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A STUDY ON THE ROLE OF COMMERCIAL BANKS IN SUSTAINABLE
DEVELOPMENT THROUGH GREEN BANKING IN GUWAHATI CITY-
WITH SPECIAL CONSIDERATION TO SBI AND ICICI

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ABSTRACT

Sustainable development is the organizing principle for meeting human development goals while at the same time sustaining the ability of natural systems to provide the natural resources and ecosystem services upon which the economy and society depends. Banking sector plays a very crucial role in the growth of Indian economy for promoting environmentally sustainable and socially responsible investment, banking of this kind can be termed as “Green Banking”. Green banking is a paperless banking, which not only reduces the cost of banking activities but also helps in environment sustainability. The paper aims to highlight the various initiatives taken by the commercial banks in Guwahati city with special reference to SBI and ICICI to attain sustainable development through Green Banking. Further an attempt has been made to study the level of awareness about Green Banking among the general public.

Keywords: Green Banking, Sustainable Development, Environment Sustainability, Initiatives.

1. INTRODUCTION:

“Sustainable development is the pathway to the future we want for all. It offers a framework to generate economic growth, achieve social justice, exercise environmental stewardship and strengthen governance.” - Ban Ki-moon

Sustainable development is the organizing principle for meeting human development goals while at the same time sustaining the ability of natural systems to provide the nature resources and ecosystem services upon which the economy and society depends. Over the years the concept of sustainable development shifted its focus more on economic development, social development and environmental protection for future generation. Green

banking is a way to sustainable economic growth. It means ensuring environment friendly practices in banking sector and thereby reducing internal and external carbon footprints. Adopting of greener banking practices will not only be useful for environment, but also benefit in greater operational efficiencies, a lower vulnerability to manual errors and fraud and cost reduction in banking activities. So there is need for banks to adopt green strategies into their operations, buildings, investments and financing strategies. Green banking helps a lot in attaining sustainable development. It avoids as much paper work as possible and relies on online/ electronic transactions for processing.

Banks play a critical role in economic development and they are well equipped to undertake green banking activities. Nowadays, banking operations can be carried out through various banking delivery channels away from the bank branches. ATM is the most popular banking delivery channels and the extraordinary success of ATMs had made banking sector courageous to develop more innovative alternative delivery channels such as Internet banking, mobile banking, Green channels counters, kiosk banking, credit card, debit card, online bill payment services etc. Since banks are one of the important professional institutions that interact with the masses, they are able to adopt green activities within their organisation and influence their customer to be aware of the environment. This would help the firms in the emerging economics like India utilize their limited resources in an optimum way without harming the natural environment and face the global challenge of sustainability in a successful manner.

2. OBJECTIVES OF THE STUDY:

- To study the initiatives taken by commercial banks to attain sustainable development through Green Banking.
- To study the level of awareness about Green Banking among the general public in Guwahati city.

3. RESEARCH METHODOLOGY:

• RESEARCH DESIGN:

Descriptive research design is used for the study.

• SOURCES OF DATA:

The study is based on both primary and secondary data.

Primary data- Primary data were collected from hundred respondents through telephone interaction and personal interview.

Secondary data- The study is confined to only two commercial banks i.e. State Bank of India and Industrial Credit and Investment Corporation Bank of India (ICICI). For gathering information about the green banking initiatives of these banks, data are collected from the annual reports of the

selected banks, Banks Business Responsibility Reports, official websites of the respective banks, etc. Supporting literature from relevant sources, journals, research reports, websites etc. also forms the sources of secondary data.

- **POPULATION OF THE STUDY:**

Guwahati City.

- **SAMPLE SIZE:**

100 respondents.

- **SAMPLING METHOD:**

Convenience Sampling Method has been used for the study. Respondents having sound educational background are deliberately targeted and approached for the study.

- **DATA COLLECTION TOOL:**

A structured questionnaire was used for data collection. For effective presentation and utilization of data, tables and bar diagrams are used in the report.

4. REVIEW OF LITERATURE:

a) **Vadrale, K., Dr.Katti, V.P.(2016) “ Green Banking Initiatives By Indian Public And Private Sector Banks”.** The objective of the study is to evaluate the use of Green Banking Products in banking sector and to examine and compare the green banking initiatives by Public and Private Sector Banks. The study concludes that Public and private sector banks are actively undertaken a multiplicity of green banking practices. Primarily, banks are creating awareness about environmental issues through green banking among bank staff, customer and mass people.

b) **Dipika., (2015) “Green Banking in India: A Study of Various Strategies adopt by Banks for Sustainable Development”.** The objective of the study is to understand how the green banking strategies are developed by Indian banks, to find out the challenges in implementation of green banking in India and to find out the necessary steps required for proper implementation of green banking. . The study concludes that Green Banking has been boosting to improve the environment and promoting economic growth.

c) **Rajesh, T., Dileep, (2014) “Role of banks in sustainable economic development through green banking”.** The objective of the study is to assess the role of banks in sustainable economic development through green banking activities. The study concludes that Green Banking is an umbrella

term referring to practices and guidelines that make banks sustainable in economic, environment, and social dimensions. Green banking can be an avenue to reduce pollution and save the environment aiding sustainable economic growth.

d) Gupta, J., (2015) “Role of Green Banking in Environment Sustainability – A study of selected Commercial Banks in Himachal Pradesh”. The objective of the study is to identify the various initiatives taken toward green banking and environment sustainability by commercial banks in India and to conduct SWOC analysis of green banking practices of the commercial banks. The study concludes that the banks are taking new initiatives and promote different green banking products. Bank should also adopt environment friendly practices which ensure the efficient use of resources.

e) Sharma, N., Sarika, K., Dr.Gopal,R. “A study on customer’s awareness on Green Banking initiatives in selected public and private sector banks with special reference to Mumbai”. The objective of the paper is to study the level of consumer satisfaction and awareness regarding Green banking services initiative taken by various Public and Private sector banks in India, Mumbai. The study concludes that green initiatives like Communication through Press, Bank environmental policy, Concession on energy savings, Solar ATMs, Green CDs is not familiar in Green initiatives by the bank as per the respondents. Green banking is still a major issue and can take an important for development of our country in India.

f) Kumar, S., (2017) “A Study on Customers Awareness on Green Banking Initiatives in Selected Private Sector Banks with Reference to Kunnamkulam Municipality”. The objective of the study is to know about the green banking products and to check the awareness of green banking among the general public and consumers. The study suggests that Sustainable development of Indian economy is based on banks and financial institution. So Indian banks tries to perform efficiently than the foreign banks for attaining green banking system. They should take necessary action to educate the general public for initiating green banking system.

5. LIMITATIONS OF THE STUDY:

Nothing in this world is perfect. Similarly our study is also not exception to the rule. Although the researcher has tried their level best to minimize the limitations still there are a few of them can be pointed out.

- The research has been done within a limited time period. Due to which, various aspects of the topic could not be reached.
- Secondary data collected from the journal are not up to date data. Data provided in the websites are also not of recent time.

6. GREEN PRACTICES OF BANKS – A GLOBAL VIEW

During the past decade there has been a growing awareness of wide spread environmental degradation facing current and future generations. Attention has been become so great that environmentalism has been identified as potentially ‘the biggest business issue of the 1990s’. On the global level there is an increase in the awareness towards the global warming and adverse climate conditions as a result interest increased toward environment protection and sustainable development. Consumer is also responsible for the environment pollution due to use of non-renewable energy which cause harm to the environment. Sustainable development and saving of environment are now recognized globally as overriding imperatives to protect our earth from the activity inflicted on it by the human. The concept of green banking will be mutually beneficial to the banks, industries and society.

The beginning of 21st century brought with a number of activities. Due to this change bank has shifted toward the adoption of innovative banking product. The use of ATM, Internet banking, online transfer, debit card and credit card became popular. Innovative product is time saving, create less cost to the bank as well as to the costumer.

A large number of banks around the globe adopted green banking strategies to reduce pollution and for attainment of sustainable economic growth. Geothermal heating and cooling systems, energy efficient lighting, using recycles materials for construction and adopting conservation policies are the green business principles adopted by Chicago’s new green bank. Halton National Bank in Sri Lanka will add energy savings of 30% and water savings of 70% which will help offset the cost of building the environmentally friendly branch. Pallavan Grama Bank has opened a solar-powered bank branch in Ammapettai in the Erode district, which was partially supported by the Union and Tamil Nadu Governments. Silicon Valley Bank is a clear leader in funding green projects. They focus on the areas of population growth, pollution and limited natural resources.

In December 2007, RBI issued a circular (RBI 2007-2008, 1216) highlighting the importance for bank to act with responsibility and contribute to sustainable development so that the impact of global warming can be reduces with the help of banking industry.

7. CURRENT SCENARIO:

- SBI will introduce "green-channel banking" at more of its branches to promote paperless work and to facilitate faster transactions for customers, SBI sources said Asia Pulse [Rhodes] 11 May 2011.
- The Institute for Development and Research in Banking Technology (IDRBT), which is an arm of RBI, is all set to introduce guidelines for green funds under which banks are given instruction to set up green funds and have a chief green officer to extend concessional loans to players undertaking environment friendly projects.
- Annual investments/addition/Productions with respect to Green Banking globally :
Top Five countries:

New Capacity Investment	Hydro Power Capacity	Solar Powered Capacity	Wind Power Capacity	Solar Water Collector	Ethanol Productions	Biodiesel Production
China/ US	China	Germany	US	China	US	US
Germany	Turkey	Italy	China	Turkey	Brazil	Argentina
Japan	Brazil/Vietnam	China	Germany	Germany	China	Germany/ Brazil
Italy	Russia	US	India	India	Canada	France
	Canada	Japan	United Kingdom	Brazil	France	Indonesia

(Source: Global Status Report, 2013)

8. HOW A BANK CAN GO GREEN?

A bank can go green by adopting the following steps or delivery channels:

a) GO ONLINE

Online banking is very useful now. By online customer can check balance online, payment of bills, transfer of funds and remote deposit. It is totally paperless banking. The use of green banking creates less expenditure, less energy and less use of paper in banking activities.

b) MOBILE BANKING

Mobile banking is very helpful. In one hand it is great ability to check and transfer the balance and in other hand it is helpful in saving time of the customer. It also helps the banking sector to save the paper. Most of banks are now providing mobile banking service.

c) INTERNET BANKING

Internet banking is an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society.

d) ATM

An electronic banking outlet, which allows customers to complete basic transactions without the aid of a branch representative or teller. There are two primary types of automated teller machines, or ATMs. The basic units allow the customer to only withdraw cash and receive a report of the account's balance. The more complex machines will accept deposits, facilitate credit card payments and report account information.

e) USE OF GREEN CREDIT CARDS

Every rupee you spend on green credit card, the bank will donate fund to the non-profit environment friendly organization for environment sustainability program.

f) SAVE PAPER

Bank should use purchase the recycled product for customer use like deposit slip, ATM slip, annual report etc.

g) POWER SAVING EQUIPMENTS

Bank should use less power consumption equipment in place of other equipment. Bank should start campaign to replace GSL bulbs by CFL bulbs. It will also contribute a lot in environment sustainability program.

h) USE OF SOLAR AND WIND ENERGY

Use of solar and wind energy is an efficient way to green banking. State bank of India became the first bank in India to use and invest in solar and wind energy plant.

9. BENEFITS OF GREEN BANKING IN INDIA:

a) **Avoids Paper Work:** Almost all banks in India are computerized or operate on a core banking solution(CBS). Thus there is ample scope for the banks to adopt paperless or less paper for office correspondence, audit, reporting etc. these banks can switch over to electronic correspondence and reporting thereby controlling deforestation.

b) **Loans at Comparatively Lesser Rates:** Banks can also introduce green bank loans with financial concessions for environment friendly products and projects such as fuel efficient vehicles, green building

projects, housing and house furnishing loans to install solar energy system etc.

c) **Environmental Standards for Lending:** Banks follow environmental standards for lending, is really a good idea and it will make business owners to change their business to environmental friendly which is good for our future generations.

d) **Creating Awareness to Business People about Environment:** Many NGOs and environmentalists are propagating environment consciousness among the public in general by arranging awareness programs and organizing seminars etc. Banks may associate themselves by sponsoring such programs.

10. GREEN BANKING INITIATIVES BY STATE BANK OF INDIA:

- SBI has launched Green Channel Counter from 1st July, 2010 as an initiative and innovative step of green banking. GCC is available in 7052 branches and average number of daily transactions through it, is more than 100000.
- SBI collaborated with Suzlon Energy Limited and generate green power by installing 10 windmills with 15 MW aggregate capacities in the states of Nadu, Maharashtra and Gujarat. SBI is the first bank in the country for generating Tamil green power.
- It became a signatory to the Carbon Disclosure Project in which bank is taking different environmental sustainable initiatives through its branches spread across the country.
- EXIM bank and SBI entered in to an agreement to jointly provide loan up to 14 years Spain based company Aston field renewable Resources and Group T- solar Global SA for building solar plants in India.
- The bank has introduced a scheme known as Green Homes'. Under this scheme, the bank is offering concessions such as reduced margin, softer interest rate and zero processing fees on home loans for environment friendly residential projects rated by the Indian Green Building Council (IGBC).
- Moreover, the bank has launched its Green Banking Policy and decided to run ATMs on solar energy to reduce their power consumption. It is the largest deployer of solar ATMs and saving more than 2000 tons of CO₂ per year ATMs.
- The recent green banking initiatives of the bank also include paperless banking for customers, clean energy projects and the building of windmills in rural India.
- On May 2016, a first of its kind fully digitalized branch called SBI Intouch Branch was inaugurated by the State Bank of India, NE circle at GS

Road, Guwahati. The main purpose of opening this branch is to cater to the needs of young India. Some of the important services that they will offer are automated account opening and credit facilities, ATM, Cash Deposit Machine, Electronic Cheque Deposit Machine, Swayam Passbook Printer and even Video Consultancy facility. Recently, these branches have been opened in other areas of Guwahati City.

11. GREEN BANKING INITIATIVES BY ICICI:

- ICICI bank had adopted 'Go Green' initiative, which involves activities such as Green products/offerings, Green engagement and green communication with customers.
- The bank is offering green products and services like Instabanking: - It is a service which gives convenience to the customers to do banking anywhere and anytime through internet banking, mobile banking, IVR banking, etc. This reduces the carbon footprint of the customers as they do not require the physical statement or travel to the bank branches.
- Bank has sent nearly 200 thousand annual reports in electronic form and bank have saved more than 60 tonnes of paper in the last quarter by sending e-statements to over 6.5 million bank accounts and 300 thousand credit card customers.
- They are offering 50% waiver on processing fee of auto loans on the car models which uses alternate sources of energy like the Civic Hybrid of Honda, Tata Indica CNG, Reva electric cars, Mahindra Logan CNG versions, Maruti's LPG version of Maruti 800, Omni and Versa and Hyundai's Santro Eco.
- The bank had reduced the processing fee for the customers who are purchasing homes in LEED certified buildings.
- ICICI has partnered with the Indian government, World Bank and UNAID to support SME projects in the area of green research and clean technology.
- The bank is celebrating World Environment Day every year on June 5. They perform various activities on that day like green pledge through signature campaigns, plantation and distribution of saplings etc.
- The bank always insists their customers for online bill payment, online funds transfer and subscription to e-statements which promote 'paperless' and 'commute free' modes of banking transactions.

12. DATA ANALYSIS AND INTERPRETATION:

1. Green Banking Awareness Among Respondents

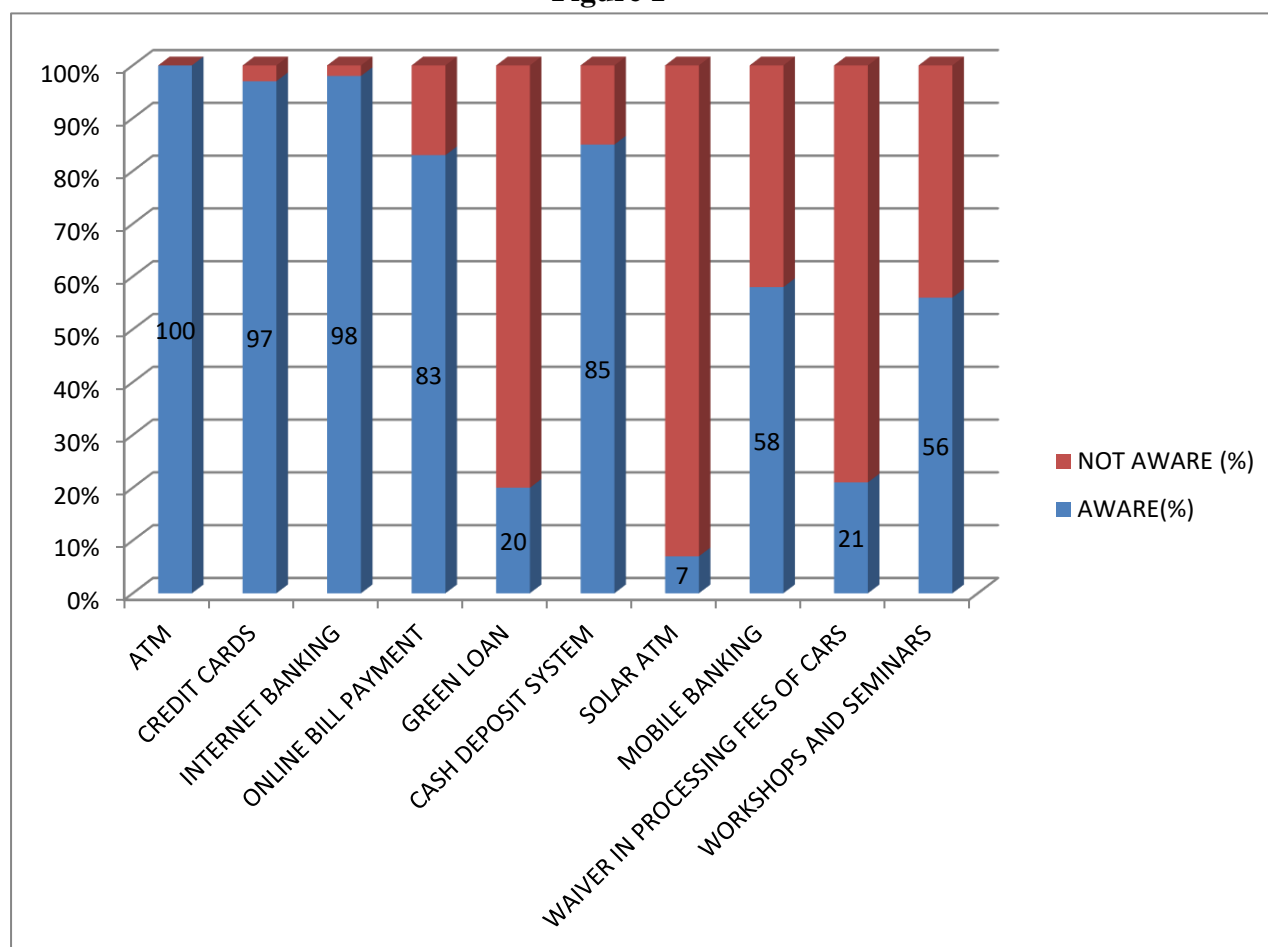
Table 1

Green Banking Initiatives	Aware (%)	Not Aware (%)
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ATM	100	0
Credit Cards	97	3
Internet Banking	98	2
Online Bill Payment	83	17
Green Loan	20	80
Cash Deposit System	85	15
Solar ATM	7	93
Mobile Banking	58	42
50% waiver in processing fee of cars that use alternate mode of energy like electricity and CNG.	21	79
Conducting Workshops and Seminars for Green banking	56	44

(Source: Independent field survey by the researcher)

Figure 1



Interpretation:

From the above table and diagram it is clear evident that the general public are showing a good degree of awareness level regarding green banking initiatives like online bill payment, ATM, internet banking and cash deposit system. But most of the respondents opined that, they are least aware of the modern facilities like green loan and solar ATM. According to them, the selected banks still not introduced these facilities.

2. Respondents using green banking products

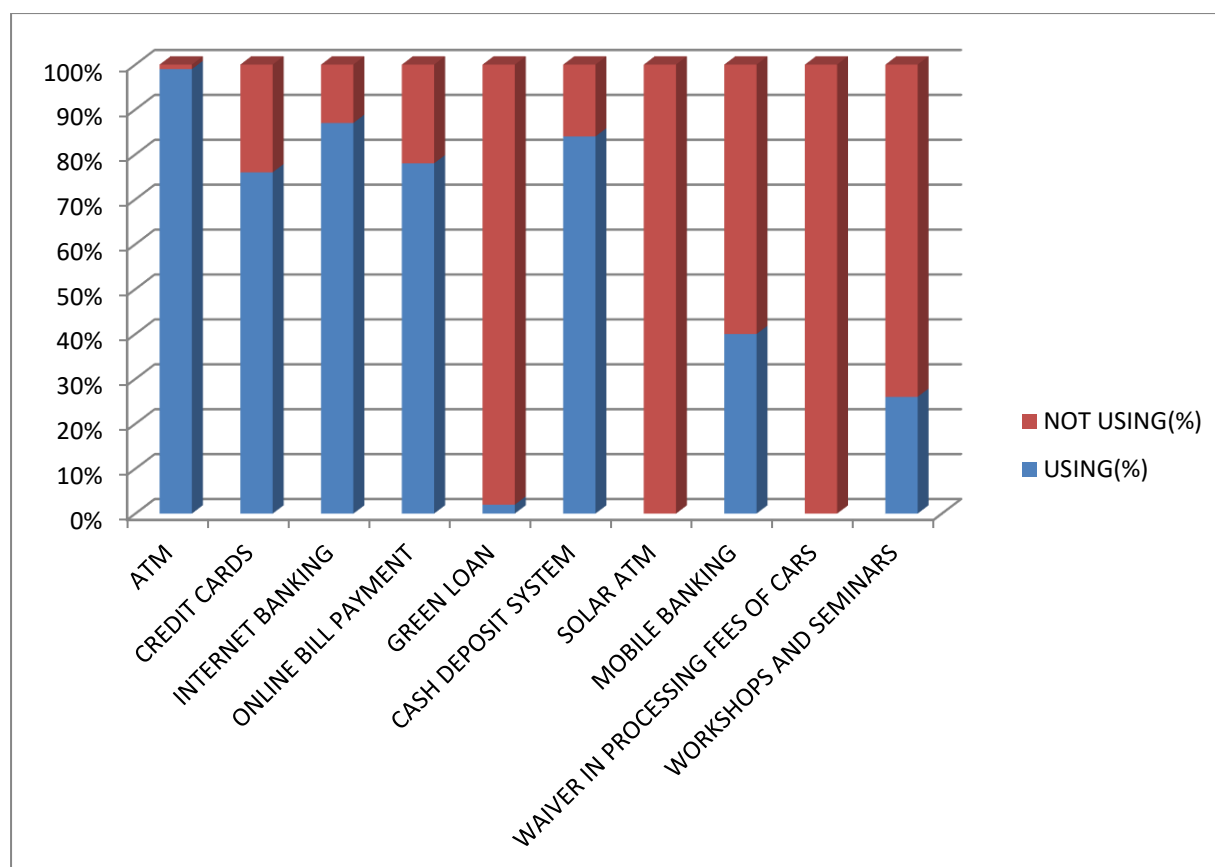
Table 2

Green Banking Initiatives	Using (%)	Not Using (%)
ATM	99	1

Credit Cards	76	24
Internet Banking	87	13
Online Bill Payment	78	22
Green Loan	2	98
Cash Deposit System	84	16
Solar ATM	0	100
Mobile Banking	40	60
50% waiver in processing fee of cars that use alternate mode of energy like electricity and CNG.	0	100
Conducting Workshops and Seminars for Green banking	26	74

(Source: Independent field survey by the researcher)

Figure 2



Interpretation:

From the above table and diagram it is seen that the general public frequently use green banking products like online bill payment, ATM, internet banking and cash deposit system. On the other hand products like green loan, solar ATM, etc. have 0% users as these initiatives are still not introduced in the respective banks in Guwahati City.

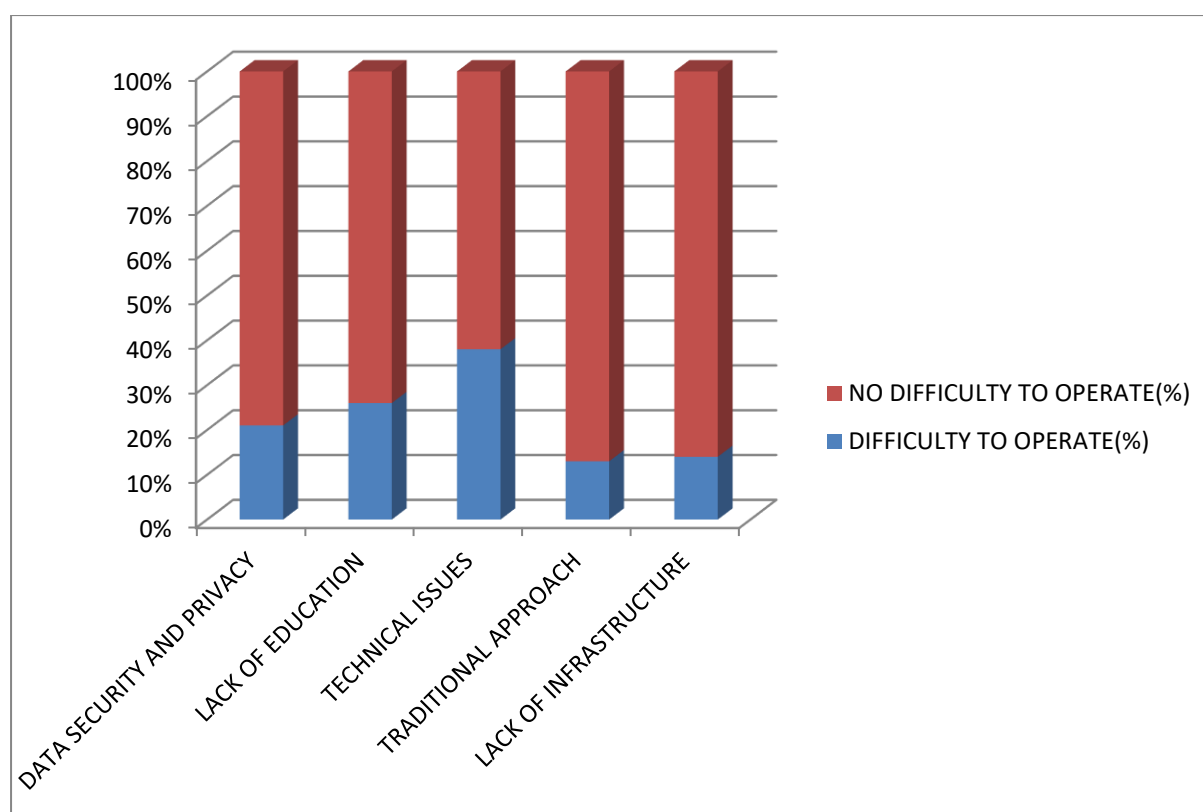
3. Obstacles experienced by respondents in availing green banking service

Table 3

Obstacles	Difficulty to operate (%)	No difficulty to operate (%)
Data Security and Privacy	21	79
Lack of education	26	74
Technical Issues	38	62
Traditional approach	13	87
Lack of infrastructure	14	86

(Source: Independent field survey by the researcher)

Figure 3



Interpretation:

According to the above table and diagram, it is seen that majority of the respondents do not have difficulty in operating the green banking services. It is also evident from the table that the respondents have technical issues while availing these services; i.e. the main obstacle experienced by the respondents while operating green banking services is technical issues.

13. FINDINGS AND DISCUSSIONS:

The major findings of the study are as follows-

- From our study it is found that State Bank of India is the first commercial bank to introduce Green Banking in the country. Green Channel Counters of SBI is available in 7052 branches and average number of daily transactions through it, is more than 100000. The bank has introduced a scheme known as Green Homes'. Under this scheme, the bank is offering concessions such as reduced margin, softer interest rate and zero processing fees on home loans for environment friendly residential projects. The recent green banking initiatives of the bank also include paperless banking for customers, clean energy projects and the building of windmills in rural India.
- As per the research it is found that ICICI bank had adopted 'Go Green' initiative, which involves activities such as Green products/offering,

Green engagement and green communication with customers. Further, the bank is offering green products and services like Instabanking which gives convenience to the customers to do banking anywhere and anytime through internet banking, mobile banking, IVR banking, etc. This reduces the carbon footprint of the customers as they do not require the physical statement or travel to the bank branches. Moreover the bank always insists their customers for online bill payment, online funds transfer and subscription to e-statements which promote 'paperless' and 'commute free' modes of banking transactions.

- Out of the respondents approached, most of them were using green banking products but were not aware of the terminology 'Green Banking' and some of them were using the green banking products as well as they were quite aware of the term 'Green Banking'.
- After conducting the survey it has been found that out of 100 respondents, majority of the respondents are fully aware of green banking products like ATM, Credit cards, Internet Banking, Online Bill Payment, Cash Deposit System.
- From the research it has been found that almost all of them are using ATMs.
- Internet banking is used by maximum respondents.
- It has also been found that most of the respondents pay their bills by Online Bill Payment System.
- According to our study it is found that out of the total respondents, a very few of them have attended workshops and seminars conducted by the banks for green banking.
- After the research it has been found that majority of the respondents do not have difficulty in operating the green banking services.

14. CONCLUSION:

Green banking is a paperless banking, which not only reduces the cost of banking activities but also helps in environment sustainability. Banking sector plays a very crucial role in the growth of Indian economy for promoting environmentally sustainable and socially responsible investment. Public and private sector banks have actively undertaken a multiplicity of green banking practices. There is an increase in awareness regarding protecting and conserving the environment. Green Banking is an emerging concept here. It integrates management of environment with banking activities and aims at reducing carbon footprints. Banks are creating awareness about environmental issues through green banking among bank staff, customer and mass people. Gradually, bank's green banking activities have shifted from encouraging and implementing of e-banking to the recycle of the wastes, water treatment plants, rain water

harvesting, using solar based equipments, constructing green building etc. in more effective manner.

With respect to the level of awareness of Green Banking among the general public we can conclude that majority of the respondents are quite aware about green banking initiatives like ATM, credit cards, online bill payment ,etc. On the other hand we can see that green initiatives like Solar ATM, Green Loans etc. are not familiar as these initiatives are still not introduced in the respective banks as per the respondents.

REFERENCES:

- Dipika.,(2015) “ Green Banking in India: A Study of Various Strategies adopt by Banks for Sustainable Development”, International Journal Of Engineering Research and Technology (IJERT)
- Gupta, J., (2015) “Role of Green Banking in Environment Sustainability – A study of selected Commercial Banks in Himachal Pradesh”, International Journal of Multidisciplinary Research and Development, Volume: 2, Issue: 8, 349-353, e-ISSN: 2348-4182, p-ISSN: 2349-5979, Impact Factor: 3.762.
- Kumar, S., (2017) “A Study on Customers Awareness on Green Banking Initiatives in Selected Private Sector Banks with Reference to Kunnankulam Municipality”. SSRG International Journal of Economics and Management Studies (SSRG-IJEMS), Volume 4, issue 3.
- Rajesh, T., Dileep, (2014) “Role of banks in sustainable economic development through green banking”, International Journal of Current Research and Academic Review, ISSN: 2347-3215 Volume 2 Number 12, pp. 136-141.
- Sharma, N., Sarika, K., Dr. Gopal,R. “A study on customer’s awareness on Green Banking initiatives in selected public and private sector banks with special reference to Mumbai”. IOSR Journal of Economics and Finance (IOSR-JEF), e-ISSN: 2321-5933, p-ISSN: 2321-5925, pp- 28-35.
- Vadrale, K., Dr.Katti,V.P.(2016) “ Green Banking Initiatives By Indian Public And Private Sector Banks”, <https://www.researchgate.net/publication/305547284>
- Website: <https://electicnortheast.in/sbi-opens-digitalized-branch/>
- Website:<http://m.economictimes.com/industry/finance/banking/icici-bank-plans-to-go-paperless-in-green-drive/>