banks have also taken other steps for energy conservation like recycling, duplexing (two side printing), CFL's, carpool etc.

Sudhalakshmi and Chinnadorai (2014) presented the status of Indian banks in respect of green banking and also stated that though going green is very much essential for emerging economies like India significant efforts have not been taken yet. Especially in lending principle banks are required to include their green aspect for smooth and environmental friendly transaction. Surely every step taken today will mean a better global environment in future. Also policy measures to promote green banking are very much needed in India. Indian banks in this aspect are running behind time in successful adoption of green phenomenon. In this regard serious steps are required to be taken

Nath, Nayak et.al. (2014) made an attempt to study the green rating standard given by RBI, World Bank's social and environmental norms and initiative taken by banks in adopting green practices. During the course of their study they also listed strategies for adopting green banking. Green rating standard also known as green coin rating. Under

this concept banks are evaluated on the basis of carbon emissions and also amount of recycling activities. Social and environmental norms for financial institutions have been framed by World Bank and these norms provide ways to reduce environmental impact. Besides banks are also required to do environmental impact assessment, do annual reporting and also adopt sustainable technology. The researchers studied and listed the various initiatives taken in respect of environment by different banks in India.

Jha and Bhome (2013) also conducted similar surveys as stated above to check and thereby create consumer awareness on green banking. By conducting interviews and also using specially structured questionnaires from opinion surveys they stated certain steps needed in green banking. Online banking, green loans (low rate to those who wish to buy solar equipment's), green checking accounts (ATM, Special touch screens) for supporting environmental friendly residential projects, green credit cards, power saving equipment's, power saving mobile banking are among few steps suggested by them. Based on their studies they concluded that Green banking will ensure organization's move towards stability and sustainability.

Pathak and Yadav (2013) studied green banking approaches opted by both private and public banks for environmental sustainability. Using case study approach they found out that Indian banks have understood the relevance of taking positive steps towards environment. Moreover results of the study conducted also revealed that public sector banks have taken more initiatives as compared to private sectors with exception of ICICI bank. In private sector banking only ICICI Bank's approach is a sustainable one.

Rajput, Kaur et al. (2013) aims to understand how Indian banks respond to rapid environmental changes and also the action taken in respect of Green banking. They found out that there is small group of banks in India that lead in environmental aspect. Also response of Indian banks towards international initiative for environment management is sluggish. By conducting factor analysis they concluded that risk of failure of business to peers and also lack of RBI mandates are obstacles to moving economy towards sustainability. Gaps in India are lack of awareness and consciousness on environmental issues. They opined that India requires carbon disclosure projects for public disclosure of emissions. This disclosure project is active in India but responses are very less and include only 8 signatories. Researchers also feel that current management system needs to be very much integrated with environmental and sustainable issues.

Bahl (2012) highlighted the means of creating awareness about green banking to ensure sustainable growth. Garrett's ranking technique was used to analyse the most significant strategies in respect of green banking. If the goal is to attain sustainable development then this can be achieved only through imparting education and creating awareness. Based on the research studies conducted he opined that among the internal sub systems emphasis should be given to newsletters, publications so as to create awareness and also effective means for external sub systems such as event meetings, websites and through media. A proper structured green policy guideline is very much needed for effective and efficient green banking.

Major objectives of the Study:

1. To study opportunities of green banking in India
2. To study the green banking initiatives by various banks
3. To know the major avenues of green banking
4. To study the major challenges of green banking
5. To study various strategies for green banking approach

Opportunities of Green Banking in India

India as of now is at a critical juncture in scaling renewable energy to provide energy access to many growing cities and vast rural communities. Finance as such is one of the principal barriers to rapid expansion of India's clean energy market which is needed to meet the ambitious national target of 175 gigawatts (GW) of solar, wind and other renewable energy by 2022, as well as broader targets of Paris Climate Agreement. As such financing must be not only abundant but also cheap so that clean energy can certainly compete with fossil fuels. Also plentiful and low cost capital will allow India to transition to a much cleaner platform while enabling continued economic and sustainable growth. Eventhough the investment in renewable energy and energy efficiency is growing at a good pace both internationally and in India, the scale of investment does not yet match the scale of financing needed to grow rapidly. In order to reach India's solar, wind and efficiency targets to increase clean energy access in the next six years or so from now over \$140 billion of investment is required. Significant, sustained and collaborative efforts are required from various stakeholders, including government, various financial institutions, industry, investors and research organizations in order to develop innovative financial solutions to achieve the desired targets. To enable renewable energy investments to scale up to needed levels in India strong policy settings and incentive structures must be adopted. More importantly dedicated 'Green financial institutions' known as green banks are proving to be successful at both state and national level at leveraging public money to bring in private capital. An Indian green bank in this regard can help propel India's solar wind and energy markets and also support critical energy-efficiency and climate resilience projects.

Green banking initiatives adopted by various banks

As part of green practices, RBI has issued major guidelines for banks to take proactive steps for increasing use of electronic payment systems, elimination of post-dated cheques and also gradual phase out of cheques in their day to day business transactions and activities. On behalf of this, other banks such as NABARD, EXIM Bank, SIDBI etc. would take up the e-governance initiatives in a proactive manner. Through these initiatives it is expected that on one hand the quality, effectiveness and efficiency of the service delivery will improve and on the other hand banks will gradually move towards less paper based transactions in days to come.

1. State Bank of India (SBI): In order to promote paperless green banking for deposits, remittance and withdrawal SBI has started "Green channel counter" on 1st July 2010. In this counters customer need not fill up any pay in slips or draw cheques for withdrawal or depositing of money from their accounts, saving paper and thereby contributing to the concept of green banking. SBI thus became the first bank in the country to venture into generation of green power by installing windmills at various locations in the country. The bank has also introduced a scheme known as green homes, under this scheme the bank is offering concessions such as reduced margin, zero processing fees and low interest rate for on home loans for environment friendly residential projects rated by the Indian green building council (IGBC). Bank in recent days has also launched a loan product called 'Carbon Credit Plus' to finance the future clean development mechanism (CDM) projects.
2. Punjab National Bank (PNB): According to corporate social responsibility report 2010-2011 (PNB, 2011) they had initially taken various steps to reducing emission and energy consumption. As energy conservation initiative bank has begun conducting electricity audit of offices. Bank is also emphasizing mainly on green buildings

and earnestly encouraging simple green practices such as opting for energy efficient lights, CFL bulbs, printing on both sides of paper purchasing composite fax machines which can necessarily perform multiple functions, immediate repair of water leakage, use of master sensor master switches for light which reduces consumption of extra unit of energy

3. Bank of India (BOI): Provision of providing mobile banking, phone banking, internet banking and electronic cards was added as alternate delivery channel to reduce the use of paper in banking procedure. Bank has issued e-transaction advices to corporate customers and reduction in paper usage as well as encouraging electronic statements among retail customers. Various green initiatives such as distribution of tree saplings and also creating awareness among society have been undertaken by the bank.
4. Initiatives taken by ICICI Bank: The bank offers green products and services like Insta banking which is a service which gives convenience and easiness to the customers to do banking anywhere and anytime through mobile banking, internet banking, IVR banking etc. This certainly reduces the carbon footprint of the customers as they do not require the physical statement or travel to bank branches. The bank also conducted paperless initiatives like e-greetings and e- statements which has helped to save 30,000 trees from being felled and sixteen crore litres of water through green initiatives. Besides this ICICI Bank attempts to support other organizations in their endeavours to 'Go green' by managing and funding green technology projects.
5. Canara Bank: Canara bank in 2013 had taken many green initiatives as a part of green banking initiative; bank had adopted environmental friendly measures such as internet banking, tele banking, mobile banking, solar powered biometric operations etc. Canara bank has also set up e-lounges for high tech banking facilities like passbook printing kiosk, internet banking, ATM, online trading and cash or cheque acceptor. The bank also has implemented e-governance for HR function and several other administration areas to reduce the paperwork in bank transactions. Due preference and weight age to projects are given in terms of lending policy which can earn carbon credits like windmills, solar energy products etc. Besides these the bank is also not extending any finance to the units which are producing ozone depletion substances such as carbon tetrachloride, chlorofluoro carbon, aerosol products, solvents etc.
6. Syndicate Bank: Bank has taken steps towards effective implementation of "Green initiative in corporate governance" by allowing paperless compliances through electronic mode. Also transactions through alternative channel to reduce the usage of paper based payment instruments are actively encouraged. Through e-lounge facilities, ATM's and internet banking, bank is encouraging banking transactions through e-mode thus paving way for a greater role towards green initiatives.
7. Central Bank of India: It launched "Go Green" campaign for its esteemed customers with a purpose to promote green banking which is queue less banking and also promotes use of recyclable products for banks stationery using TYVEK materials. Here customers are motivated to opt for e-statements, use internet banking and also use e-voucher machine for transactions.
8. HDFC Bank Ltd: It has launched a system of sending the personal identification number (PIN) for debit card holders through SMS instead of usual dispatch by post. Bank has also incorporated environment friendly features into their infrastructure which involves energy conservation, air quality management etc. Phase

out policy- replacing inefficient lighting options with LED lights in large offices, use of central pollution control board (CPCB) compliant diesel gensets server and also desktop virtualization reducing much of the power consumption. Establishment of multiple alternate service points to enable easy transactions in paperless environment. Employee awareness campaigns to promote an environment friendly practice

9. Yes Bank: It is a first Indian signatory to carbon disclosure project and also has documented its carbon footprint. It is the first Indian bank originating from private sector which has become signatory to UNEP statements by financial institutions on environmental norms and sustainable development. Yes bank has also advocated a proactive response to climate change from its peers in industries, banking community and society as well.
10. IDBI Bank : This bank took a leap step towards green initiative in corporate governance through which bank sends all the documents relating to general meeting notices, annual reports, other notices etc. to their shareholders in electronic form. IDBI bank also has an exclusive team working on clean development mechanism (CDM) and other advisory services. It has also implemented a refinance scheme for most of the energy saving projects especially for micro, small and medium scale enterprises.

Major Avenues of Green Banking

As rightly highlighted by Institute for Development and Research in Banking technology established by RBI the major avenues of Green Banking are as follows:

Green process which signifies that each unit and activities should be environment friendly. Major among these are maintaining contacts with the customers through online means, paperless transaction, offering banking products in a way to have very minimal environmental impact

Green services and products like electronic paperless statements, electronic banking etc.

Major Green strategies which means explaining the key stakeholders about the environmental values, setting a green policy and also publicizing it etc.

Major challenges of Green Banking

For certain while adopting green banking practices, banks will face the following challenges listed below:

1. High Operating cost: Talented as well as experienced staffs are required to provide proper service to customers for green banking. Loan officers with experience should be trained with additional experience in dealing with green business and customers
2. Startup pace: Many banks in green business are quite very new and are in startup pace. Generally it takes 3 to 4 years for a bank to start making money thus it does not help banks during recession
3. Diversification problem: Normally in majority of cases green banks restrict their business transaction to those business entities who qualify the screening process conducted by green banks themselves. With limited number of customers they indeed have a smaller base to support them as well.
4. Credit risk: Credit mainly arises due to lending to those customers whose businesses as such are affected by cost of pollution, change in environmental laws and regulations and also new requirements of emission level. Also probability of customers default is high due to the result of uncalculated expenses for the capital investment in production facilities, third party claims and also loss of market share.
5. Reputational risk: If banks are involving themselves in those

projects which are damaging the environment then they prove to lose out on their reputations. There are also instances of some cases where environmental management system has resulted in cost saving, increase in bond value etc.

Various Strategies for Green Banking Approach

The incorporation of environmental and social strategies into the development goals of the banks has helped in arriving at an effective management system. Accordingly Ginovsky (2009) had emphasized that in order to implement ecologically friendly practices banks certainly should launch new banking products which can promote the sustainable practices and also need to restructure their back office operations as well. The author in his writings has suggested some of the strategies which banks can follow to be successful in green banking operations:

- Use of paperless banking transactions which can result in reducing the carbon footprint from the internal banking operations as well as cost saving to bank in many ways
- Adoption of green street lending, which offers low rate of interest to customers and also businesses for installing the solar energy systems as well as solar saving equipment's

According to Agarwal and Dharwal (2013) green banking is a key in mitigating the credit risk, reputation risk and legal risk. The author has suggested in his book some green banking strategies like green financial products, carbon credit business, carbon footprint reduction, green mortgages, green buildings and social responsibility services towards the society at large. However most banks were doing 'Single bottom Analysis' that is they were considering financial performance of borrowers, but instead they should do the 'Triple bottom analysis' i.e., analysing the social and environmental performances as well. From the empirical study, it is found that banks can go ahead and adopt following strategies for going green in banking:

- Engage with key stakeholders and also create awareness of environmental issues and also their impact on the economy, the environment and society at large
- Conduct regular energy audits and also review equipment's purchases and disposal policies
- Set SMART (Specific, Measurable, Attainable, Realistic and timely) green goals as internal targets to reduce the carbon footprints along the timelines
- Monitor progress regularly, watch energy trends and also new developments. Revise green policy as and when required
- Banks should focus on green buildings across its branches to effectively implement ecological friendly practices
- Banks can go ahead and support various projects ranging from community clean ups to national initiatives on climate change, water, air, biodiversity and many more
- Banks can introduce green funds for customers who would like to invest in environment friendly projects which can help in sustainable development

Conclusion:

Green is the word now. There is constant increase in awareness regarding conserving and protecting the environment. As such green banking is an emerging concept. It certainly integrates management of environment with the banking activities and also aims at reducing carbon footprints. In a rapidly changing market economy where globalization of markets are intensified the competition, banks should certainly play an important role to take ecological and environmental aspects as part of their lending principle which would also force industries to go for mandated investment for environment

management. Banking and financial sector should be made to work for sustainable development. Green banks are at start-up mode in India. Lot of channels are unutilized by the Indian banks for greening their activities even though they have started adopting green practices. On the outset for India there is a huge lot of opportunity available which they can exploit and move their goal of economic development. Green banking thus not only means sustainable use of resources but also adopting green lending principles. Finally Proper training and educational programs by banks for the green initiatives will actually make Green Banking a success. Green Banking adopts even more importance and relevance in developing countries like India. Henceforth, the concept of the "Green Banking" will ultimately subsidy to the banks, clients and the economy. It not only assures the greening of the country but also help in proving the increase of the asset quality of the banks in their future walks.

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