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Green Finance: Fostering Sustainable Development in India

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Abstract

Green finance is a critical enabler of sustainable development, facilitating the transition to an environmentally sustainable economy. Green finance has emerged as a pivotal instrument for achieving sustainable development goals (SDGs) by mobilizing investments into environmentally sustainable and socially inclusive projects. In India, a country grappling with rapid urbanization, industrialization, and population growth, green finance offers a pathway to mitigate environmental degradation while promoting economic growth. This paper explores the role of green finance in fostering sustainable development in India, examining its current status, challenges, policy framework, and future potential.

Keywords: Green finance, Sustainable development

Introduction

Green finance is an innovative approach integrating financial mechanisms with environmental objectives. It encompasses a wide range of activities, including investments in renewable energy, energy efficiency, sustainable agriculture, pollution control, and conservation of natural resources. In India, green finance is gaining prominence as the country grapples with pressing challenges such as climate change, resource depletion, and environmental degradation.A key part of green finance 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.

Indiahas pledged to achieve net-zero emissions by 2070 and to reduce its carbon intensity by 45% by 2030 from 2005 levels. Achieving these ambitious goals necessitates significant financial resources, technological innovations, and systemic reforms. Green finance is instrumental in mobilizing the required capital while promoting economic growth and environmental sustainability.
According to India's Third Biennial Update Report 2021 to the UNFCCC between 2014 and 2019, while the **Global Environment Facility** and **Green Climate Fund** has provided grants to a total of only US USD 165.25 million, the corresponding domestic mobilisation amounts to USD1.374 billion.

Green finance is responsible for the financing of both public and private green investments along with the preparatory and capital costs. Some of the major roles of Green Finance are as follows:

- To provide financing for environmental goods and services such as water management or protection of biodiversity and landscapes.
- To prevent, minimize and compensate the damages to the environment and to the climate.
- To provide financing of public policies which will encourage the implementation of environmental and environmental-damage mitigation or adaptation projects and initiatives.

Objectives of the Study

- To understand the concept and scope of green finance in India.
- To identify the key drivers and challenges of green finance.
- To evaluate the role of green finance in fostering sustainable development.

Research Methodology:

The study is based on the secondary data available. Analysis of government reports, academic papers, and financial data and also review of international best practices in green finance.

Review of literature:

1. Parvadavardini Soundarrajan, Nagarajan Vivek (2016) in their study titled ‘Green Finance for sustainable green economic growth in India’ explained the meaning, work, strengths and challenges of green finance. Green finance stated the infrastructure of green growth- finally green growth is an orchestra composed of the technical developed company, the financial company, the government and the consumer.

2. Sharif Mohd. and Vijay Kumar Kaushal (2018) in their study titled ‘Green Finance; A step towards sustainable development’ states that India has huge potential to create green infrastructure needed for green finance by overcoming the barriers and creating awareness among the corporate citizens for more sustainable development. The study was based on the main objective to build up green financing at grass root levels of the country. The research included gatherings from secondary data available. The study concluded that in sustainable and financial development, green finance became a global concern.

3. Babita Jha, Priti Bakhshi (2019) in their work bring the focus on the fact that India should not only focus on domestic investors. The green finance instruments should be designed such that it should attract both local and international investors.

4. P. Dhoot and S. Awate (2021) study titled ‘Green Financing: An emerging form of sustainable development in India’ was based on descriptive research. Its objectives were to study the kind of green finance products and services offered by the Indian markets and to analyze the trends in green finance in India. Data for the study was collected was secondary through various reports and financial institution websites. It elaborated that the Indian green finance market is in an emerging state and it has not been able to attract an ample number of investors. It curtains down that current market practices, regulations monitoring the market are becoming a great hurdle in the success of financial instruments.

5. Sumedha Bhatnagar, Dipti Sharma (2022) study explained that Green financing is an approach through which countries can encourage economic growth in convergence with environment supportive

activities through innovative development of the financial industry. The results obtained from the analysis also suggest that the development of GF requires an integrative approach of the government, financial system, policymakers, private sector and non-governmental organizations for market diversification and risk mitigation.

Need for Green Finance:

1. **Polluter Pays:**The '**polluters pays' principle** is the commonly accepted practice according to which those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment.It acknowledges the different capabilities and differing responsibilities of individual countries in addressing climate change. Developed Countries historically have been the major environmental polluters.Therefore, based on above mentioned principles, the developed countries are morally responsible to provide technology and finance to combat climate change.

2. **Expected Contributions from Developed Countries**: Required climate finance from developed countries is to transfer USD 1 trillion annually to developing countries to meet their climate targets.Through the Cancun agreement, **2010 developed countries** committed to a goal of mobilising jointly USD 100 billion per year by 2020 to address the needs of developing countries.However, the Glasgow Climate Pact (COP26) noted that the goal of developed countries have not yet been fulfilled.In this regard, the COP26 has requested the Standing Committee on Finance to the UNFCCC to prepare a report in 2022 on progress towards achieving the goal of mobilising **USD 100 billion per year** to address the needs of developing countries.

3. **Global framework for Climate Financing:**To facilitate the provision of climate finance, the **UNFCCC** has established the financial mechanism to provide financial resources to developing country Parties.**The Adaptation Fund under Kyoto Protocol:** It aims to finance concrete projects and programmes that help vulnerable communities in developing countries that are Parties to the Kyoto Protocol to adapt to climate change.

4. **Green Climate Fund**: It is the financial mechanism of the UNFCCC, established in 2010.India has been pushing for rich countries to meet the Paris Accord climate finance commitment of USD 100 billion per year.**Global Environment Fund** has served as an operating entity of the financial mechanism since the Convention came into force in 1994.

The Current Status of Green Finance in India

In recent years, India has witnessed a steady rise in green investments, particularly in the renewable energy sector. The country has become a global leader in solar and wind energy production, with ambitious targets of achieving 500 GW of renewable energy capacity by 2030. Financial instruments like green bonds have gained traction, with Indian entities raising over $18 billion through green bond issuances by 2023.

India's green finance landscape has experienced notable growth, with tracked green finance reaching INR 4,804 billion (approximately $65 billion) in the fiscal year 2021/22. This includes INR 3,712 billion ($50 billion) for mitigation efforts and INR 1,092 billion ($15 billion) for adaptation initiatives.

Despite this progress, the current funding falls short of the estimated INR 162.5 trillion ($2.5 trillion) required by 2030 to meet India's climate goals, indicating a significant financing gap.

The Indian government has taken steps to address this gap, notably issuing its first sovereign green bond worth INR 80 billion ($980 million) in January 2023.
To bridge the financing gap, experts advocate for a collaborative approach involving government policy support, innovative financial instruments, and increased private sector participation. Additionally, integrating Environmental, Social, and Governance (ESG) criteria into financial decision-making is crucial for sustainable development.

Green Financing

According to the UN Environment Programme – "Green financing is to increase the level of financial flows (from banking, micro-credit, insurance, and investment) from the public, private and not-for-profit sectors to sustainable development priorities."
In other words it refers to, financial goods and services that are designed to help address environmental factors and climate-related risks. This includes sustainable investments such as renewable energy, green bonds, green technologies, and energy-efficient infrastructure. The goal of green finance is to provide capital for projects that can help reduce carbon emissions and promote a more sustainable environment and economy.

Types of Green Financing in India

1. Green Sovereign Bonds
2. Green Deposits

Green Bonds

According to the World Bank, Green bonds are a type of debt security that is issued to raise funds for initiatives that are related to the environment or the climate. Governments, companies, and multilateral organisations issue green bonds to exclusively finance projects that have positive environmental or climate benefits, such as renewable energy, clean transportation, and green buildings. Investors receive fixed-income payments in return.
As part of the Indian government's market borrowings for 2022-23, sovereign Green Bonds will be issued to mobilise resources for green infrastructure. The proceeds from the same will be utilised in public sector projects that can help reduce the carbon intensity of the environment and economy.

Green Deposits

Green deposits are a type of financial product that banks and financial institutions offer to promote environmentally sustainable initiatives and projects. These deposits are created to attract funds specifically for financing green and sustainable projects, such as renewable energy, energy efficiency, waste management, and other environmentally friendly initiatives.
There are several types of green deposits to choose from, including fixed deposits (FDs), savings deposits, recurring deposits, and certificates of deposits. Each of these deposits offers different features

and benefits, enabling individuals and organisations to select the most appropriate option based on their investment objectives and personal preferences.
Banks that accept green deposits are required to inform the Reserve Bank of India about how they will invest the funds. This increases transparency and ensures that the money goes towards its intended cause, thereby boosting investor confidence.

The Green Credits Programme, launched by the Environment Ministry in October 2023, aims to create a market-based incentive for different kinds of environment-positive actions. The programme is not limited to carbon emissions reduction.
Currently, Carbon credits have a market-based system at national and international levels. This system allows companies or nations to claim carbon credits if they take action to reduce their carbon footprint. These credits can be traded for money. Companies that are unable to achieve their emission standards buy these credits to improve their performance.
As a starting point, it is envisioned that private companies would buy these green credits as part of their Corporate Social Responsibility (CSR) obligations. Unlike the carbon credit markets, which focus more on industry and corporations, the Green Credits Programme can benefit individuals and communities as well.

Challenges in Green Finance

- **Capital Shortage**: Achieving India's climate goals requires investments of over $2.5 trillion by 2030, a significant gap from current funding levels.
- **Data mining, collection, and analysis:**This can be a task as there's a huge amount of data from various sources, especially when it comes to banks.
- **High Costs**: Renewable energy projects, particularly in the early stages, require substantial upfront investments and face high operational risks.
- **Limited Awareness**: Stakeholders, including financial institutions and consumers, often lack awareness of green finance opportunities.
- **Regulatory Barriers:** Inconsistent policies and lack of incentives deter private sector participation.

Opportunities and Future Prospects

- **Innovative Financial Instruments:** Expansion of green bonds, green loans, and sustainability-linked bonds can attract global investments.
- **Digital Finance:** Leveraging fintech solutions to improve accessibility and efficiency in green finance.
- **Private Sector Engagement:** Encouraging public-private partnerships and corporate social responsibility initiatives.
- **Policy Reforms:** Streamlining regulations, providing tax incentives, and establishing a robust green taxonomy to classify sustainable activities.
- **Expanding Scope of Collaboration:** Multi-stakeholder partnerships should be promoted to include major actors in financial markets, banks, investors, micro-credit entities, insurance companies along with the public sector.
- **Holistic Framework**: Green financing could be promoted through:Changes in countries' regulatory frameworks, Harmonising public financial incentives, Increases in green financing from different

sectors. and Alignment of public sector financing decision-making with the environmental dimension of the SDGs.

Conclusion

Green finance is not merely a tool for environmental preservation; it is a transformative approach to achieving sustainable development in India.Green finance is a cornerstone of India's journey towards sustainable development. By addressing challenges and leveraging opportunities, India can harness green finance to achieve its climate goals while fostering economic growth and social equity. The active collaboration of stakeholders, including the government, private sector, and international community, is essential to realize the full potential of green finance. As India accelerates its transition to a sustainable future, green finance will play a transformative role in reshaping the nation's economic and environmental landscape.

Reference:

1. Parvadavardini Soundarrajan, Nagarajan Vivek (2016): Green Finance for sustainable green economic growth in India, Agric. Econ - Czech,62 2016(1): 35-44, 10.17221/174/2014- AGRICECON

2. Sharif Mohd. and Vijay Kumar Kaushal (2018): Green Finance; A step towards sustainable development, MUDRA- Journal of Finance and Accounting, Volume 5, Issue 1, 10.17492/mudra. v5i01.13036

3. Babita Jha, Priti Bakhshi (2019): Green Finance: Fostering Sustainable Development in India, International Journal of Recent Technology and Engineering, Volume 8, Issue 4, 10.35940/ijrte. D8172.118419

4. Gincy Charles, Bijin Philip (2020): Green Finance: Recent Drifts, Confrontation and Prospect Opportunities for Sustainable Development in India, Mukt Shabd Journal, Volume ix, Issue iv, (1854-1865)

5. P. Dhoot and S. Awate (2021): Green Financing: An emerging form of sustainable development in India, Vidyabharati International Interdisciplinary Research Journal 12(2) 698-712

6. Prerana Sharma, Arup Roy (2021): Green Financial Instruments in India: a study on its current status and future prospects, International Journal of Business Innovation and Research, Volume 26, No.,2, 10.1504/IJBIR.2021.118445

7. Sumedha Bhatnagar, Dipti Sharma (2022): Green Investment in Renewable Energy Projects: A Path to Cleaner Revival in Post-pandemic India, Sage Journal, 10.1177/09722629221132066

8. Neha Khanna, Dhruba Purkayastha, Shreyans Jain (2022), Climate Policy Initiative.