
Green Banking Technology in Curbing Npa in India

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Abstract: *The main aim of the Indian Government is to achieve Atmanirbhar Bharat through success of Swadeshi movement which focuses on holistic and sustainable development. It is important to keep in mind that to provide conducive environment for the production of indigenous goods and services, cost competitive products with least effect on the climate. During lockdown period due to COVID 19, we witnessed that various financial transactions took place at a fast pace due to the availability of smart technologies. Considering Covid-19 pandemic and economic slowdown, banks are relying on technology to improve risk monitoring and NPA management competences. The need of the hour is improved Innovative Green Banking Technologies for paper less transaction starting from applying for loans to release of loans, agreements, payback methods and recovery of NPAs etc. The aim of this research paper is to study various financial products, rules and policy of Banks NPA Recovery which promote Green Banking. Banks have a major part in controlling carbon imprint and speedy growth by redirecting capital flows to environmentally accountable projects and pioneering technologies.*

Keywords: *Green Banking, Technology, NPA, RBI Government of India, and Green Companies.*

1. INTRODUCTION

Economic development is always faces the challenge for exploitation of natural resources and contribution for environmental destruction. Banks as financial institutions can play an important role sponsoring Green Banking Technology for reducing carbon imprint. The implementation of Technology and Artificial Intelligence can help in viable growth of corporate business. It promotes cost competent, reasonable gains, corporate distinctiveness and good will of the business models.

In order to achieve the goals of improving Ease of Doing Business- World class infrastructure, financing and investments are needed. Banks must concentrate on giving loans to Green Companies which produce low carbon emitting Goods and Services. Financial

Products must be designed to promote paperless transaction between Banker and Customer and major funds must be allocated towards promoting Green Intellectual Property Rights products.

The Banking sector saw less impact of Non-performing Assets(NPA), as Government of India came up with relief packages and regulatory measures in a big way for faster revival. The Covid-19 is shifting banking and financial institutions towards implementation of technological know-how. NPA is one of most alarming problem that have dazed the entire financial institutions mainly Banks. The Banks need improved technology transformation in cloud space, block chain, artificial intelligence etc.,

This paper aims to study various Green Banking products for sustainable environment development of Banking. The research is based on descriptive research using literature and analysis of various Banking practices to promote technology.

Technology in Banks : Bank lending practices must concentrate on environmental friendly practices. It is an attempt to combine operational improvements in lending practice by changing borrowers habit of business. “Green Banking” (Nath, 2014) is “an umbrella term referred to practices and guidelines that make banks sustainable in economic, environmental and social dimensions” (Manikyamba, 2021).

Green Banking is an innovative mode of Banking practices which is the way of doing business in the modern times. Green banking is still in its infancy and the coming future is all based on Green based technology. Plentiful of financial services are available today. Banks need to concentrate on providing credit to business models which are environmental friendly and help in promoting carbon free footprint (Bahl, 2012).

Presently the business phenomenon has changed realm of banking towards sustainable conservation of environment. The World Bank promotes application of Green Banking technology through a set of elements like economy, nature, society and well-being, though effective consumer communication skills and targeted marketing strategies. The sound Green banking system encourages innovative products that support commercial as well as environmental development.

The main purpose of promoting green banking is to reduce carbon footprint from banking activities. This can be attained through various techniques like substituting online banking in place of branch banking, paperless transactions with customers for recovery/management of NPAs and asset liability management (Manikyamba, 2021).

a. Objectives of the Study:

- i.** To study various strategies used by banks to promote Green Banking
- ii.** To understand existing online facilities for promoting Green banking.
- iii.** To analyse Green Banking in India in tackling NPA

2. METHODOLOGY

The study is based on exploratory research which include literature review and secondary data collected from banks, regulatory authorities and web sites.

b. Scope of Study:

The best use of Banking Technology has witnessed during lockdown period of Covid-19. There has been a tremendous utility of online banking facilities in cost cutting, increased productivity, management of NPAs, Asset liability management and improved customer services to their best satisfaction. Green Banking technology decreases usage of Paper thereby creating awareness on environmental and social responsibility. The coming years will see improved technologies on Green Banking for more sustainable development of economy.

c. Literature Review: The NPA is double edged razor, which damages profits, capital structure which needs faster evaluation timely recognition through technology (Jauhari.S, 2020). Digital technologies play a crucial role in the lives of bankers and customer. The NPA is foremost alarming problem which can be detected at early stages through CIBIL technology (M.P, 2020). Biodiversity can change world to be a better place live in with certain changes by reducing carbon imprint in terms of less paper, less energy and less usage of non-renewable resources through sustainable banking activities. Green Banking is an innovative concept which can benefit entrepreneurs, banks and environment as well (Sahi, 2017). The Banks need to adopt preventive action employing emerging technologies to handle NPAs as the primary reason for bankers' failure is the main cause for rise of NPA. The banks need to use CIBIL score as notable technology to control NPA as an early warning mechanism (VijayaranganU, 2020).

1. Banking Technology:

In 2010 to Banking Information Technology initiatives for the Indian Financial Institutes. These regulations have brought into light various online transaction facilities are used by people in the present days (Report, 2010). RBI has stressed the financial institutions to follow sustainable development practices and encourage advancing loans to projects within priority sector lending targets like small renewable energy (Report, Forest and Climate Change , 2019). The Financial Times and International Finance Corporation(IFC) a World Bank member is awarding institutions for integrated social, environmental and corporate governance (Manikyamba, 2021).

The RBI while promoting green banking improved the internal bank processes and technical/physical infrastructure for effective and efficient for zero or minimal impact of banking on the environment (Dipika, 2015).

- **Credit Information Bureau(India) Limited(CIBIL):** CIBIL is a credit information company which is engaged in maintaining the credit related records of individuals as well as corporates. The registered banks and financial institutions can update information and criminal and civil cases filed against the willful defaulters for recovery of NPAs.

- **Legislation for recovery of NPAs:** The Government of India has enacted various legislations to tackle NPAs. These include Insolvency and Bankruptcy Coe 2016, Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act and Recovery of Debts due to banks and Financial Institutions Act 1993 which

established Debt Recovery Tribunal (DRT). Due to pandemic all the cases for recovery of NPAs are filed online mode.

- **Technology for NPAs:** Technology for managing NPAs is a also one of the green banking initiative for sustainable environmental methods. During the COVID-19 pandemic technology has definitely addressed the NPA crises. Apart from this at initial stages technology through CIBIL can be used to study the consumer credit patterns. NPA recovery is a costly as well as time taking process. To reduce the time as well as cost of recovery process it is required to consolidate taskforce and technology in order to ease the NPA crises.
- Additionally, greater responsibility of banks and financial institutions in effective monitoring of debtors and early detection of willful defaulters.
- **Monitoring and Screening of Borrowers and their assets:** Banks and Financial institutions face high operating costs during manual survey and identification of assets of willful defaulters. In Economic Survey 2020 stated that “A large proportion of NPAs of Banks in India especially Public Sector Banks(PSBs), could have been prevented if data and analytics were employed in corporate lending. The rates of default were the highest with larger loans(above Rs. 100 crore)”. It suggested that PSBs to use Goods and Service Tax Network (GSTN) technology as green banking initiative for using tracing data and artificial intelligence for loan disbursements.
- The GSTN technology can help in unearthing through better screening and monitoring of borrowers. The borrowers collateral assets are geo-tagged using GPS technology and PSB Network which would help in reducing the burden of NPA as well as prevention o fraud..

2. Challenges in promotinmg Green Banking :

a. Challenges encountered by Banks for effective implementation of Green Banking techonlogy are:

- Despite of availability of best online modes of Banking services, Banks are still depending on traditional methods.
- Asset management is not being done effectively due to lack of monitoring techniques.
- Credit and recovery management must have additional vigilance while dealing with customers and defaulters.
- Due to various Government policies Banks are forced to stray away from financing of ecologically and ethically challenging projects.
- Lack of stricter regulation policies.
- Banks need to conduct quarterly energy saving and technology audit for ensuring effective Green Banking technologies.

b. Challenges in NPA recovery process:

There are various factors that affect procedural lapses while implementing SARFAESI Act 2002, RDDBFI Act 1993, IBC 2016. It is noticed that Recovery notice, delays at various stages, liquidation process, reorganization process, mistakes in news paper publications, limitation aspects etc., have shown impact on recovery of NPAs. NPA monitoring though technology integration is the best option for proper due diligence at every stage of recovery process.

c. Role of Technology in tackling NPA:

Technology can be used to integrate banks data for proper monitoring of willful defaulter and control bad debts. Payment patterns can be detected at early stage to avoid corporate frauds. Technology can help to minimize probability of default.

3. Technology Trends for Improving Green Banking Recovery Process:

The sensitive nature of Banking services which involve public funds, banks need strict monitoring policies. Indian Banks are still in development stage in terms of corporate banking governance as compared to developed economies. Artificial Intelligence and Machine Learning are advanced methods to catch fraudsters and credit card management by Banks.

- **Cloud Banking Technology:** Cloud computing is a technology used by Banks for transforming banking business into a risk free business operation. In the recent report by IDC, it is expected that by 2024 about 80% of corporate banks in India are expected to use Cloud Technology (Vasudevan, 2021). This would help Banks to reduce data storage expenses by using cloud based services while assuring client data security. The Cloud computing can be used in delivering various financial services in payment gateways, lending services, digital wallets, online fund transfer and secure online payments (RAY, 2018).

- **Artificial Intelligence:** Integration of Data relating to customers from various Banks using KYC details for integration of Data like Credit score & rating agencies, CIBIL etc, to collect information and prevent rise of NPAs. Willfull defaulters do not disclose account details and divert funds or misuse public money, which may lead to rise of NPAs (Chauhan, 2018).

- **Blockchain Technology:** Using Blockchain technology banks can monitor and track NPAs which helps to keep a check on increase of NPA and provide robust mechanism to trace NPA as it progresses. This technology can be used by banks, regulators as well as government to track corporate frauds at an initial stage. Blockchain will record loan advances, record of payment dates, alert identification of Loss Assets, manipulation of records as banks and regulatory bodies automatically update information in blockchain network (Deka, 2021).

- **Global Positioning System(GPS):** GPS system can be used to manage NPA by identification of secured or collateral assets which are mortgaged with the Banks as most of the fraudsters try to mislead the lenders at the time of identification of Business place or secured assets. GPS system can also track the movement of the willful defaulters by tracking their movement through their truncations patterns through their Credit/Debit Card.

Problems and Challenges in Implementing Debt Recovery Laws in India and Use of AI technology:

Procedural obstacles in implementing provisions of DRT:

Sl.No.	Challenges	Remedy
1	Speedy Adjudication	Automatic alert AI system to be attached to each case

		which is highlight delay and cause
2	Prolonged proceedings	Automatic adjudication system must be implemented to shift to next stage, in case of unnecessary prolongation of proceedings due to borrowers
3	No accountability for DRTs	DRTs must be made accountable by centralization of case monitoring mechanism by Department of Ministry of Finance
4	Inadequate infrastructure	More Technology based infrastructure must be given to all DRTs and DRATs
5	Data integration between DRTs and DRATs	Integration of data of all DRTs and DRATs shall help in holding willful defaulters.

3. SUGGESTIONS & CONCLUSIONS

The Need of the hour is to promote environment friendly business models, online banking facilities, use of paperless transactions, Artificial Intelligence, Blockchain technology, consumer awareness programs, increase online service centers etc. Apart from all these, NPA recovery also can be done through the utilization of technology to raise regular alerts in respect of valuation of assets, locating assets, disbursement of loan after proper verification of title deeds on websites.

Banks in India and at global level have already started using smart technology to analyse risk management and fraud detection techniques in order to identify rise and control NPAs by integration of credit data.

Stricter regulations must be framed for converting all manual transaction into online or paper less transactions. The Government must frame regulations for banks and ensure enforcement to convert all manual works into online mode as India has attained full internet facilities even in remote areas.

Green Banking can be attained only through increased use of technology the way forward for Banks. It is high time that banks and financial institutions need to redefine themselves as active technology driven companies. While going green Banks also need to be vigilant as many instances of fraud and digital risks have increased.

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