IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

FINANCIAL MARKETS- GREEN FINANCE FOR SUSTAINABLE ECONOMIC GROWTH

Author Dr. U. Padmavathi, M.COM, MBA, ACMA

Designation Professor & HoD, MBA

Institution Sridevi Women's Engg. College

Place Hyderabad, Telangana

ABSTRACT

India today is witnessing an interesting change within the corporate sector. Indian companies are gaining worldwide recognition and are embracing sustainability, going beyond compliance to gain shared value and good reputation in the international business community. Green finance refers to the financial arrangements that are specific to the use for projects that are environmentally sustainable or projects that adopt the aspects of climate change. Financial instruments such as green bonds; carbon market instruments and financial institutions like green banks and green funds constitute together as green finance. It requires appropriate incentive structure for amplified allocation of funds towards adopting and setting up of green projects.

The success of introducing innovative financing mechanisms and instruments requires necessary conditions to prevail in the economy. The financial sector can play a vital role in mitigating overarching climate change risks by diverting capital from the carbon-emitting sectors to the carbon-mitigating sectors.

Key words- Green finance, sustainable economic growth, financial markets, financial instruments

INTRODUCTION

India's energy sector is experiencing a transition with increasing penetration of renewable energy in the energy mix. One of the major impediments in the process of such a transition is to secure the necessary finance to achieve the transformative goal of producing 175 gig watts of renewable by 2022. The problem gets compounded with limited budgetary resources, conjugated with difficulties associated with mobilizing private capital for the sector. With this backdrop, we offer a granular understanding of the associated challenges of mobilizing such finances, drawing from India's perspective.

REVIEW OF LITERATURE

India today is witnessing an interesting change within the corporate sector. Indian companies are gaining worldwide recognition and are embracing sustainability, going beyond compliance to gain shared value and good reputation in the international business community. All this is basically voluntary in nature, since corporate realizes the long-term benefits associated with this positive value creation. The government is laying a strong emphasis on sustainable development and its integration across the system. Sustainable development is the pathway to the future for all. It offers a framework to generate economic growth, achieve social justice, exercise environmental stewardship and strengthen governance. In order to protect and substantially improve the environment, nations around the world have been increasingly focusing on the use of eco friendly technologies.

Sustainability is nothing but to have access to natural resources for future generations. Sustainable economic growth refers to maintain natural resources and using them for economic growth in the long run .In reality, the ecosystem should not get disturbed as it provides factors of production for sustainable economic growth. Sustainability is managing the natural resources with minimal depletion to meet the requirements of the future generations.

Structural list approaches to economic development emphasise the sectoral specificity of growth, seeing a special role for the manufacturing sector in particular. A sectoral approach is implicitly premised on the notion that there are important common characteristics of the various activities within sectors, characteristics that are relevant for growth. The view taken here is that there are indeed important 'common denominators' in the characteristics of sectors that are relevant for growth, but it is also crucial to adequately recognise the heterogeneity within sectors. Activities within sectors vary widely in terms of their degree of technological advancement, export orientation, strength of backward and forward linkages, productivity and scope for cumulative productivity increases, scope for increasing returns to scale, and other characteristics important for growth. This heterogeneity is related in part to the degree of aggregation in a sectoral classification. Naturally, the more disaggregated a classification (a higher number of digits in the International Standard Industrial Classification (ISIC) system, for example), the less the degree of heterogeneity. Still, it is important to recognise that even where activities are in the same sector, there are important differences between them.

The financial community in India is realising that the financial community in India is realizing the fact that sustainability-related information from companies can be a sustainable tool in financing decisions. Many institutional investors are expecting transparent disclosures from companies in which they invest with regard to water, energy efficiency and impact on forests for themselves and also from their supply chain. A lot can be done to build on the momentum that existing initiatives, whether by the Reserve Bank of India or various private and national banks, financial institutions, capital market players and stock exchanges, have provided. Effective working of the financial sector around a sustainable financing model is also a need of the hour.

The National Manufacturing Policy of 2011, focused on 'green manufacturing' as well by prescribing various environmental safeguards and compliance measures for industrial production including green building norms for units above a certain threshold, regular environmental audits, water conservation, waste water treatment, use of rainwater harvesting and renewable energy. The National Action Plan on Climate Change (NAPCC) was formulated with a vision to outline the broad policy framework for mitigating the impact of climate change (Jain, 2020). The Climate Change Finance Unit (CCFU) was formed in 2011 within the Ministry of Finance as a coordinating agency for the various institutions responsible for green finance in India. The major strategic move since 2012 included implementation of the sustainability disclosure requirements. Security and Exchange Board of India (SEBI) made it mandatory for top 100 listed entities based on market capitalization at BSE and NSE to publish annual business responsibility reports since 2012 and revised it from time to time. In May 2017, SEBI issued guidelines for green bond issuance specifying the disclosure requirements.. There have been several fiscal and financial incentives at work in India. production and sales (Jain, 2020). In order to counter the high up-front cost of such vehicles, the State Bank of India has introduced a 'green car loans' scheme for electric vehicles with 20 basis points lower interest rate and longer repayment window, compared to the existing car loans. The Government has also brought in a Production Linked Incentive (PLI) Scheme for manufacturing of high efficiency modules in the arena of renewable energy.

Green finance- sustainable market frame work

Green finance refers to the financial arrangements that are specific to the use for projects that are environmentally sustainable or projects that adopt the aspects of climate change. Environmentally sustainable projects include the production of energy from renewable sources like solar, wind, biogas, etc.; clean transportation that involves lower greenhouse gas emission; energy efficient projects like green building; waste management that includes recycling, efficient disposal and conversion to energy, etc. GoI launched two phases of Faster Adoption and Manufacturing of Hybrid and Electric Vehicles scheme in 2015 and 2019, to enhance the flow of credit, reducing the up-front purchase price of all vehicles and developing the infrastructures to encourage green vehicle.

Financial instruments such as green bonds; carbon market instruments and financial institutions like green banks and green funds constitute together as green finance. It requires appropriate incentive structure for amplified allocation of funds towards adopting and setting up of green projects. Once funds are channelized from the traditional industries into the green and environment- friendly sectors, other factors of production may also follow for their sustainable development. It gradually leads to an optimal allocation of resources to support sustainable growth in the long run. In order to achieve these objectives, targeted policies on green finance have been framed in major countries of the world, linking all stakeholders of economic growth.

1. Banking on sustainability
2. Institutional eco finance system
3. Incentivizing public sector investments
4. Energy efficiency based funding to Small and medium enterprises on profit lines
5. Redirection of cross boarder financial flows

The government has to focus on the following aspects for sustainable development

1. Equity tax credits
2. Production tax credits
3. Promotion of energy service companies
4. Promotion of green financing institution (IREDA)
5. To increase Equity convertible bonds for funding green projects
6. To bring Renewable energy in priority sectors
7. Incentives based on output
8. National clean energy fund

MARKET INNOVATIONS

1. Credit enhancement based on credit rating
2. Connecting corporate bond market with green agenda
3. Green bonds
4. To position yield companies to scale up as a renewable plot form

Renewable energies contribute 20% of total power energy in India. The companies need low cost, liquid and repeatable capital structure. Equities are more liquid in the market and are best suited to fund the financial requirements of the expanding sector. In addition dividend growth depends upon expansion of the projects through equity sources rather over leveraged funds. However, debt with low cost is also be suited for funding the growth. Some companies rely on fixed income securities. The Reserve Bank has also been taking proactive policy measures to promote and support green finance initiatives. It has included the small renewable energy sector under its Priority Sector Lending (PSL) scheme in 2015. Under this scheme, 13 firms in renewable energy sector are eligible for loans up to `Rs. 30crore. The households are eligible for loans upto Rs.10 lakh for investing into renewable energy. In September 2019, India announced a target to reach 450 GW of renewable energy generation by 2030. Reserve Bank is facilitating cross border investments in green bonds, knowledge sharing on environmental risks, and improving overall green finance activities.

The Indian Inquiry recommendations cover six thematic areas focusing specifically on action within the financial system: 1. Developing a sustainable capital markets strategy: Building on SEBI's recent market guidelines, credit enhancement, adjustment to risk weightings and fiscal incentives could help further scale up the green bond market. Infrastructure investment trusts – known as yield companies in the US – also have considerable potential to raise equity capital for illiquid green assets through developing a sustainable financial System in India.

2 Strengthening keystone financial institutions: The pivotal role of the Indian Renewable Energy Development Agency (IREDA) could be further developed through building products for takeout, guarantees and loan-life extension. The NCEF's effectiveness could be improved through a well-articulated vision and revisions to operational guidelines. 3. Aligning financial regulations with sustainability: Further action can be taken to make additional sustainable finance projects admissible under Priority Sector Lending requirements. In addition, renewable energy could be given its own exposure limit outside of the overall power sector. Finally, the new Indian Financial Code (IFC) presents an opportunity to mainstream sustainability considerations in the regulation of India's financial system. 4. Building financial sector capacities: The capacity of the financial sector needs to be further developed in several areas, notably in financial ratings, financial disclosure and 'green credit' decision-making including for agricultural commodities and forestry. 5. Increasing access to sustainable finance: Access to sustainable finance is still lacking in many areas, notably for the Small and Medium Enterprises (SME) sector in terms of driving energy saving and adaptation to climate impacts. Further incentives are also required to channel finance into water, sanitation and waste management. 6. Mobilizing international financial flows: India has considerable opportunities to leverage the Green Climate Fund as well as the new International Solar Alliance. Finally, 'green credit' from overseas can be increased through changes to external commercial borrowing rules, while foreign institutional investors can be attracted through mechanisms such as the Green Infrastructure Investment Coalition, where India is strongly represented. Within the contours of these six thematic areas of interventions, policymakers, regulators and financial market participants can embrace the beginning of a new design of the financial system that responds to the needs, challenges and opportunities arising out of India's sustainable growth objectives.

Focus on the following aspects are required to strength the financial system for sustainable growth in India:

I. It is critical that the financial system's capacity and readiness to respond to climate change and other sustainable development priorities needs to be enhanced in driving innovation across banking, insurance, investments and securities.

II. Developing a Sustainability Oriented Market Framework would require

a. Banking on Sustainability: Investing in sustainable infrastructure and increase the long term viability of infrastructure projects.

b. Enabling the Institutional Finance Ecosystem: There is a need for skill enhancement of the financial sector.

c. Incentivizing Public Sector Investments: An enabling institutional framework for sustainable infrastructure financing requires financing decisions to take into account sustainability as a parameter.

d. Catalyzing Efficiency Gains in Small and Medium Enterprises: There is a need for capacity building in the SME sector for better energy use disclosure and also for soliciting funding support for bridging enterprise efficiency linked capacity gaps.

e. Redirection of Cross Border Financial Flows: Stakeholders should be made aware of long term positive efficiency gains through evidence based awareness building.

III. Regulations and Incentives

a. Incentives and initiatives which could lead to an increase in domestic equity investment through equity tax credits, production tax credits and development of energy service companies.

b. Strengthening existing institution such as IREDA to become the green development financing institution in the country and enabling it to garner additional lines of credit and long tenor financing.

c. Deregulations to increase external commercial borrowing funding of green projects by exempting withholding tax, replacement of construction finance and refinancing and innovative solutions for hedging

d. The renewable energy sector should be put under Priority Sector Lending (PSL) category and unutilized amount under PSL should be diverted to clean energy.

e. There is need to provide incentives in particular sectors such as output based support or result based financing for the waste management sector.

f. The existing guidelines of National Clean Energy Fund need to be amended in order to sharpen its operational framework and improve its effectiveness and performance. A separate window should be created to allocate funding for specific types of projects that improve energy access.

IV. Market Innovation

a. There is a need for credit rating and credit enhancement facility within the Government or Financial Institutions that would encourage the Pension Funds or Insurance Funds to invest in clean projects.

b. Green Bonds market is characterized by longer tenure and hence, it could be an attractive option of investment in the clean energy space. To grow the Green bonds market in India, the global bonds market and the savings in India or the private capital market could be tapped to address this agenda.

c. Yield Company, an income oriented investment vehicle being adopted by the companies to unlock value of long-term contracted assets that may be undervalued in existing business, access broad yield focused public investor base and create a buyer/ long-term owner for project developers. Yield Co enable access to low cost, liquid and repeatable capital source and generate predictable cash flows by bundling up renewable assets with long-term Power Purchase Agreements (PPAs).

CONCLUSION

Financing of renewable energy in India continues to face multiple conundrums, largely entrenched with the nature of current financial market in India in general, such as short tenure of loans, high capital costs, and lack of adequate debt financing etc., as well as with the sector-specific issues of the renewable energy sector. The success of introducing innovative financing mechanisms and instruments requires necessary conditions to prevail in the economy. The financial sector can play a vital role in mitigating overarching climate change risks by diverting capital from the carbon-emitting sectors to the carbon-mitigating sectors.

Over the past decade, the pace of Indian innovation in sustainable finance has accelerated involving both a range of voluntary market-led initiatives as well as policy actions. IREDA needs to be strengthened as a green development financing institution in the country and enabling it to get additional lines of credit and long term financing. National voluntary guide lines for responsible financing by Indian bank's association. RBI's decision on social infrastructure and decentralized renewable energy is included within the priority sector lending requirements for banks. SEBI has issued guidelines for the development of green bond market. Pradhan Mantri Fasal Bima Yojana initiative is extend crop insurance and funds are facilitated for the National Clean Energy Fund (NCEF) through coal cess. Financial markets are the major financial facilitators for green finance to have paradigm shift for sustainable economic growth.

REFERENCES:

- Berensmann, K., & Lindenberg, N. (2016),"Green finance: actors, challenges and policy recommendations", German Development Institute/Deutsches Institut für Entwicklungspolitik (DIE) Briefing Paper, 23
- Dikau, S., & Volz, U. (2018, September), "Central Banking, Climate Change and Green Finance", ADBI Working Paper Series(867).
- Geddes A., Schmidt T. S. and Steffen, B. (2018), "The multiple roles of state investment banks in low-carbon energy finance: An analysis of Australia, the UK and Germany", Energy Policy, 115 (2018), 158-170
- Jain, S. (2020), "Financing India's green transition", ORF Issue Brief No. 338, January 2020, Observer Research Foundation.
- M Chhaochharia(2021)" green finance in India; progress and challenges"- https://irjhssonline.com
- Nassiry, D. (2018), "Green Bond Experiences in Nordic Countries", ADBI Working Paper, No. 816, March
- Olga, B., & Smorodinov, O. (2017), "Challenges to green finance in G20 countries", Mirovaya ekonomika i mezhdunarodnye otnosheniya, 61(10), 16-25
- RBI (2019), "Opportunities and Challenges of Green Finance", Report on Trend and Progress of Banking in India (2018-19), 16-18.
- Reddy, A. S. (2018), "Green Finance- Financial Support for Sustainable Development", International Journal of Pure and Applied Mathematics, 118(20), 645-650.
- *"Green Finance in India: Progress and Challenges"*- **https://rbidocs.rbi.org.in**
- "Challenges in green finance in India"- ***https://diva-portal.org***
- "Green finance- future sustainable Banking in India"- https://www.interscience.in
- "Accelerating green finance in India – Definitions and beyond"-https://www.climateinitiative.org (2020)
- "Landscape Green finance in India-climatic policy initiatives"- *https://www.climateinitiative.org(2022)*
- GK Sarangi (2018)Green Energy finance in India- https://www.abd,org