

Challenges of Green Finance and Sustainable Economic Development in India

Dr. Sanjay K. Solomon**

**Dr. Sanjay K. Solomon, Associate Professor, Department of Commerce, Lucknow Christian College, LUCKNOW.U.P. India.

ABSTRACT

India's aspirations to become a US\$ 5-trillion 1 economy by 2024 is contingent environmental outcome. It can be in the form of loans, debt mechanisms and investments that are used to encourage the development of green projects or minimize the impact on the climate of more regular projects. or a combination of both. Green finance is a systematic approach which includes various stakeholders such as government, financial institutions, and regulatory agencies. While framing the regulations for green finance, to create an appropriate incentive and restrictive mechanism, green elements will need to be included into laws and regulations of the countries including fiscal, taxation, monetary, credit and industrial policies. Showing growing momentum in its debut year green bond raised Rs.79 billion issuances by public and private banks, three private corporations issued their own green bonds, demonstrating the market's quick maturation and diversification into the corporate sector. A lack of unawareness about green finance has created a huge hurdle for investors, companies and banks seeking to implement green investing. Without having a foundation for internal budgeting, accounting and performance measurements for financial institutions, allocating financial resources for green projects and assets becomes complicated. In India, major challenges could be high borrowing costs, false claims of environmental compliance, plurality of green loan definitions, maturity mismatches between long-term green investment and relatively short-term interests of investors. on the steady growth of its Gross Domestic Product (GDP). Green finance is a financial activity a product or service that's been created to ensure a better economic growth.

Keywords: Green Finance, Sustainability, Public policy, Green lending, Green bonds, Borrowing costs.

Green financing is to increase level of financial flows from different sectors i.e. banking, micro-credit, insurance and investment organizations, the public, private and not-for-profit sectors to sustainable development priorities. A key part of this is to better management of environmental and social risks, take up opportunities that bring both a decent rate of return and environmental benefit and deliver greater accountability. Green Finance includes all the initiatives taken by private and public agents (e.g. businesses, banks, governments, international organizations, etc.) in developing, promoting, implementing and supporting projects with sustainable impacts through financial instruments. In other words, Green Finance provides the financial tools required by active agents to increasingly generate activities with positive and durable externalities. Some examples of Green Finance projects can be the promotion of renewable energies, energy efficiency, water sanitation, environmental audits. The reduction of air, vehicle and industrial pollution, climate change, deforestation.

Green finance is important because of its multifold benefits. Green finance promotes the construction of smart cities in the long run. Green finance promotes inclusive economic growth. Investments in green projects can reduce short and long term carbon emission levels. Green financing will benefit institutional shareholders interested in impact investing. Increase in green financing can reduce funding for fossil fuel activities that pose a risk to the environment and the climate. Green Finance is important as it promotes and supports the flow of financial instruments and related services towards the development and implementation of sustainable business models, investments, trade, economic, environmental and social projects and policies. As the financial sector plays major role through its intermediary functions and risk management in advancing sustainable economic development while directing investment to the real economy, the intertwinement of these two is crucial. Green Finance represents the future of the economic growth through innovative financial mechanisms and by supporting the investments in projects with positive and sustainable externalities.

Green financing would be effective if it is promoted through changes in countries' regulatory frameworks, channelising public financial incentives, increases in green financing from different sectors, alignment of public sector financing decision-making with the environmental dimension of the Sustainable Development Goals,

increases in investment in clean and green technologies, financing for sustainable natural resource-based green economies and climate smart blue economy, increase use of green bonds, and so on. The main thrust areas for the efforts on green financing are: Supporting public sector on creating enabling environment, promoting public-private partnerships on financing mechanisms such as green bonds, Capacity building of community enterprises on micro-credit.

Green Finance in India is targeting at analysing green finance investments by tracking the annual finance flows supporting emission reduction or climate change mitigation activities, throughout their value chain. It identifies the sources and intermediaries of finance at both domestic and international levels and the financial instruments used in these transactions. It also identifies the purpose or recipient of the finance, i.e., the sectors and subsectors of the economy to which the finance flows. Green finance includes climate finance as well as other environmental objectives that are necessary to support sustainability, and in particular, aspects such as biodiversity and resource conservation.

Objective of the Study

This paper reviews the existing research on green finance. It identifies the important issues in the green finance literature, particularly, the strategies to increase green financing; efforts to make green investment profitable; promoting green financing using technology and policy, the role of regulators and financial institutions in the green finance agenda, and the challenges of green financing. The findings indicate that green finance has the potential to make a significant difference in the environment, society and for climate change mitigation. But many challenges such as the lack of awareness about green finance, conflicting definitions of green finance, lack of policy coordination for green financing, inconsistent policies, and lack of profitable incentives to investors and financial institutions who are willing to invest in climate change mitigation, need to be addressed.

METHODOLOGY

In our discussion we have stressed on the secondary results of the researches on global green financing. We have taken an attempt through our works to initiate green finance in the developing countries. Every society need green finance for the eco-friendly business. The populations of the world growing rapidly and for this large population we need green finance to make the earth as a living place of the all species of organisms.

Green finance is essence to the overall debate on sustainability of economic growth. Expeditious economic development is often achieved at the cost of environment. Depleting natural resources, degraded environment and uncontrolled pollution are hazardous to public health and create challenges to the sustainable economic growth. In order to protect and substantially improve the environment, nations around the world have been increasingly focusing on the use of eco friendly technologies. Green finance requires appropriate incentive structure for increased allocation of funds towards setting up or adopting environmentally sustainable projects. Once adequate funds are provided from the conventional industries and are diverted towards the green and environment- friendly sectors, other resources including land and labour may also follow. To achieve the objectives of green finance, targeted policies on green finance have been formed in various countries involving all partners of economic growth, viz., corporates, governments and banks.

India has set ambitious renewable energy goals to improve energy access and energy security while taking action on climate change – including target to install 100GW of solar energy and 60GW of wind energy by 2022. To scale the necessary finance to achieve these national targets, which is the centerpiece of India's climate commitments made at the 2015 UN climate negotiations, the Government of India is making efforts with different market players to enable market creation and remove major hurdles in mobilizing finance. Any development requires a sound financial system supporting it, the spotlight is now on aligning the financial system with sustainable development. The RBI, have been conscious of the role of banks in providing finance for sustainable development. In December 2007, banks in India were sensitized to the various international initiatives including the equator principles and were asked to keep alongside of the developments in the field of sustainable development and corporate social responsibility and modify their lending strategies in the view of such developments. India's focus on harnessing the financial system to provide to socially important segments India has started emphasising on green finance as early as 2007. In December 2007, the Reserve Bank issued a notification on "Corporate Social Responsibility, Sustainable Development and Nonfinancial Reporting – Role of Banks" and mentions the importance of global warming and climate change in the context of sustainable development. 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 capitalisation 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. The Government of India (GoI) offers 30 per cent of the installation cost of the rooftop solar panels as subsidy to the institutional, residential and social sectors in most states. In some of the special category states, the subsidy is up to 70 per cent of the installation cost.. The Government has also brought in a Production Linked Incentive (PLI) Scheme for manufacturing of high efficiency modules in the arena of renewable energy. The Reserve Bank has also been taking dynamic 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, firms in renewable energy sector are eligible for loans upto 30 crore while the households are eligible for loans upto 10 lakh for investing into renewable energy. In September 2019, India announced a target to reach 450 GW of renewable energy generation by 2030.

One major green finance instrument is the green bond. There is a code of conduct that defines what constitutes a green bond. Green bonds work like any other bonds with one key difference: the money raised from bond/investors is used exclusively to finance projects that have a positive environmental impact, such as renewable energy and green buildings. According to the World Economic Forum the market for green bond could be worth more than two trillion dollars by 2023. Green bonds are generally issued by government and private institutions like any other bonds but the proceeds are utilised to finance projects that are eco-friendly and support net zero. India started investing in green bonds in 2015 with the aim to meet the capital requirement for green infrastructure. The Securities Exchange Board of India (SEBI) is the primary entity that regulates the issuance and requirements of listing of green bonds. Green bonds currently fund renewable energy (38.3 percent), building and industry (27.5 percent), transport (10.2 percent), water (9.7 percent), waste management (6.2 percent), climate adaptation (4.3 percent), and agriculture and forestry (3.9 percent). Although this represents rapid growth of the green bonds market, it is still small compared to the overall \$100 trillion bond market.

Green bonds are the bonds issued by any sovereign entity, inter-governmental groups or alliances and corporates with the aim that the proceeds of the bonds are utilised for projects classified as environmentally sustainable. As of February 12, 2020, the outstanding amount of green bonds in India was US\$16.3 billion. India issued green bonds of about US\$8 billion since January 1, 2018, which constituted about 0.7 per cent of all the bonds issued in the Indian financial market. Although the value of green bonds issued in India since 2018 constituted a very small portion of the total bond issuance, India maintained a favourable position compared to several advanced and emerging economies. Most of the green bonds issued since 2015 had maturities of five years or above, but less than 10 years. However, some issuers such as Yes Bank Ltd. (2015), Indian Renewable Energy Development Agency Ltd. (2017, 2019), Rural Electrification Corporation Limited or REC Ltd. (2017), Power Finance Corporation Ltd. (2017), Indian Railway Finance Corporation Ltd. (2017), Adani Renewable Energy Ltd. (2019)¹⁵ have issued green bonds with the maturity of 10 or more years. ReNew Power Pvt. Ltd. has issued green bonds with maturity period of less than 5 years in 2019. In addition to corporates and government, the World Bank has issued green bonds towards several projects in India from time to time. Based on the Green Bond Impact report (2019) by the World Bank, it is estimated that the outstanding amount of Green Bond proceeds allocated to support the financing of such projects in India is US\$640mn, as on June 30, 2019. India has become the second-largest market globally for green bonds with \$10.3 billion worth of transactions in the first half of 2019, as issuers and investors continued to adopt policies and strategies linked to sustainable development goals, according to the Economic Survey 2019-20.

Obtaining finance for small scale and micro projects requires moving away from traditional public grants, institutional lending and generous sources, and explore combined finance structures that allow strategic use of development finance from private investors for sustainable development. Social impact bonds for climate transition can be used as a funding structure for small budget interventions at the district, municipal and state levels, which blends impact investing, public-private partnerships and outcome-based finance. Outcome based funding structures enable investors to provide upfront early risk financing to implement green projects. It is a needed to attract more investors willing to provide such “first loss capital” to de-risk projects and catalyse further investments. These incentives may be provided by offering more viable/investible projects in which the outcome parameters are clearly defined, providing guarantee support to back stop unknown risks and providing regulatory relaxations to facilitate flexible funding structures

Generally the corporate funds are a useful source for green finance. Indian company law endorse profit making corporates to channelise funds towards corporate social responsibility (CSR) activities which are unrelated to

their own business. Many corporates choose to fund environmental projects as part of their CSR strategy, for example, afforestation or developing solar parks. There is potential for more concerted utilization of CSR funds towards climate and greater impact can be achieved by creating CSR fund pooling vehicles which specifically target climate mitigation measures. There are various compliance requirements under the CSR rules, particularly the requirement to transfer 'unspent' CSR funds to specified government relief funds, could be inconsistent with the needs of climate projects which have longer maturity periods. SEBI also recently launched the Social Stock exchange in India which provides social enterprises and social venture funds an alternate platform to raise funds from institutional and retail investors and attract CSR funding with transparency. Clarifications will be required under the Foreign Contribution (Regulations) Act to enable foreign investors to invest in social venture funds listed on the social stock exchange.

The challenge, before developing economies to mainstream green finance so as to incorporate the environmental impact into commercial lending decisions while simultaneously balancing the needs of economic growth and social development. This will necessarily mean setting out on the journey of integrating financial system and sustainable development which has numerous goal-posts. These goal-posts could include: a. Developing awareness about environmental susceptibilities and risks among the stakeholders especially market intermediaries. b. Develop a commonly accepted set of green finance definitions and indicators that can be used to make cross-country or cross-market comparisons. c. Identify and develop green financial products and services which can be introduced in the market. d. Develop parameters for measuring progress. e. Develop innovative financial solutions for supporting the needs of long lasting environment-friendly projects. f. Enhance capabilities for assessing the risks including environment risks in order to dovetail them into lending decisions while there have been improvements in public awareness and financing options, the major challenges could be high borrowing costs, false claims of environmental compliance, plurality of green loan definitions, maturity mismatches between long-term green investment and relatively short-term interests of investors, problems in internalizing environmental externalities, information asymmetry problems, inadequate analytical capacity, lack of clarity in the definition of "green" in green finance, maturity mismatch between short-term and long-term green investment, the relatively short-term time horizon of savers and investors, lack of effective coordination between financial and environmental policies, uncertainty about government policies, limited policy support for the commercialization of new technologies, finance not being tailored to small-scale investment needs, limited knowledge about financing options and limited technical expertise within companies.

Green finance in India is still at the growing stage. Green bonds constituted only 0.7 per cent of all the bonds issued in India since 2018, and bank lending to the non-conventional energy constituted about 7.9 per cent of outstanding bank credit to the power sector, as on March 2020. There have been remarkable improvements in public awareness and financing options, the major challenges includes high borrowing costs, false claims of environmental compliance, plenty of green loan definitions, maturity mismatches between long-term green investment and relatively short-term interests of investors. India is in the race against time in meeting its climate goals and greening all finances has become an imperative. All what is required is concerted efforts, a cohesive approach and the collective vision of policymakers, regulators and players in the financial system. The way forward is to accelerate the dialogue at the highest level and initiate a narrative around sustainable finance. An integrated approach around taxonomy, green guidelines, financial products, as well as defining the roles of private and public sector and bankers and asset managers is required. This will stimulate action to align the financial system with green finance and in turn support the sustainable growth of the country. As investments are a function of risk and rewards, investments in climate finance will not take off unless the risk criteria is not recalibrated for the long term.

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