IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Green Finance: Contemporary Issues And Challenges For Economic Sustainability In Indian Green Growth

Dr.S. Sriranjani Mokshagundam.[1], Jaisheela.S [2]

[1] Professor of Management, SJB college of Management Studies, Bangalore

[2]Research Scholar in Management, SJB College of Management Studies

Abstract:

Green Finance is a recent inclination and imminent opportunities for sustainability in India because the concept of Green Finance is an innovative in the field of "Finance". As the term describes finance is a broad range of funding for environment oriented technologies, projects, industries or businesses for economic development. Green Growth approaches will induce the required transformation process towards low-carbon and resource-efficient economies and that can tap substantial progression potential in developing and newly industrialized country like India to sustain in long run. The issues like current economic crisis, is the lack of funding for environmentally friendly infrastructure. Urban climate change policies will have consequences for city's budgets for which new solutions are required. Economic Growth with special attention to Eco-friendly industries and development of renewable energy technologies Perhaps the most common obstacle to the growth of the "green finance", especially during the current economic crisis and the lack of funding for environmentally friendly infrastructure

The Green finance includes encounters in solidification managerial proficiency and creation of cognizance on economic values of technologies. This paper incriminates the contemporary issues and challenges to meet the crises pertaining in Indian economy. An attempt is made in this paper to focus on the development of green finance, imitative, benefits and its potential future growth of Indian context.

Key words: Green finance, Green Management, Green Growth, Sustainable development

INTRODUCTION

The Finance sector of an economy forms the backbone of the country. It has a direct impact on the country's economic growth and development. However in order to achieve sustainability in economic growth the philosophy of Environmentalism plays a very crucial role. Therefore, with increasing environmental concerns both at national and global level; it has become important for the finance sector to become responsive to these environmental issues. This gave rise to the concept of Green Finance which is an innovation in the field of finance. Green Finance is an economy that aims at reducing environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment. It is closely related with ecological economics, but has a more politically applied focus.Green Finance is any market-based investing or lending program that factors environmental impact into risk assessment, or utilizes environmental incentives to drive business decisions."Financial products & services that consider environmental factors throughout the lending decision-making, ex-post monitoring, and risk management processes, to promote environmentally-responsible investments and encourage low-carbon technologies, industries and businesses." As Climate Change has a drastic cause and effect relationship with agriculture and rural development activities, it has been recognized that activities like forestry, agriculture and other land use activities, viz., dairy, soil conservation, energy use practices, use of renewable energy, etc. have tremendous potential for reducing emission. Climate Finance is an emerging form of green finance available for projects in developing countries that help reduce emissions or adapt to climate change. This is achieved either via increasing the revenues available to public and private development projects, such as tariff support or carbon finance, or by improving project capital structure.

Evolution of Green Finance

Investment is conservation evolved:

19th century: Simple public sector financing
(Taxes, fees, stamps and government spending)

20th century: mix of public & philanthropic finance

Last 25 years: Growing involvement of the private sector and the development of new financial mechanism.

Financial innovations: social policy bonds, crowd sourcing initiatives (online platforms to mobilize capital) – will transform raising capital

GREEN FINANCE

Green finance refers to any financial instrument or investment – including equity, debt, grant, purchase & sale or risk management tool (for example: investment guarantee, insurance product or commodity, credit or interest rate derivative, etc.) – issued under contract to a firm, facility, person, project or agency, public or private, in exchange for the delivery of positive environmental externalities that are real, verified and additional to business as usual, whereby such positive externalities result in the creation of transferrable property rights recognized within international, regional, national and sub-national legal frameworks

Green Finance Comprises

- **Financing of green investments (Include preparatory and capital cost):** The financing of public and private green investments in the following areas of environmental goods and services and prevention, minimization and compensation of damages to the environment and to the climate.
- **Financing public green polices:** that encourage the implementation of environmental and environmental-damage mitigation or adaptation projects and initiatives.
- **The financing of public policies (including operational costs**): Components of the financial system that deal specifically with green investments, such as the Green Climate Fund or financial instruments for green including their specific legal, economic and institutional framework conditions.

Green Investment Includes:

It is categories on renewable energy, energy efficiency and reforestation.

1. Waste processing and recycling
2. Bio-diversity protection
3. Climate Change adaptation
4. Renewable Energies
5. Water Sanitation
6. Energy Efficiency
7. Industrial Pollution control0
8. Other climate change mitigation(e.g.: reforestation)

Importance of Green Finance

Understanding about why green is indicates the importance of green finance. If repeated in another form, greening is crucial for the following:

1. The financial sector can support the transition to a sustainable and green economy in several ways. Investors are already moving towards greener and low-carbon investments.

2. To promote environmentally sustainable investments across financial aspect to specific products and services those seek to promote environmentally sustainable investments.

3. To achieve economic growth by reducing pollution, minimizing waste and improving efficiency in the use of natural resources.

4. Green finance investment provides policy analysis and guidance in technologies, infrastructure and companies that will be critical in the transition in change in climate - resilient and resources –efficient economy.

LITERATURE REVIEW

Dr. Swati Dheeraj Singh Rautela (2016), The first Earth Summit in 1992 produced results in form of the Agenda 21, the UN Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversion (CBD), the Forest Principles, the Rio declaration defining widely accepted principles such as the precautionary principle, and established a process allowing meaningful civil society engagement – all under the banner of sustainable development, standing on its three pillars of environmental protection, economic development and social development.

Priyanka Goel (2016), it promotes green investments in renewable energy development projects which help in achieving sustainable economic growth for the nations. The present study primarily aims at exploring existing literature on the Green banking initiatives taken by the top leading public and private sector banks in India. Secondly, to know about the different green products and services available in the Indian financial markets, their challenges and lastly, the future scope of green finance in India. The scope of National Clean Energy fund (NCEF) has been expanded to include financing and promoting clean environment initiatives and fund researches towards that end. In today's era of technological advancement the global economy is threatened from three major challenges: climate change, energy constraints and financial crisis.

Keerthi B.S (2016), On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) GIZ is tapping into these potentials by providing industrial MSMEs in selected regions of India with access to advisory services, training and financing schemes that enable them to implement energy efficiency measures. The project pursues an integrated approach to scale up energy efficiency measures in the sector by developing and implementing a specific energy efficiency loan concept with the Small Industries Development Bank of India (SIDBI) and the State Bank of India (SBI) that is complemented by training on sustainability measures for MSMEs

Dr. loluru Nagarjuna (2015), Specifically, through understanding the theatrical frame about sustainable banking and green finance from a global level, and examining how Indian banks implement in compliance with the "Green Credit Policy "at home and their environmental conducts abroad, the paper has provided a baseline to identify challenges and opportunities at India's banking sector, to help understand the current situation of implementation inside of banks, but the interviewees expressed unwillingness to have their opinions disclosed, and some chose to remain anonymous due to commercial confidential concerns.

Objectives

- To study the green financial issues and challenges for economic sustainability in India
- To evaluate the progress of Indian Investment in Green Financing
- To understand the future scope of Green finance in India.

- To Endeavors a suggestion on some green finance concept for economic development.
- To study the Green financial aspect in terms of Indian Investment

Methodology

The study mainly includes literature review from secondary data. The secondary data sources includes different databases, websites and other obtainable sources were collected and since this topic has been studied through macro- level approach; and for that the purpose of the study is exploratory method has been used and also a systematic review of collected literature was done on available data.

Significance of Green finance

•**It promotes technology diffusion and eco- efficient infrastructure -** Investment in environmentally sound technologies, such as clean energy, may help bring down their costs and expedite wider technology diffusion.

•**It creates comparative advantage** - Low carbon green growth may inevitably change from the current voluntary nature to a mandatory strategy in response to the rising pressures emanating from climate change and other environmental and economic crises.

•**Adds value -**Businesses, organizations and corporations can add value to their portfolio by enhancing and publicizing their engagement in green finance. Thus they can give their business a green edge and thereby attract more environmentally conscious investors and clients alike.

•**Increases economic prospects**- Governments promoting green finance help buffer their societies against the time when resources become scarce by establishing and promoting domestic markets for alternative resources and technologies. They increase their economic prospects further by dipping into the new markets that possess great potential for employment generation.

FUTURE INDIAN INVESTMENT IN GREEN FINANCE

Environment sustainability being a key issue on worldwide level has increased the scope for investment in green projects utilizing renewable energy resources.In 2015 the Green Climate Fund set up under the framework of the United Nations Framework Convention on Climate Change (UNFCCC) has accredited NABARD as National Implementing Entity (NIE) to finance clean energy projects in India. It has launched various programs like National Action Plan on Climate change, Jawaharlal Nehru National Solar Mission, National water Mission, National Mission for Enhanced Energy Efficiency, National Mission on Strategic Knowledge for Climate Change, National Clean Energy fund. The recent government policies and initiatives which have increased the scope of Green financial products in India are as follows:

- India's installed power generation capacity of 2, 55,012.79 megawatt (MW), renewable power has a share of 12.42% or 31,692.14 MW which shows that there exists a huge scope for investment in this sector.
  India's National Action Plan on Climate Change recommended that country should generate 10% of its power from renewable energy resources by 2015 and 15% by 2020.
- Since, the sanctioned budget would not suffice so MNRE has asked the public and private sector financial institutions such as Power Finance Corporation (PFC), Rural Electrification Corporation (REC), Indian Renewable Energy Development Agency (IREDA), IFCI Ltd, SBI Capital Markets ltd and ICICI bank ltd to raise funds.
- The scope of National Clean Energy fund (NCEF) has been expanded to include financing and promoting clean environment initiatives and fund researches towards that end. The finance ministry has increased the clean energy cess on coal by Rs.100 per metric ton to fund clean environment initiatives.
- It includes use of CNG in train operations, setting up of water recycling plants, use of solar energy to illuminate coaches, station buildings and platforms
- Other initiatives on part of government includes its plans for creating a solar army, providing venture capital to ambitious solar power generation projects and setting up of solar parks totaling 20,000 MW over a period of five years.
- Indian Innovation Lab, a new initiative of MNRE aims at bringing the public and private leaders on common platform to develop innovative instruments that would mitigate risks and direct more investment for green growth in India.

Green Growth in Indian Context

The 2030 Sustainable Development Agenda with 17 sustainable development goals and 169 targets that were adopted in September 2015 demonstrate the scale and ambition of member states in the new universal agenda.

Article 48-A of the Constitution says that "the state shall endeavor to protect and improve the environment and to safeguard the forests and wild life of the country." Article 51-A (g) says that "It shall be duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wild life and to have compassion for living creatures." These provisions highlight the national conscience on the importance of environment protection.

The National Action Plan on Climate Change (NAPCC) along with the State Action Plan on Climate Change are important milestones for mainstreaming climate in development processes at the national and state levels.

NAPCC has eight national missions that outline priorities for both mitigation and adaptation to combat climate change. The government is proposing to set up new missions on wind energy, health, waste-to-energy, coastal areas, and also redesigning the National Water Mission and National Mission on Sustainable Agriculture. The current eight missions are on the areas of solar energy, energy efficiency, sustainable habitat, sustainable agriculture, Green India, water Himalayan ecosystem, and strategic knowledge. Under the Copenhagen Accord, India communicated its domestic mitigation action as an endeavor to reduce the emissions intensity of its GDP by 20–25% by 2020 in comparison to the 2005 level.

The Ministry of Environment, Forest, and Climate Change recognized green growth in its vision, wherein 'poverty eradication' along with green growth is seen to be central. The concept of Green Growth spans much beyond climate mitigation and adaptation and aims at achieving economic growth that is socially inclusive and environmentally sustainable.

Green Finance Issues

- A great share of investment drifts to infrastructure and the government take the responsibility to develop infrastructure, which is a long term project for management of resources which in turn increases the country's competitiveness.
- The wider technology diffusion at lesser costs also channelize private sector capital into domestic.
- Financial Institutions should motivate technology innovations and eco- friendly infrastructure, which help to brings down costs.
- Government can target public effort to channelize private sector capital into domestic.
- Previous experiences had shown that capital will be stagnant or having a less flow without combination of public finance and proper policy frameworks.
- It is very much applicable in developing countries like India, where state-owned financial institutions take the responsibility of disposition of funds as financial markets are still vague.
- In few cases the environmental management system resulted in lower risk, greater environmental stewardship and increase in operating profit. Reputation risks involved in the financing of ecologically and ethically questionable projects

Green Finance National Mission

The National Mission for a Green India is one of the eight Missions under the National Action Plan on Climate Change (NAPCC). The Mission (henceforth referred to as GIM) recognizes that climate change phenomena will seriously affect and alter the scattering, type and quality of natural resources of the country and the accompanying livelihoods of the people. GIM concedes the impacts that the forestry sector has on environmental amelioration concluded climate mitigation, food security, water security, biodiversity conservation and livelihood security of forest dependent societies

Key innovations:

1. Focus on quality of forests – Primary focus on improving density of forest cover
2. Focus on ecosystem services – Emphasis on biodiversity, water and improved biomass – Carbon sequestration as co-benefit – Addressing ecosystems like grasslands, wetlands and urban
3. Focus on democratic decentralization – Gram Sabha as overarching institution to facilitate implementation of the Mission activities at village level, nested as Polycentric Approach, not one size fits all.
4. Creating a new cadre of Community Youth as Foresters – Build a skilled cadre of young "community foresters" from scheduled tribes and other forest dwelling communities
5. Adoption of Landscape-based Approach – Interventions at scale (5000-6000 hectares) at a time – Simultaneous treatment of forest and non-forest areas – Addressing key drivers of degradation
6. Reform Agenda as conditionality

Mission Aim: Respond to climate change by a combination of adaptation and mitigation measures, which would help:

• Enhancing carbon sinks in sustainably managed forests and other ecosystems;
• Adaptation of vulnerable species/ecosystems to the changing climate
• Adaptation of forest dependent local communities in the face of climatic variability.

LIMITATIONS OF THE STUDY

The theoretical frame applied to this study is originally from the paradigm distilled from the experience and analysis of Indian Investments. Some of theories may not completely fit for Indian investment categories whose characteristics is unique under Different social and economic system. Therefore, to gain further insight into the collective efforts from Indian issues and its challenges need to be taken in the light of circumstance in India that may or may not amplified in this study. For the data collection, the information are secondary data and based on literature review.

IMPLICATIONS OF GREEN FINANCE

- **Financial Industry**
  - ✓ Development of new financial products
  - ✓ Financing for more industries and technologies
  - ✓ Advancement of risk management techniques
  - ✓ Efficient operation of emission trading market

- **Environmental Improvement**
  - ✓ Better environment through green industries and technologies
  - ✓ Legislation for better environment
  - ✓ Actively- trading carbon market

- **Economic Growth**
  - ✓ Development of new technologies
  - ✓ Promotion of Eco-friendly industries
  - ✓ Design of efficient emission trading scheme

- **Green Investment**
  - ✓ Financing green enterprises and technologies
  - ✓ Development of green financial products and green investors
  - ✓ Consideration of environmental risks in lending decisions
  - ✓ Efficient operation of emission trading market

CONCLUSION

Green finance is becoming more prominent, driven by the scale and insistence of the challenge of financing sustainable development, and the realization that only a fraction of this can realistically come from public sources. In a rapidly changing market economy where globalization of markets has intensified the competition, the industries and firms are vulnerable to stringent public policies. One of the key insights from was that governments need to be clearer about the policy signals they send to financiers about their plans for climate action and defensible development. Whatever the precise terminology, what is key to these roadmaps is making the conduit between high-level national targets and the technical details of how money actually flows across banking, capital markets, insurance and investment. There is no doubt that considerable uncertainty clouds the year ahead. But one thing is clear - the shift to climate-consistent, green and, ultimately, more sustainable finance now looks persistent. It is time now that India takes some major steps to gradually adhere to the equator principles-guidelines that use environment-sensitive parameters, apart from financial, to fund projects.

References:

- http://envfor.nic.in/rules-regulations/national-green-tribunal-ngt
- Greening the Financial Sector: How to Mainstream Environmental Finance in Developing Countries Paperback – Import, 1 Mar 2014
- http://seforall.org/sites/default/files/Green_Finance_for_Dev_Countries.pdf
- https://www.theguardian.com/sustainable-business/green-financial-policy-new-generation
- http://climatemundial.com/whatisgreenfinance/
- http://www.oecd-ilibrary.org/environment/green-finance-and-investment_24090344
- https://www.huffingtonpost.com/nick-robins/2017-what-next-for-green_b_14203706.html
- https://www.ifc.org/wps/wcm/connect/48d24e3b-2e37-4539-8a5e-a8b4d6e6acac/IFC_Green+Finance+-+A+Bottom-up+Approach+to+Track+Existing+Flows+2017.pdf?MOD=AJPERES
- Down to Earth, “Enter the Green Rating Project’ (Science & Environment Fortnight), July 31, 1999.