



Sustainable Development through Green Banking – the Way Ahead for Banking Sector

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ABSTRACT

The world faces a great challenge of environmental degradation which has drawn the attention of global citizens and policy makers alike. Banking sector has an important role to play make the planet safe for survival of living beings. Green banking practices not only mean promoting environment-friendly practices and reducing carbon footprint from day to day banking activities but addressing the issue of carbon credit. Adopting innovative practices can be a significant step in addressing environmental issues for sustainable growth. Green Banking means ensuring environment friendly practices in banking sector and thereby reducing internal and external carbon footprints. Banking industry is generally not considered as polluting industry. But it impacts the environment in terms of increasing energy consumption (lighting, air conditioning), paper consumption. This paper attempts to discuss the different practices relating to green banking practices.

Keywords-- Green Banking, Carbon Footprint, Carbon Credit, Corporate Social Responsibility

have forced the governments and organizations, around the world, to take up the cause of environmental protection, and implement it in their policies. Government policies are not only meant for protection, but are also intended for sustainable development, of the environment. Environmental sustainability plays a key role in sustainable growth and development, as the integration of social, economic and environmental sustainability help to make the development sustainable.

Corporates from all around the world, have started to make environmental protection, a part of their business strategy, and are offering environment friendly or green products and services to their customers. Lately, their Indian counterparts have started taking notice of these practices. Indian firms competing for maximum profits, are using green marketing strategies for competitive advantage. To exploit such competitive advantage, clean and green technologies are making their way, into various functional areas of many organization, including banks.

Industrial and economic growth cannot be achieved, without a robust and flexible financial sector. A strong banking sector provides for the creation of jobs, generation of wealth, and eradication of poverty, entrepreneurial activity, and overall prosperity of the country. As the banks are the backbone of our economy, so, eventually, it will be the banks who will help the economy attain the desired rate of growth. They are playing an important role in promoting a sustainable environment. As society is now more concerned and aware about the environmental issues, there is need for banks to adopt green strategies into their operations.

1.1 Green Banking

According to Indian Banks Association (IBA, 2014) "Green Bank is like a normal bank, which considers all the social and environmental / ecological factors with an aim to protect the environment and conserve natural resources". The purpose of such banks is to perform banking activities with special attention towards

I. INTRODUCTION

Since the launch of the "Make in India" Programme, by our present prime minister, Mr. Narendra Modi, India has entered into a race with China and Japan, to become the leading economy of Asia. In order to be the top economy of Asia, India needs to achieve a GDP growth rate in excess of 9%. To achieve such an ambitious target, we need to attract huge investments from the Foreign Institutional Investors (FIIs). This will lead to a spur in the industrial growth of the country. But this growth comes at a cost. The cost of such growth will be the exploitation of the natural environment. There will be loss of land, forest and fossil fuels which will affect the ecological balance of the environment surrounding us. It can be observed from the natural disasters which have been happening frequently in the past decade. Such events

preserving earth's ecology, environment, and natural resources including biodiversity. Green banking is about technological advancements, operational efficiency and changing customer attitude, towards banking. The aim of these changes is to promote environment friendly practices, and to reduce the carbon footprint of the banking sector. Banks do not impact the environment greatly, with their internal operations, but it is their clients who affect the environment in a great way. Some of the major clients of banks are industries like cement, paper, chemical, fertilizer, steel, power etc. which are considered as the largest emitters of carbon. Banks can become intermediary between economic development and environment protection, by promoting socially responsible and environment – friendly investments. To promote green investment, banks should finance projects which aim at using green technology and reducing pollution. Even though banks have never been considered as a pollution generating industry, but with the present expansion of the banks, the internal operations are consuming more and more energy i.e. lighting, electrical/electronics, IT, air-conditioning etc. Apart from this, the wastage of paper, combined with lack of green infrastructure, is constantly increasing the carbon footprint of the banking sector. To overcome this scenario, banks will have to change their traditional lending practices, to the industry. Earlier, banks were only concerned with their clients' financial performance. But now, to become environmentally responsible, banks will have to do a three – level analysis of their clients. The three level analysis will take into account not just the financial part, but also the environmental and social impact. Green banking is not just about the Corporate Social Responsibility of the banks, but

also about preserving the environment, which will lead to a sustainable growth of the economy as well.

II. LITERATURE REVIEW

(Saini & Sindhu, 2014) highlight the importance of commercial banks in the economic development of the country. They have explained how the industries are expanding, but don't have enough capital to invest. In such a scenario, banks are one of the major source of credit. Banks not only help the industries but are also responsible for making the savings of people, available for investment. Because of this, banks are considered as the wheels of our economy. They provide investment opportunities to industries as well as the common people.

As defined by RBI (IRDBT, 2014), green banking refers to making the internal bank processes, physical infrastructure and IT infrastructure as efficient as possible, with zero or minimal impact on the environment. It has introduced a green rating standards for Indian banks. This model has been explained by (Nath, Nayak & Goel, 2014) which is called as "Green Coin Ratings". According to this system, banks are rated based on their carbon emissions from internal operations, the amount of reused materials being used in the office establishment and the IT equipment like computers, printers, network devices etc. Banks are not just evaluated on the basis on internal operations but also on the project finance front also. Ratings depend on number of green projects approved and the recognition given to clients for their green initiatives. In this way, banks not only make their internal processes greener, but also encourage their external stakeholders to make more green investments.



Figure 1: Green Coin Rating System by RBI

Source: Institute of Development and Research in Banking Technology, 2013

2.1 Strategies for Green Banking

Biswas (2011) has suggested some strategies for environment friendly banking: -First strategy deals with an

Environment Impact Assessment (EIA) of the projects. The assessment will reveal the environmental risks involved in the project. Banks can maintain an Annual

Reporting System (ARS) under which the banks will keep a record of all the finances towards green projects, and their current status. It will also mention the potential environmental risks involved in the project, and how the client intends to take care of it. Banks should invest in green technology to reduce their carbon footprint. The equipment used in the banks' internal operations should be environment friendly. It will not only minimize risk, but also save cost and ameliorate bank's reputation. Namita (2014) did an empirical study on green banking initiatives by Indian banks. In her study, the author took a sample of 12 bank managers, 50 bank employees and 50 bank customers. The author first explains the benefits of green banking. Major benefits discussed by the author are the following: Minimum paper work: Almost all the banks in India are offering Core Banking Solution (CBS) which leads to minimum paper for internal communication and correspondence. They are also conducting processes like auditing and reporting, with minimum possible paperwork. Environmental standards for Lending: If banks start to follow environmental safety standards before any lending operation, then the businesses of the country will also become environment conscious. Cheaper loans: Banks can offer subsidized rate of loans for green ventures. This will encourage corporates and entrepreneurs to start up and develop green businesses. In the article, the author also suggests some strategies for green banking. Some of those techniques are mentioned below: Online Savings Account: Nowadays, many public and private sector banks are providing option for online opening of savings account. Such a step greatly reduces the paper used in account opening. Also, facilities like online transaction details, electronic statements, receipt of paychecks etc., provide

great convenience to the customer, as well as help save paper. Direct Deposit: Employers can pay remuneration to their staff, by directly depositing the amount in their corresponding account, rather than giving them physical paychecks. It not only speeds up the transfer of money, but also saves a lot of paper. Debit Card and Credit Card Rewards: Banks can have tie-ups with environment – friendly groups such as The Sierra Club or Defenders of Wildlife, so that banks can donate a small percentage of card (debit and credit) transaction, for helping the environment. Online Bill Payments: Earlier bills such as cable bills, telephone bills, credit card bills, mortgage bills etc., used to be delivered physically and the payment was made at the respective counters. But today, the bills have become online documents and their payments can be made from the banks' website directly. Internet Banking: It is the process of banking by which customers can do most of their banking transactions online i.e. with the help of internet. This system of banking has brought a revolution in the banking sector. Now, customers don't have to go to bank to create accounts, or deposit/withdraw cash, or create fixed deposits. All such facilities are available at the touch of few buttons. This process has been the greatest contributor to green banking practices.

2.2 Green banking initiatives by Indian Banks

Indian banking industry includes both public and private sector banks. The major difference between the two is that government is the majority shareholder (more than 50%) in public banks whereas in private banks, private parties are the majority shareholders (more than 50%). In the present study, three major public sector banks and three major private sector banks have been considered.

Public Sector Banks		Private Sector Banks	
Banks	Net Profit (Rs. Cr)	Banks	Net Profit (Rs. Cr)
SBI	13,101.57	ICICI	11,175.35
Bank of Baroda	3,398.44	HDFC	10,215.92
PNB	3,061.58	Axis	7,357.82

Source: moneycontrol (2015)

Table 1: Top banks on the basis of their profits (2014)

2.2.1 Public Sector Banks State Bank of India (SBI)

SBI launched green channel counter (GCC) in 2014, to speed up the process of payment and money transfers. Prior to this technology, customers used to fill up forms, to transfer money. But with this technology, customers can simply swipe their green debit card, and transfer money, within an instant. Rajesh & Dileep (2014) have explained some of the green initiatives taken by SBI. One of the major projects undertaken by SBI, is the "Green

Homes". Under this project, SBI will offer discounted rates of interest, low margin and zero processing fee on home loans, for housing projects rated by Indian Green Banking Council (IGBC). It is the first Indian bank to venture into wind power generation (Business Standard, 2014). Under this initiative, the bank has installed 10 windmills with 15 MW each, for captive power generation.
Bank of Baroda (BOB)

It is another major public sector lender to the industries. Bank of Baroda has made it compulsory for

industries to obtain “no objection” certificate from the pollution control board, before it can provide any kind of finance. Also, it has slowly stopped lending to industries which deal with environmentally hazardous substances like CFC, foam products, aerosol products etc. It has also been observed from the annual reports (2014) of the bank that they are preferring environment friendly projects such as wind and water projects and solar power projects.

Punjab National Bank (PNB)

PNB is another leading bank of the country which realizes the impact of environment on the health of the nation's economy. As per the Corporate Social Responsibility Report 2010 -11, (PNB, 2011), PNB has taken multiple initiatives to reduce its carbon footprints. One of the major initiatives of the bank, is the tree plantation ('Van Mahotsav') drive. It has conducted more than 290 tree plantation drives. It has started energy audit of its offices and maintains a separate energy audit sheet. This reporting structure helps the bank to keep track of its various energy hungry activities. For internal communications, the bank emphasizes on emails, rather than on printed information. Many other green activities such as both side paper printing, energy efficient lighting system, use of master sensor for controlling lights and bulbs etc, are being undertaken by the bank.

2.2.2 Private Sector Banks

ICICI Bank

As per the ICICI Banks annual report (2014), the bank has taken up “Go Green” initiative which includes green communication techniques, green products/services, green engagements and green partners. Under the green communications program, the bank promotes paperless statements and e-greetings, which has helped to save thousands of trees and crores of liters of water. Under the above mentioned initiative, the banks gives top priority to green projects. It helps in funding and managing such projects. In the vehicle financing division, the bank offers as much as 50% waiver on processing fees, on environment friendly vehicles such as Honda Civic Hybrid model, vehicles using CNG technology and electric vehicles like Reva. On the consumer front, the bank has started an initiative called 'Instabanking', under which a customer can do banking transactions from internet as well as from mobile. This has reduced a lot of paperwork thereby reducing the carbon footprint of the bank.

HDFC Bank

The key areas identified by HDFC banks, in which it can reduce its carbon footprints, are reduced paper usage, waste management and energy efficient activities. HDFC was one of the first banks to introduce SMS based

Personal Identification Number (PIN). Under this scheme, the one-time activation password won't be sent through post, instead it will be sent on the registered mobile number. Bank advises its customers to adopt e-banking and m-banking facilities so that the paper based transactions could be minimized. It has also implemented many energy – efficient activities like installation of LED bulbs, creating green data centers with state-of-the art facilities and judicious use of all other electrical devices. Bank has started installing solar panel based ATMs. It is also promoting use of recycled paper and plastic.

Axis Bank

As per the annual report of the company (2013), Axis bank has become much more sensitive towards environment conservation, and has implemented many strategies to reduce its carbon footprints. It has made its head office at Mumbai, a green building and got it certified for Platinum LEED. Since 2011, the bank has started waste management services at its premises, at Mumbai. Among the services, the waste from the offices of the bank are collected and converted into notebooks, notepads and envelopes, to be used in the daily office administrative work. As with their competitors, Axis bank also encourages its customers to take advantage of e-banking and m-banking. Apart from all this, it has also established few solar based ATMs. All these activities have resulted in a huge drop of the bank's carbon footprint.

III. RESEARCH METHODOLOGY

3.1 Objective of the Study

The objective of this research is to study the various green banking initiatives taken by different banks and how the initiatives are contributing towards their sustainability.

3.2 Methodology

The study is based on secondary data. Data required for the study has been obtained from various banks, various information published on the bank, RBI website, scholarly articles and various other websites on the internet. The sample consists of 6 major banks, based on the profits earned in 2014, money control (2015). Among the six banks, three are public sector banks and other three are private sector banks.

IV. FINDING

The following data has been accumulated from Reserve Bank of India, RBI (2015):

MOBILE BANKING			
Bank Name	Value (in Rs. '000)		%age Increase/Decrease
	Nov. 2014	Jul. 2015	

SBI	11066676	19065365	41.95403025
BOB	458372	1248726	63.29282805
PNB	6570993	491389.5	-1237.226986
ICICI	14789531	68853685	78.52034935
HDFC	35383253	64612435.4	45.2377042
AXIS	11309631	25899559.2	56.33272786

Source: RBI (2015)

Table 2: Growth rate of mobile banking (2015)

The above data shows that in between November 2014 and July 2015, there has been a significant increase in the volume of mobile banking transactions. This reflects the consumers' awareness about the advantages of mobile banking. Also, if we compare between public sector and

private sector banks (top three), then we can observe that the rate of growth of mobile banking for private sector banks is faster than that of public sector banks.

The following data has been accumulated from Reserve Bank of India, RBI (2015):

NEFT BANKING			
Bank Name	Value (in Rs. '000)		%age Increase/Decrease
	Nov. 2014	Jul. 2015	
SBI	749328.34	1014725.1	26.15454767
BOB	85197.53	92025.89	7.420042338
PNB	91299.48	153664.07	40.58501769
ICICI	302231.56	435048.84	30.52928034
HDFC	530964.41	718912.69	26.14340832
AXIS	284569.47	390853.45	27.19279566

Source: RBI (2015)

Table 3: Growth rate of internet banking (2015)

The above data represents the growth of internet banking activities among the top three public sector banks and private sector banks. From the data, we can observe that there has been an average growth of 25 – 30% in the online fund transfer activities. This rate of growth has been similar for both the public and private sector banks.

V. CONCLUSION

From the literature and secondary data analysis conducted in this paper, it is observed that both the public and private sector banks are aggressively working towards a paperless banking system. Few of the banks like SBI, PNB and ICICI have started dedicated programs related to specific business section, to reduce their carbon footprints. With regards to paperless banking activities like mobile banking and electronic fund transfer (RBI, 2015), private sector banks have shown a lot of aggression which is showcased by the higher rate of growth in the above mentioned systems. But still, Indian banks have a long way to go, before they can become completely green organization. One of the important strategies which they need to follow, is the adoption of LEED certification for

green building. Under this certification, the offices of the banks will be using non-renewable sources of energy to power their offices, the lighting system of their offices will be energy-star rated, sewage and waste disposal system will be installed and rainwater harvesting will be followed. These are just some of the techniques which will be followed under the LEED certification. Another important measure the banks need to follow strictly, is the energy audit system. Banks should conduct regular energy audits of their offices so that they can detect those processes which consume excess energy. This way, banks can reduce their carbon footprints considerably.

Banks can have a major impact on the environment, if they get cooperation from their clients. Banks should implement strict environment systems, before financing any project. Some of the systems are Environment Audit Management (EAM), Environmental Impact Assessment (EIM) and Annual Reporting System (ARS). They should provide incentives to green projects, and make it tough for polluting projects, to be sanctioned. Green banking can be used as an opportunity to reduce pollution and save the environment, which will lead to a sustainable growth.

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