

GREEN FINANCE : AN EMERGING FORM OF SUSTAINABLE DEVELOPMENT IN INDIA

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ABSTRACT

"We are the first generation to feel the effect of climate change and the last generation who can do something about it." -Barack Obama

Green finance plays a pivotal role in achieving inclusive, resilient and cleaner economic growth by creating environmental benefits. It helps in increasing the flow of finance from the public, private and nonprofit sectors to sustainable development priorities (Babita Jha, 2019). To build economic development in a sustainable manner, India also needs a national green finance strategy. It requires green infrastructure funding of about \$4.5 trillion by 2040. The contribution made by both public and private sector banks will play a crucial role in green financing. This particular study showcases about the green financing initiatives taken by the public, private and foreign banks in India and also recommends some measures to be taken for this purpose.

Key Words : Green Finance, Sustainable Development, Economic Growth.

Introduction

According to the [United Nations Environment Programme \(UNEP\)](#), Green financing is to increase level of financial flows (from banking, micro-credit, insurance and investment) from the public, private and not-for-profit sectors to sustainable development priorities. A key part of this is to better manage environmental and social risks, take up opportunities that bring both a decent rate of return and environmental benefit and deliver greater accountability. Green finance is defined as comprising "all forms of investment or lending that consider environmental effect and enhance environmental sustainability" (Volz et al. 2015). Sustainable development pathway requires an unprecedented shift in investment away from greenhouse gas, fossil fuel, and natural resource intensive industries towards more resource efficient technologies and business models. The financial sector will have to play a central role in this 'green transformation' (Ulrich Volz, 2018). Green financing is a subset of sustainable finance and focuses on promoting and facilitating the funding of activities, policies, and businesses that positively impact the environment, including the reduction of carbon use and adoption of more climate-resilient systems. Not only can green finance initiatives benefit the environment, it can also help scale up economic development for the longer term. Important aspects of green finance are sustainable investment and banking, where investment and lending decisions are taken based on environmental screening and risk assessment to meet sustainability standards. Green finance as a part of Green Banking makes great contribution to the transition to resource efficient and low carbon industries i.e. green industry and green economy in general (Ravi Meena, 2013). Important aspects of green finance are

sustainable investment and banking, where investment and lending decisions are taken based on environmental screening and risk assessment to meet sustainability standards.

The SDGs are a collection of 17 global goals set by the United Nations General Assembly as an agenda for the year 2030. These 17 SDGs are an urgent call for action by developing and developed countries and provide a blueprint for the peace and prosperity for people and the planet. To achieve the Sustainable Development Goals (SDGs), we need to open a new file for green projects and scale up the financing of investments that provide environmental benefits through new financial instruments and new policies, such as green bonds, green banks, carbon market instruments, fiscal policy, green central banking, Fintech, community-based green funds, among others. These instruments are known as "green finance." (Jeffrey D. Sachs, 2019).

Every country should focus on circular economy concept. The circular economy is an exciting and inspiring approach to create a new economy, a new way of consuming, using and producing products. The circular economy aims to create a system without waste that keeps all resources flowing continuously between producers and users. A system with low environmental impact and high economic activity.

Review of Literature

Dr Mahadev Karade (2021) mentioned about the primary purpose that is to make private investors aware of their sustainability role. This paper explained about the various public policies framed for the purpose of green finance. It was advised to Government of India to make a clear green investment policy with a long-term view of the economy

and to broaden its focus on domestic as well as foreign investors.

Babita Jha et al. (2019) explored the various green financing initiatives taken by the public/private sector organizations/banks and also analyzed green financing trends adopted in India. This study was conducted on commitments made by different financial institutions majorly banks for renewable energy.

Ravi Meena (2013) mentioned about the reduction of external carbon emission by way of banks that should finance green technology and pollution reducing projects. The prime aim of the paper is to highlight the means to create awareness in internal as well as external sub systems among target groups and impart education to attain sustainable development through green banking.

Md. Sabuj Hoshen et al. (2017) talked about determining the allocation of green financing to green projects by categorizing them into banking and non-banking sectors in Bangladesh. This study observed that the Private Commercial Banks (80.4 percent) contribute more funds to the green project and the tendency to reinvest in green projects is increasing day by day. This research was of purely secondary data based only. It was advised to invest in green finance projects so that the whole world can combat with the problem of global warming.

Ulrich Volz (2018) discussed about the need for greening the finance system and the role of financial governance. This literature mentioned about the green lending and investment in Asia and an overview of green financial governance initiatives across Asia. This paper also identified about the various market innovations and green investments to increase green finance in Asia.

Objective

To understand the various green financing initiatives taken by public, private and foreign sector banks in India.

Hypotheses

- H01 - There is a positive impact of climate related financial disclosures on sustainable development.
- H02 - There is no impact of climate related financial disclosures on sustainable development.
- H03 - There is a positive impact of green initiatives on sustainable development of India.
- H04 - There is no impact of green initiatives on sustainable development of India.

Research Methodology

This study is of descriptive nature and is based on secondary data taken from various government reports published by the Government of India, Reserve Bank of India and other published reports from public, private and foreign sector banks in India.

Data Analysis & Interpretation

The following table shows about the involvement of banks

in the study -

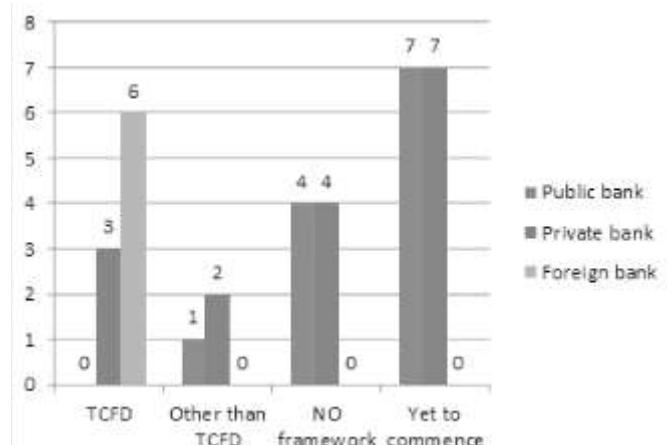
S.N.	Category of banks	No. of Banks
1	Public sector banks	12
2	Private sector banks	16
3	Foreign banks (Having a major portion in India)	6
	Total	34

There are mainly 2 categories for the first 2 hypotheses one is simply for climate related financial disclosures while the other one is related to some webpage adopted by banks on Sustainability/ESG/Climate risk.

Category 1 - Climate related financial disclosures

There are 4 situations underlined for all the banks regarding climate related financial disclosures. These situations are -

1. Banks which are making disclosures aligned to the recommendations of the financial stability Board's Task Force on Climate related Financial Disclosures (TCFD).
2. Banks which are making disclosures aligned to the recommendations of disclosure frameworks other than the TCFD.
3. Banks which are making some climate related financial disclosures but these are not aligned to any framework.
4. Banks which are yet to commence making climate related financial disclosures.



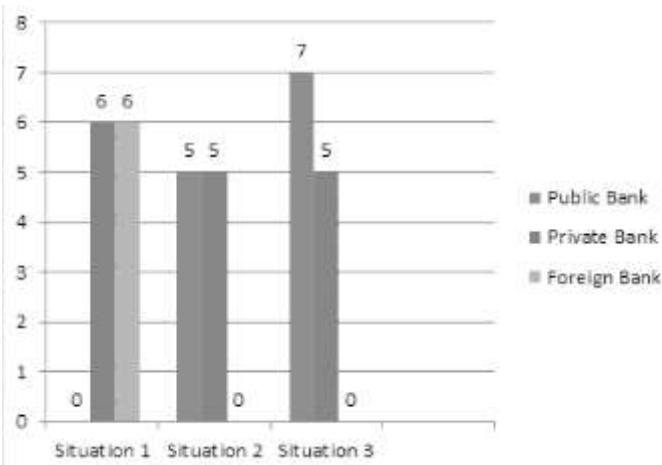
	Public Bank	Private Bank	Foreign Bank
TCFD	0	3	6
Other than TCFD	1	2	0
No framework	4	4	0
Yet to commence	7	7	0

It is analyzed that all the foreign banks (100%) are falling under TCFD category while no public sector bank is preparing their climate related financial disclosures according to TCFD. There is only 1 public bank preparing its financial disclosures in accordance with other than TCFD while private banks are 2 who are doing the same. Public and private banks (4&4) are equally preparing their financial disclosures not in accordance with no framework. Remaining banks are going to commence some criteria for the preparation of their climate related financial disclosures.

Category 2 - A separate webpage on Sustainability/ESG/ Climate risk

There are 3 situations mentioned for the webpage on sustainability/ ESG/ Climate risk –

1. Banks with a separate webpage on sustainability/ ESG/ Climate risk on their website.
2. Banks with no separate webpage on sustainability/ ESG/ Climate risk on their website, but intend to have one within next 12 months.
3. Banks with no separate webpage on sustainability/ ESG/ Climate risk on their website and with no short-term plan to create one.

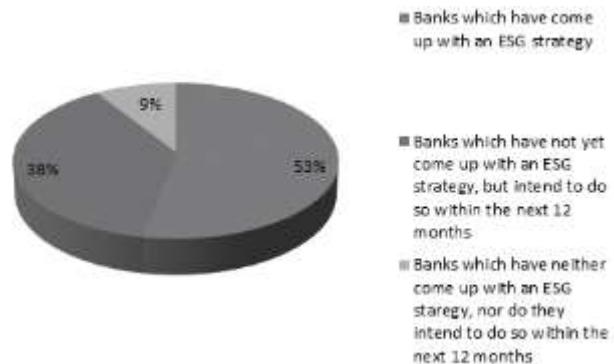


	Public Bank	Private Bank	Foreign Bank
Situation 1	0	6	6
Situation 2	5	5	0
Situation 3	7	5	0

According to analysis on the basis of table no 2 all the foreign banks are falling under situation 1 only it means all the 6 foreign banks having separate webpage on their website while public banks are nil for the situation 1. 5 public banks and 5 private sector banks are with no separate webpage on their website while 7 public banks and 5 private banks are not planning to do so in short while.

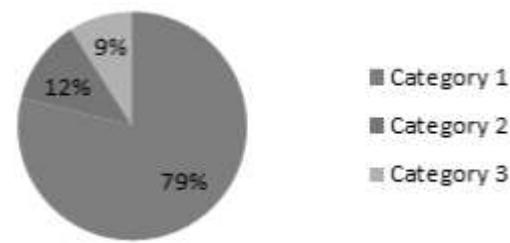
There are 3 categories mentioned for the check of next 2 hypotheses related to green initiatives. First one is related to banks which are having ESG strategy while second one is related to the reduction in carbon emission and increase the portion of renewable energy and the third one is related to become carbon neutral in near future.

Category 1 - Banks which are having an ESG strategy



It is an overall analysis of all the banks whereby 53% banks are coming up with an ESG strategy while 38% banks are planning to adopt this strategy in coming 12 months only and remaining 9% banks are not yet planning something like ESG strategy as green initiatives.

Category 2 - Reduction in carbon emission and increase in renewable energy



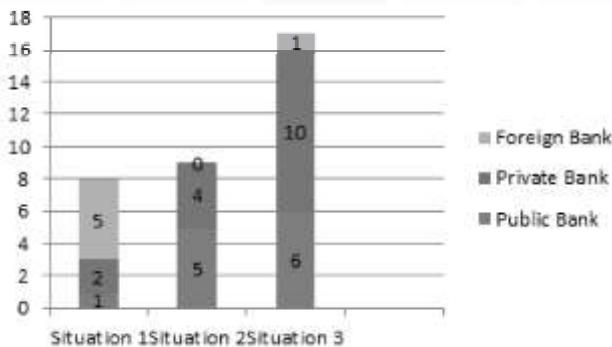
There are 3 categories about measures to decrease carbon emissions –

1. Banks who has taken measures to decrease carbon emissions arising from their operations and increase the proportion of renewable energy in their total sourced electricity (79%).
2. Banks which intend to do so within the next 12 months (12%).
3. Banks which does not have any such plans (9%).

Category 3 - To become Carbon neutral

Banks which have announced plan with a timeline to become carbon-neutral

1. Banks which have announced plans with a timeline to become carbon-neutral.
2. Banks which intend to do so within next 12 months.
3. Banks which do not have any such plans.



	Public Bank	Private Bank	Foreign Bank
Situation 1	1	2	5
Situation 2	5	4	0
Situation 3	6	10	1

It is seen that 83% of the foreign banks are falling under situation 1 while remaining foreign banks are not having any such plan to become carbon neutral. Maximum percentage of the private banks are not interested in becoming fully carbon neutral while 25 % private banks are planning to do so in next 12 months and remaining 12.5% have already announced to be carbon neutral. 50% of the public banks are falling under the 3rd situation while 41% are planning to be so in next 12 months and remaining public banks have already announced to become carbon neutral.

Results & discussion

- All foreign banks are maintaining their financial disclosures on the recommendations of Task Force on Climate Related Financial Disclosures (TCFD) and they are having a separate webpage for the Sustainability/ESG/Climate risk.
- No public sector bank is preparing their financial disclosures on the recommendations of Task Force on Climate Related Financial Disclosures (TCFD) and also not having any separate webpage for Sustainability/ESG/Climate risk.
- Few private sector banks are preparing their financial disclosures on the recommendations of Task Force on Climate Related Financial Disclosures (TCFD) and also having a separate webpage for Sustainability/ESG/Climate risk.
- It can be concluded that hypothesis 1 is fulfilled by foreign banks and private banks while public banks are falling under hypothesis 2.

- As per the above interpretation it can be said that all types of banks are supporting for the green initiatives so it can be said that hypothesis 3 is proved by all the banks.

Conclusion

Green funding is necessary for environmental friendly projects to reduce the risk of climate change for sustainable development. For the sustainable development of the country every financial and non-financial organizations should maximum give try to invest in green projects only. For effective green financing & banking, the RBI and the Indian government should play a proactive role and formulate a green policy guidelines and financial incentives. The survival of the banking industry is inversely proportional to the level of global warming. Therefore, for sustainable banking, Indian bank should adopt green banking as a business model without any further delay.

Recommendations and suggestions

- Creating and raising awareness in investors and individuals regarding green financing initiatives and climate risk and to use the options which are almost carbon free.
- Enhancing transparency through ESG disclosure requirements.
- Providing incentives, where needed, to banks and NBFIs for the financing of green projects.
- Supporting the development of new market segments such as the green bond market or climate risk insurance.

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