

# ENVIRONMENTAL SUSTAINABILITY THROUGH GREEN BANKING: A STUDY ON PRIVATE AND PUBLIC SECTOR BANKS IN INDIA

Rambalak Yadav<sup>a</sup>, Govind Swaroop Pathak<sup>b</sup>,

Department of Management Studies, Indian School of Mines, Dhanbad, India.

Corresponding author: rbyadav1988@gmail.com

©Ontario International Development Agency ISSN: 1923-6654 (print)

ISSN 1923-6662 (online). Available at <http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html>

**Abstract:** Industrialization around the globe has triggered the pursuit of ever increasing needs and demands of the population and it has become symbolic of prosperity and development of an economy. But on the other hand it has resulted in the exploitation of the natural environment which in turn has disturbed the ecological balance. The disturbance in ecological balance has adversely impacted the human and its surrounding environment. The recent industrial disasters and natural disaster occur in the last three decades were directly or indirectly linked with the uneven industrialization. This in turn has raised an important issue of environmental protection among environmentalists, government and organization from all over the world. Environmental sustainability and sustainable development have become the important agenda in the international community. Various conferences and programs such as Earth Summit and United Nation Environmental program were being organized to create awareness about this alarming issue. Understanding the importance of the existence of human health & well being governments as well as the organizations started taking various initiatives for the concern of environmental protection and sustainability. Environmental sustainability plays a vital role in sustainable growth and development, as the integration of social, economical and environmental sustainability help to make the development sustainable. Environmental protection has become a part of strategy in most organizations in the developed countries and started offering environment friendly or green products and services to the consumers. Learning from their western counterparts, the Indian organizations have also adopted environmental friendly practices within the organization. But the concept of environmental sustainability and green products and services is new to developing country like India.

The aim of this paper is to study the various 'Green Banking' approaches adopted by private and public

sector banks in India for environmental sustainability. Further this paper attempts to categorize the phases of Green Marketing initiatives of the banks on the basis of their green banking initiatives. The sample consists of the top performing banks of the public sector and the private sector, using the case study approach. The findings reveal that with the time the Indian banking sector have understood the importance of environmental protection and started taking various initiatives under its green banking approach. The finding also shows that public sector banks have taken more green banking initiatives as compared to private sector banks with an exception of ICICI bank. Secondly it was analyzed under the Phases of Green Marketing (Peattie, 2001) most of the banks were categorized in the Environmental' Green Marketing: The Second Age; and taking initiatives which are beneficial to the environment as well as organizations; only ICICI bank Green banking approach was found suitable to the third phase of green marketing- Towards the Third Age: Sustainable Green Marketing. Based on the findings of the study implications for further research endeavors is discussed.

**Keywords:** Environmental Sustainability; Green Banking; Green Initiatives; Phases of Green Marketing.

## INTRODUCTION

The problem related to environment, maintaining the ecological balance and environmental sustainability has become issues for debate around the globe. The organizations as well as consumer have understood the importance of the environment for the survival of human beings. The green movement has got attention and expanding rapidly in developed countries but with the time there is increasing receptiveness among consumers about going green in Indian subcontinent also [1]. Today, green or environmental marketing has become a strategic marketing approach with recent focus in

business endeavors [2]. Now the profit driven firms have also accepted the green marketing strategies due to political and social pressures and with the time they have exploited the ecological issues as a source of competitive advantage [3]. To explore this competitive advantage green and clean technologies are finding their way into functional areas of day to day business operations of various organizations including the banking sector.

Green approach is not benefiting only the environment but it is beneficial for organizations in many ways. Various studies have shown the positive correlation between the environmental performance and financial performance [4], [5]. Along with environmental benefits, the ecological activities of the organizations have also resulted in operating profit [6], [7], cost savings [8] and increased competitiveness [9], [10]. Orasto [11] presented a framework for categorizing generic types of competitive environmental strategies, a classification scheme that can help managers to optimize the economic return on environmental investments and transforms these investments into source of competitive advantage. Proper designing of environmental standard within an organization can trigger the innovation that lower the cost, benefits resource productivity and enhanced competitiveness [12].

#### **BANKING SECTOR IN INDIA & ITS CONTRIBUTION TO GROWTH OF INDIAN ECONOMY**

India's financial system has undergone reforms in the year 1990 as the part of the economic reform policy [13], [14]. The financial system plays an important role in the economic growth of a nation; and banking system plays a major role in representing Indian financial system [15]. In India the banking systems is divided into two major forms: Scheduled Commercial Banks and Scheduled Co-operative Banks. Scheduled Commercial Banks consist of Public sector banks, Private Banks, Foreign Banks and Regional Rural Banks. . But the Scheduled commercial bank accounts for the most of the business in India and public sector banks contribute maximum to 70 % of total credit and deposits businesses in India.

The banking sector has contributed 5.7 percent of total GDP of the country in the financial year 2011-2012. Traditionally the Indian financial system is being based and so far banking sector has played a seminal role in supporting the economic growth of the nation. The banking sector in India is growing very rapidly, its assets had reached up to Rs 83 trillion in year 2012 as compared to Rs 7.5 trillion in the year 1998 [16]. Since the 2000 the rapid growth in Indian economy has been credited to financial systems due to rise in investment and saving rates The banking sector in India is small as compared to the most East

Asian economies and individual banks in India are comparatively small by international standards, still the impact of economic crisis on Indian banks was negligible [14].

Banking sector plays an important role in the economic growth of a nation. As the banks are among one of the major sources of financing instrument for commercial projects so they can play a major role in promoting environmental sustainability by funding the socially and environmentally responsible investment projects. Organizations in the banking sector are generally adopting green activities for the environmental sustainability. The concept of 'Green Banking' will be beneficial to the environment, banking industries as well as economy & it will not ensure the greening of industries only but also facilitates the improving in asset quality in the future [17]. Considering the benefit of going green the Indian banks have also adopted the 'Green Banking' approach in the past few years and taking various green initiatives on all possible scales to be more environmentally responsible. However the 'Green Banking' approach of Indian banks differs from each other as they are in different phases of green marketing on the basis of their approach toward environmental sustainability.

#### **DEFINING THE CONCEPTS: ENVIRONMENTAL SUSTAINABILITY & GREEN BANKING**

##### **Environmental Sustainability**

Environmental Sustainability is 'the ability to maintain the things that are valued in the physical environment (natural and biological environments)'. Environmental sustainability could be defined as 'a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by our actions diminishing biological diversity' [18]. Environmental system seeks to sustain the global life support system indefinitely [19].

In the industrialized nation of developing countries the problems related to the environment have become very critical and their dependence on natural resources for the growth and development underline the need of implement policy and plans for sustainable resource use [20]. Due to increasing effect of industrialization, urbanization, increasing population density and poor environment management system in India the environmental problems have become alarming issues [21]. So the time demands the need of using the natural resources in a sustainable way; i.e. meeting the needs in such way that it not only meet the needs of present but also for the future generation

'Living well within the environment'

### **Green Banking**

The concept of Green Banking is attached to Triodos bank (established in 1980) from Dutch origin which started the environmental sustainability in the banking sector from the very first day. In the year 1990 the bank launches 'Green fund' for funding environment friendly projects and all other projects follow later [22]. Taking example from this bank the banks all over the world start taking green initiatives in the banking sector.

Green Banking means promoting environmentally friendly practices and reducing the carbon footprint from the banking activities [23]. Institute for Development and Research in Banking Technology [24] defines Green Banking as '*Green Banking is an umbrella term referring to practices and guidelines that make banks sustainable in economic, environmental, and social dimensions. It aims to make banking processes and the use of IT and physical infrastructure as efficient and effective as possible, with zero or minimal impact on the environment*'. Jha & Bhome [25] defines green banking as means of promoting environmental friendly practices and reducing carbon footprint by banking activities.

So it can be concluded that Green Banking approach involves using environmentally friendly practices at every level from adapting environment friendly practices within the banking organizations and also considering the environmental aspect of the projects while funding and investing in commercial projects.

### **PHASES OF GREEN MARKETING**

In an article Peattie [26] mentioned that Green Marketing has evolved through three phases namely The First Age: 'Ecological' Green Marketing, The Second Age: 'Environmental' Green Marketing, and Towards the Third Age: 'Sustainable' Green Marketing.

#### **'Ecological' Green Marketing: The First Age**

(a) This phase sought to identify the products, companies or industries which were having a direct negative impact on the environment. These were mainly front line industries such as automobiles, oil & refineries and agro-chemicals. (b) Providing immediate solutions to specific 'environment problems' caused by these industries such as impact of synthetic pesticides, oil spills, pollution, depletion of natural resources etc. (c) 'End of pipe' improvements were used by the organizations. For example: catalytic converters were used in automobile industry so that it can convert toxic byproducts of combustion into less toxic substance by ways of catalyzed chemical reactions. (d) The first

age resulted into increasing amount of environmental regulation within the legal environment.

#### **'Environmental' Green Marketing: The Second Age**

(a) The second stage witnessed a gradual shift from 'end of pipe' pollution cleanup towards clean technology. The focus was on innovation, either to design innovative products or innovative production systems which eliminate waste and pollution at the designing stage. Quality standard ISO 1400 series were drafted that is related to qualities of companies in term of environmental management system. (b) Ecological Green marketing was focused mainly on the front line industries only whereas the second age i.e. Environmental Green Marketing was not only focused to front line industries but also starts considering all manners of products used in homes (such as carpets, white goods, paper, cleaning products, electronic appliances etc.) along with service sectors such as banking and tourism. (c) The phase evolved the concept of 'Green Consumers' and also resulted in recycled packaging, packaged food goods with environmental claim, moving from litter to landfill. (d) Marketer realized that good socio-environmental performance could be a basis of competitive advantage. This becomes 'Win-Win' situation for an organization where they can improve their environmental performance and may be benefited from increased consumer demand of green products.

#### **Towards the Third Age: Sustainable Green Marketing**

(a) It started addressing green marketing not just in term of environmental damage and competitive advantage, but in pursuit of sustainability. This phase created the need of including sustainability in the system along with already established economic and social system. (b) The third age i.e. sustainability is based on three main components that are futurity, equity and emphasis on needs respectively.

##### ***Futurity***

Focusing on the needs of future generations along with meeting the needs of current investors and customers.

##### ***Equity***

To bring out the current social and economical order in society as the benefits of industrializations is unevenly distributed. As the average income of the population belonging to less-industrialized nations are seven times lower than that within population in industrialized nations.

### **An emphasis on needs**

Focusing on the needs of the consumer rather than focusing on the needs and wants of the consumers. As the 20 percent of the world population has no discretionary income so the main emphasis should be in need.

(c) Companies like IBM, McDonald and BT have started doing green activities beyond their boundaries. For e.g. these companies started insisting their backward supplier to improve their eco-performance and back-up with green audits.

### **OBJECTIVE OF THE STUDY**

Following are the objectives of the study: (a) To study the environment friendly practices adopted under green banking approach by various banks in India. (b) To study the various initiatives taken by Indian banks by adopting Phases of Green Marketing given by Peattie (2001).

### **RESEARCH PROCESS**

#### **Research Approach**

Researchers have adopted case study method in this paper. Case studies have been used for various purposes: exploratory, descriptive and explanatory research [27] and to generate theory and initiate change [28]. These uses will depend on the research questions asked and the extent to which the researcher has control over the events being studied [27] (as quoted in Blaikie [29]). Case study approach is among those approaches which can be applied in both qualitative as well as quantitative stances [30]. Yin [27] defines a case study as “*an empirical enquiry that: 1) investigate a contemporary phenomena within its real-life context; when 2) the boundaries between phenomena and context are not clearly evident, and in which 3) multiple sources of evident are used*” (p.23).

#### **Description of the Sample**

For conducting the study top performing banks (on the basis of net profit) in India from private and public sector were taken for the study. The top performing banks in both private and public sectors on the basis of their net profit are mentioned in Table 1.

#### **Data Collection**

The secondary method of data collection has been used in this study. The information and data regarding the green practices adopted by the various banks have been accessed from the sources such as company official website, annual reports, sustainability reports, article etc.

### **GREEN BANKING INITIATIVES IN INDIAN BANKS-CASELETS**

#### **Green Banking Initiatives in the Public Sector Banks**

##### **Public Sector Banks (PSBs)**

The banks where majority of the stake (more than 50%) is held by the government are called Public Sector Banks. The shares of PSBs are listed in the stock exchange. Currently there are 26 public sector banks in India.

##### **State Bank of India (SBI)**

SBI is the India's oldest and largest banking institution (including both public and private sector banks) in almost every parameter such as net profit, revenue, assets and market capitalization. The bank was established in 1806 as Bank of Calcutta and became as the State Bank of India in the year 1955 during the nationalization of Imperial Banks in India. The bank offers various ranges of activities such as investment banking, consumer banking, commercial banking, assets management, pension, insurance, mortgages and credit card, through it widespread network of branches in country and overseas. As of December 2012, it had assets of US\$501 billion and 15,003 branches (including 157 foreign branches) and 2, 92,215 employees are working in its branches. It is involved in community services activity since 1973 and throughout the country the bank participates and sponsors various social cause and welfare activities

##### **The Green Banking Initiatives taken by SBI**

(a) Launched Green channel counter facilities in the year 2010 in some of its branches and planning to extend it in more branches. An environmental friendly approach that helps to make paperless banking up to some extent [31] (b) Collaboration with Suzlon Energy Ltd. to use wind power at the place of thermal power in its business operations and currently using wind power in its most of offices located in Gujarat, Tamil Nadu and Maharashtra [32]. (c) Initiated the carbon disclosure projected in the financial sector in India, for the sake of environmental concern and safety [33]. (d) SBI and Export- Import Bank of India (EXIM Bank) both jointly provide a long term loan (upto 14 years) to a Spain based companies Grupo T- Solar Global SA and Astonfield Renewable Resources for building solar plant in India. Most of the financial institutions avoid giving long term loans to such projects because of their uncertainty and technological changes.

##### **Punjab National Bank**

Punjab National Bank is among one of the India's oldest bank and was established on 19 May,

1894. Presently it's the second largest public sector bank by assets and third largest bank (including each non-public & public sector banks) in India. The bank has thirty seven million customers and 5937 domestic branches unfold across the country and about sixty two thousand employees employed in the bank. Aside from the branches in India the bank also encompasses a subsidiary in United Kingdom & branches in other Asian countries. It offers a wide variety of financial services there for customers like consumer banking, corporate banking, equity, mortgage, credit card, finance & insurance banking, wealth management etc. Aside from financial activities the bank is also involved in various social initiatives such as farmer empowerment, environment friendly initiatives, education & health initiatives for the financially disadvantaged category.

#### **The Green Banking Initiatives taken by Punjab National Bank:**

(a) Bank has started using energy efficient appliances & conducting the electricity auditing of their offices. On the other side the bank is also accenting on green infrastructure. (b) A separate green audit sheet is being employed by the bank to access the impact of various green banking initiatives implemented in the bank. (c) The bank has conjointly placed guidelines for supply the term loan to the business units and commercial projects that are producing renewable energy and special guidelines has been issued to curb the units that use environmental depleting substances. (d) In the year 2010-11 the bank has sanctioned nine commercial projects of wind energy comes with total sum of Rs. 1850.81 million to push and develop the renewable supply of energy. Source: Punjab National Bank, Corporate Social Responsibility Report 2010-2011 [34].

#### **Bank of Baroda (BOB)**

Bank of Baroda is an Indian state owned (public sector) bank established in the year 1908 in the princely state of Baroda. The Bank was nationalized in the year 1969 by the government of India. It provides various ranges of banking products and financial services through its branches such as corporate banking, investment banking, retail banking, asset management etc. to the consumers. In year 2012 the bank was ranked 715 on Forbes Global 2000 list. Currently the bank has a widespread network of 4172 branches and 2000 ATMs in India. The bank also has its international presence with 100 branches/offices in 24 countries outside India with its presence in major financial center such as New York, Dubai, and Hong Kong, Singapore etc. The bank has taken various corporate social responsibility initiatives upheld inclusive growth high on its agenda.

#### **The Green banking initiatives taken by Bank of Baroda**

(a) Internet banking, mobile banking was added as alternate delivery channel to reduce the use of paper in banking procedure. (b) As a part of green banking initiatives various changes were made such as backup consolidation, server and desktop virtualization. (c) While financing the commercial projects the banks give a due weight age to green projects such as windmills and solar power projects which helps in earning the carbon credit. (d) The bank insisted to implement water treatment plant and obtain NOC from central/ state government pollution control board while lending the loan to manufacturing units which emit toxic polluting substance. (e) Promotion of measure of pollution control and efforts for environmental protection & conservation and cleaning of environment. Source: Bank of Baroda, Annual Report 2012-2013 [35].

#### **Canara Bank**

Canara Bank is an Indian public sector bank and was established as Canara Hindu Permanent Fund in 1906 and further renamed as Canara Bank in 1910 & nationalized in the year 1969. The bank has a widespread network of 3564 branches and 4000 ATMs spread across the country. The bank also has abroad offices in Dubai, Hong Kong, London, Moscow and Doha. The bank was ranked 816 by Forbes Global 2000 list. Various financial services such as asset management, commercial banking, investment banking, consumer banking, credit card and mortgages are being provided by the bank. It also sponsors two regional rural banks in Kerala and Karnataka. In the year 2003 the bank partnered with UNEP for solar project under development project initiatives. Along with this bank is also involved in activities such as rural development and environment friendly initiatives.

#### **The Green Initiatives taken by Canara Bank**

(a) The bank has implemented various green banking initiatives such as internet banking, tele-banking & mobile banking. Solar power biometric ATMs has been implemented in a few rural areas. (b) Now the bank is not extending the finance to the new units which are involved in producing and consuming Ozone depleting substances. The bank has also stopped extending the finance small/medium scale unit engaged in the manufacturing of Aerosols by using CFC. (c) The bank insisted to manufacturing units which emit toxic polluting substance to implement water treatment plant and obtain NOC (No Objection Certificate) from central/ state government pollution control board while lending the loan. (d) The banking is providing loans for implementing solar lighting system, till the date the

bank has financed 50,000 such unit lending 5-8 lac Rs to each unit [36]. Source: Canara Bank, Annual Report 2012-2013 [37].

### **Green Banking Initiatives in the Private Sector Banks**

#### ***Private Sector Banks***

The banks where major parts of the equity are held by private shareholders and not by state or government are called private sector banks.

#### ***ICICI Bank Limited***

ICICI bank is a multinational financial service company based in India. A bank was established as a completely owned subsidiary in the year 1994; earlier it was formed in 1955 as a joint collaboration of World Bank together with Public sector banks and public sector insurance firms of India. Presently it is the largest bank within the private sector and second largest bank overall including each private as well as public sector banks in India. The bank conjointly operates

in eighteen different countries round the globe. The bank includes a widespread network of 3,350 branches and 10500 ATMs across the country and around 81,254 staff employed in its offices. It offers a wide range of banking product and services to corporate as well as retail consumers. The bank is also associated with varied welfare activities with focus on achieving economic development with human development and environmental awareness campaign with the help of its ICICI foundations.

#### **Green Banking Initiatives of ICICI Bank**

(a) Providing green banking facilities such as mobile banking, net banking which reduces the use of paper as well as save the consumer time helping the bank in earning its carbon footprint. (b) The bank is working with Green Business Centre in collaboration with other business organization having focus on promoting green building, energy efficiency, recycling etc. (c) The bank has aided varied activities that helped in widespread of the ISO: 14000, which is associated in providing Environment Management System Certification. Within the past they worked with industries like textiles, pulp, cement, and paper and to encourage them for this method of certification. (d) Providing 50% relinquishment on the processing fee of selective car models that uses alternate mode of energy like LPG (Liquefied petroleum Gas) & CNG (Compressed Natural Gas). (e) Recently the bank has given the loan fund of Rs. One billion to the companies venturing into energy economical and environment friendly process. Alongside that bank has additionally served and promoting the use of unpolluted technology in STBSS coal washery & Reva electric Car

Company. Source: ICICI communities, Green Initiatives [38].

#### ***HDFC Bank Limited***

HDFC Bank was incorporated in 1994 by Housing Development Finance company and was among the first companies to receive approval from Reserve Bank of India to set up a bank in the private sector. The bank has total of 3,062 branches and 10,743 ATMs spread across the country with employee strength of 66,076. It is the fifth largest bank in India by total assets. The bank provides a wide range of services ranging from consumer banking, corporate banking, private banking, assets management, equity to finance and insurance. The bank is also involved in community welfare services and activities such as empowerment of the lower class by helping them in education, health, water facilities etc. that will help the bank to maintain long term relationship with the society.

#### **Green Banking Initiatives of HDFC Bank**

(a) Reduction in paper usage by issuing e-transaction advices to corporate customers & encouraging e-statements among retail customers. (b) Energy conservation by conventional light options by CFLs, and establishing green data centers. (c) Tying up with vendors for paper and plastic recycling & IT policy is strictly followed for disposing the IT assets due for retirement. (d) For exploring the renewable energy 20 solar ATMs have been set up in the Bihar as the pilot test and furthermore will be set up after it. (e) Focusing on green procurement by purchasing energy star rated electronic products & purchasing diesel generator set and air conditioner that are compliant with the norms of central pollution control Board (PCCB). Source: HDFC Bank, Business Responsibility Report 2012-2013 [39].

#### ***Axis Bank Limited***

Axis bank is a financial service corporation based in India and among the top three private sector banks. The bank started its operations in 1994 when the Government of India allowed the private banks in Indian market. The whole spectrum of financial services is provided by the bank such as retail as well corporate banking. The key areas of the bank include wholesale/corporate banking, Investment banking, retail and business banking. As on 31<sup>st</sup> March 2013 the bank has 1947 domestic branches and 11,245 ATMs across the country & overseas branches in Hong Kong, Dubai, Colombo and Singapore etc. The bank is also engaged in various corporate social responsibility (CSR) activities through its trust- The Axis Bank Foundation. The bank donates it 1 percent of total annual net profit for the social initiatives and the betterment of the society through their foundation.

**Table 1:** Top Performing Banks on the basis of their net profit

Public Sector Banks		Private Sector Banks	
Banks	Net Profit Rs (million)	Banks	Net Profit Rs (million)
State Bank of India	14,1040.98	ICICI Bank	8,3250.47
Punjab National Bank	4,7470.67	HDFC Bank	6,7260.28
Bank of Baroda	4,4800.72	Axis Bank	5,1790.43
Canara Bank	3,2820.71	Kotak Mahindra	1,3600.72

\*Source: moneycontrol.com

**Table2:** Shows the different phases of green marketing of Indian bank on the basis of study.

S.No	Banks	Private/ Public	Phases of Green banking Initiatives
1.	State Bank of India	Public Sector Bank	<i>Environmental' Green Marketing: The Second Age</i>
2.	Punjab National Bank	Public Sector Bank	<i>'Environmental' Green Marketing: The Second Age</i>
3.	Bank of Baroda	Public Sector Bank	<i>Environmental' Green Marketing: The Second Age</i>
4.	Canara Bank	Public Sector Bank	<i>Environmental' Green Marketing: The Second Age</i>
5.	ICICI	Private Sector Bank	<b><i>Towards the Third Age: Sustainable Green Marketing</i></b>
6.	HDFC Bank	Private Sector Bank	<i>Environmental' Green Marketing: The Second Age</i>
7.	Axis Bank	Private Sector Bank	<i>Environmental' Green Marketing: The Second Age</i>
8.	Kotak Mahindra	Private Sector Bank	<i>Environmental' Green Marketing: The Second Age</i>

### **Green Banking Initiatives of Axis Bank**

(a) Under the Green Banking Initiatives the bank uses the theme of Reduce, Recycle, and Reuse. The recycling activities have helped the bank to use around 22000 kilograms of dry waste during the year 2012. (b) The banking is also providing facilities like internet banking, mobile banking to reduce the use of paper and earn carbon credit for the bank. (c) Providing the facility of e-statement registration to the customers and on each registration bank donates a notebook to the poor. (d) Various green initiatives such as distribution of tree saplings and creating awareness among society have been taken by the bank [40].

### **Kotak Mahindra Bank**

Kotak Mahindra Bank was earlier established as Kotak Mahindra Finance Limited in 1985. In the year 2003 the company was given a license by RBI (Reserve Bank of India) to run the banking business, the first ever in the banking history of India to convert into a bank. In India about twenty thousand workforce is employed in its 450 branches. The bank also has offices outside India in London, San Francisco, New York, Dubai, Singapore and Mauritius. The bank provides all ranges of banking product & services such as a deposit account, treasury loans, banking solutions, credit card, de-mat, insurance and financing. The bank is also involved in CSR activities as it sees CSR as an investment in society as well as investment in own future.

### **Green Banking Initiatives of Kotak Mahindra Bank**

(a) 'Think Green' initiatives taken by the bank encourage the consumer to sign for e-statement and for every e-statement signed Trees.com plants a tree on behalf of the bank. (b) Facilities such as net banking, SMS based transaction detail for costumers are provided by the bank that help in paperless banking and reduce the carbon footprint. (c) As per the direction of Ministry of Corporate Affairs (MCA) - Government of India the bank encouraging the shareholders for opting the electronic form of the annual report. (d) An agreement of US\$5 million has been signed between IBM and Kotak Mahindra Bank Limited that will help the bank to build and maintain energy-efficient & highly reliable green data center and it will help Kotak to save over US\$1.2 million in operational efficiency and will also reduce energy costs for the upcoming five years [41].

### **ANALYSIS & INTERPRETATION**

In accordance with the first objective to study about the green banking initiatives in India, the study shows that sustainability has become a major concern for the banking sector (both public as well as private sector)

in India. With the time the Indian banks have adopted the environmental protection as an important part of the strategy. Adopting the environmentally friendly practices within banking sector not only benefiting the natural environment but also providing the benefit to the organization as it helps in earning carbon credit, cost reduction etc. From the study it was analyzed that public sector banks are emphasizing more on green initiatives as compared to the private sector banks except ICICI Bank. The private sector banks except ICICI bank are mainly inclined toward green initiatives such as net banking, mobile banking which are needed by the bank to match with the competitors as all the banks are providing these facilities. The environmental friendly activities such as using energy efficient appliances, implement green data centers help in improving their operational efficiency as well as cost saving in the long run. Whereas public sector banks along with ICICI bank are taking various initiatives such as creating environmental awareness among society, giving more preference to environmentally friendly commercial projects, promoting the pollution control measures, promoting Environment Management System certification etc. along with the basic green initiatives such as paperless banking, energy efficient products recycling, etc.

In respect to the second objective to analyze the phases of green marketing initiatives it was found that most of the green banking initiatives taken by banks lies in the 'Environmental' Green Marketing: The Second Age. As the green banking initiatives such as Environment friendly paper, Energy efficient appliances, Recycling, Paperless banking approach is win-win situation for the banks as it helps the environment as well as providing a competitive advantage to the banks and helping in cost reduction & operational efficiency. Whereas initiatives taken by ICICI Bank such as Promoting EMS certification (ISO:14000) among manufacturing industries, waiver on processing fee of car model using CNG & LPG and Helping and promoting the use of clean technology among smaller firms categorized it into Towards the Third Age: Sustainable Green Marketing. As the bank initiatives for environment are showing their concern for environmental sustainability with a focus on basic needs & futurity.

### **LIMITATIONS**

The study uses secondary data analysis & it may reflect the perspective of the original investigator may not reflect the question of interest to others [42]. Using the secondary data for analysis limit the researcher to do what is possible from the available data and shape the questions to match with the data [43].



## CONCLUSION & IMPLICATION FOR FURTHER RESEARCH

By the time the banking sector in India has changed the way it used to operate in the past. The banking sector is getting modernized and new facilities such as net banking, mobile banking are being prioritized at the place of traditional approaches. These new approaches adopted by the banks are beneficial to customers as well as banks themselves. Now the banks understood the importance and necessity of environment along with the economic progress of a nation. Learning from their western counterparts the banks in India are also adopting various environmental practices and initiatives in their day to day business operations for the environmental concern and playing an important role in maintaining the ecological balance. But the Indian banking sector is still at the initial stage of green banking initiatives. As most of the banks are adopting and focusing only on those green initiatives which provides win-win situation for the bank, that help to show the concern for the environment along with helping the bank in cost savings and improved operational efficiency.

So the time demands a little focus on the initiatives such as creating awareness among society, and helping smaller firms to change their process so they can be more environmentally friendly in nature and that will also widespread the concept of environmental sustainability. Future research may be conducted to study the impact of green practices on consumer willingness to purchase green products of various organizations in the Indian context.

## REFERENCES

- [1] Raghavan, L., & Vahanti, G. (2009). Going Green in India. Landor, 1-5.
- [2] Ottman, J. (1998). Green Marketing: Opportunity for Innovation. New York, NY: NTC- McGraw-Hill.
- [3] Chen, T. B., & Chai, L. T. (2010). Attitude towards the environment and green products: Consumers' perspective. *Management Science and Engineering*, 4(2), 27-39.
- [4] Horvathova, E. (2010). Does environmental performance affect financial performance? A meta-analysis. *Ecological Economics*, 70(1), 52-59.
- [5] Iwata, H., & Okada, K. (2011). How does environmental performance affect financial performance? Evidence from Japanese manufacturing firms. *Ecological Economics*, 70 (9), 1691-1700.
- [6] Naffizger, D.W., Ahmed, N.U., & Montagno, R.V. (2003). Perceptions of environmental consciousness in the US small business an empirical study. *SAM Advanced Management Journal*, 68(2), 23-32.
- [7] Segarra-Ona, M., Carrascosa-Lopez, C., Segura-Garcia-del-Rio, B., & Peiro-Signes, A. (2011). Empirical analysis of the integration of environmental proactivity into managerial strategy. Identification of benefits, difficulties and facilitators at the Spanish automotive industry. *Environmental Engineering and Management Journal*, 10(12), 1821-1830.
- [8] Ruth, S. (2009). Green it more than a three percent solution?. *Internet Computing, IEEE*, 13(4), 74-78.
- [9] Bansal, P., & Roth, K. (2000). Why companies go green: a model of ecological responsiveness. *Academy of Management journal*, 43(4), 717-736.
- [10] Porter, M. E., & Van der Linde, C. (1995). Green and competitive: ending the stalemate. *Harvard business review*, 73(5), 120-134.
- [11] Orasto, R.J. (2006). Competitive Environmental Strategies: When does it pay to be green. *California Management Review*, 48(2), 127-143.
- [12] Porter, M. E., & Van der Linde, C. (1995). Toward a new conception of the environment-competitiveness relationship. *The Journal of Economic Perspectives*, 9(4), 97-118.
- [13] Chakraborty, I. (2010). Financial Development and Economic Growth in India An Analysis of the Post-reform Period. *South Asia Economic Journal*, 11(2), 287-308.
- [14] Shimizu, S. (2010). The State of the Indian Banking Sector and its Role in India's High Growth. *RIM Pacific Business and Industries*, 10 (36), 1-35.
- [15] Dinodia Capital Advisors (2013). Indian Banking Industry: Rising Above the Waves, Retrieved Accessed 25 July, 2013 at <http://www.dinodiacapital.com/pdfs/Indian%20Banking%20Industry%20-%20Rising%20Above%20the%20Waves,%20January%202013.pdf>.
- [16] Khan, H.R. (2013). Indian financial market-fuelling the growth of Indian economy. ADB Annual Conference, Greater Noida, Accessed 09 August, 2013 at <http://www.bis.org/review/r130514d.pdf?frames=0>.
- [17] Biswas, N. (2011). Sustainable Green Banking Approach: The Need of the Hour. *Business Spectrum*, 1 (1), pp. 32-38.
- [18] Morelli, J. (2011). Environmental sustainability: A definition for environmental professionals. *Journal of Environmental Sustainability*, 1, 19-27.
- [19] Goodland, R. (1995). The Concept of Environment Sustainability. *Annual Review of Ecology and Systematics*, 26, 1-24.
- [20] Stockholm Environment Institute Report . Atmospheric environment issues in developing

- countries, Accessed 09 July, 2013 at [http://www.sei-international.org/mediamanager/documents/Publications/Atmospheric/atmospheric\\_environment\\_developing\\_countries.pdf](http://www.sei-international.org/mediamanager/documents/Publications/Atmospheric/atmospheric_environment_developing_countries.pdf).
- [21] Bowonder, B. (1986). Environmental management problems in India. *Environmental Management*, 10(5), 599-609.
- [22] Dash, R. N. (2008). Sustainable 'Green' Banking: The Story of Triodos Bank. *Cab Calling*, October- December 2008, pp.26-29.
- [23] Schultz, C. (2010). Covering Eco-friendly Banking, Accessed 10 July, 2013 at <http://greenbankreport.com/green-bank-deals/what-is-the-meaning-of-green-banking/>.
- [24] Institute for development and research in banking technology (2013). Green Banking. Accessed 09 September, 2013 at [www.idrbit.ac.in/.../Green%20Banking%20Framework%20\(2013\).pdf](http://www.idrbit.ac.in/.../Green%20Banking%20Framework%20(2013).pdf).
- [25] Jha, N. & Bhome, S. (2013). A study of green banking trends in India. *Abhinav*, 5 (2), 127-132.
- [26] Peattie Ken (2001). Towards sustainability: The Third Age of Green Marketing. *The Marketing Review*, 2 (2), 129-146.
- [27] Yin, R.K. (1989). *Case Study Research: Design and Methods*. 2<sup>nd</sup> Edition. Newbury Park, CA: Sage.
- [28] Gummesson, E. (1991). *Qualitative Methods in Management Research*. Newbury Park, CA: Sage.
- [29] Blaikie, N. (2000). *Designing Social Research*. Polity Press in association with Blackwell Publishers: Malden, MA, USA.
- [30] Hancock, B. (2000). Trent Focus for Research and Development in Primary Health Care: An Introduction to Qualitative Research. Trent Focus, 1998. Retrieved from [http://faculty.cbu.ca/pmacintyre/course\\_pages/MBA603/MBA603\\_files/IntroQualitativeResearch.pdf](http://faculty.cbu.ca/pmacintyre/course_pages/MBA603/MBA603_files/IntroQualitativeResearch.pdf).
- [31] The Hindu (2011, May 11). SBI to introduce green-channel counter at more branches,. Accessed 10 July, 2013 at <http://www.thehindu.com/business/Industry/sbi-to-introduce-greenchannel-banking-at-more-branches/article2008949.ece>.
- [32] Suzlon Energy- News Release (2010, April 23). SBI banking on Green Energy with Suzlon, Accessed 07 June, 2013 at [http://www.suzlon.com/images/Media\\_Center\\_news/163\\_SBI%20-%20Suzlon-%20Press%20Release%2023.04.10.pdf](http://www.suzlon.com/images/Media_Center_news/163_SBI%20-%20Suzlon-%20Press%20Release%2023.04.10.pdf).
- [33] WWF (2011, February 21). State Bank of India become signatory to the carbon disclosure project, Accessed 07 June, 2013 at <http://www.wwfindia.org/?5541/State-Bank-of-India>.
- [34] Punjab National Bank (2011). Corporate Sustainability Report 2010-2011, Accessed 07 June, 2013 at <https://www.pnbindia.in/Upload/En/CSR%20Reports%202010-11.pdf>.
- [35] Bank of Baroda (2013). Annual report 2012-2013, Accessed 10 July, 2013 at <http://www.bankofbaroda.co.in/download/Annualreport2012-13.pdf>.
- [36] Financial Express (2011, July 03). Banking on green projects, Accessed 10 July, 2013 at <http://www.financialexpress.com/news/banking-on-green-projects/811954/0>.
- [37] Canara Bank (2013). Annual Report 2012-2013, Accessed 10 July, 2013 at [http://www.canarabank.com/english/downloads/Canara%20Bank%20Annual%20Report%202012-13\\_low%20res%20-%20Option%205%20\(1\).pdf](http://www.canarabank.com/english/downloads/Canara%20Bank%20Annual%20Report%202012-13_low%20res%20-%20Option%205%20(1).pdf).
- [38] ICICI Communities (2013). Green Initiatives, Accessed 09 July, 2013 at <http://www.icicicommunities.org/environment.html>.
- [39] HDFC Bank (2013). Business Responsibility Report, 2012-2013, Accessed 10 July, 2013 at [http://www.hdfcbank.com/htdocs/common/pdf/corporate/business\\_responsibility\\_report.pdf](http://www.hdfcbank.com/htdocs/common/pdf/corporate/business_responsibility_report.pdf).
- [40] The Hindu (2010, July 23). Go Green Initiatives Launched, 10 July, 2013 at <http://www.hindu.com/2010/07/23/stories/2010072353350500.htm>.
- [41] IBM-News Room (2009, Jan 05). IBM Signs \$5 Million IT Infrastructure Services Deal With Kotak, Accessed 10 July, 2013 at <http://www-03.ibm.com/press/us/en/pressrelease/26404.wss>.
- [42] Rew, L., Koniak-Griffin, D., Lewis, M. A., Miles, M., & O'Sullivan, A. (2000). Secondary data analysis: new perspective for adolescent research. *Nursing Outlook*, 48(5), 223-229.
- [43] Elder, G.H., Pavalko, E.K., & Clipp, E.C. (1993). *Working with Archival Data: Studying Lives*. Newbury Park, CA: Sage Publications.

Note:\* Money control is leading financial information source (financial portal) in India. It manages the financial information of companies listed in stock exchange in India.

#### About the Authors

[1]. **Rambalak Yadav** is a research scholar in the Department of Management Studies, Indian School of Mines, Dhanbad. He is MBA (I.T) from Indian Institute of Information Technology, Allahabad and currently working on his PhD in the area of Consumer Behavior. He has previously taught at Sharda Group of Institutions, Agra, India.

\* Corresponding Author: Department of Management Studies, Indian School of Mines, Dhanbad- 826004 (India)

Email- rbyadav1988@gmail.com

[2]. **Govind Swaroop Pathak** is a Professor in the Department of Management Studies, Indian School of Mines, Dhanbad and has 15 years of teaching experience. He has been a recipient of many fellowships like IFCI Research Fellowship;

Associateship of Indian Institute of Advanced Studies, Rashtrapati Niwas, Shimla; Young Researcher Fellowship of National Labour Institute, India. He has presented papers in many National and International conferences in India and abroad. His teaching, research and consultancy activities concentrate on the area of Social Science and Management.

Email- gspathak@gmail.com

