

Study on Green Bond –Innovative Financial Instrument for Sustainable Future with reference to India

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Abstract

Climate Change and environment concern is always blistering subject matter for discussion in the world .Global warming is concern for all the nations in the world. To address the problem of global warming, nations are adopting sustainable approaches for positive climate or environmental concerns. It is essential and need for today to manage the businesses with sustainable practices. Green bonds are introduced as innovative financial instrument to finance the projects having constructive environmental and climate benefits. The concept was first introduced in 2007 when European Investment Bank came with ‘Climate Awareness Bond ‘and later World Bank issued ‘Green Bond’. Soon after Governments along with the International Organizations issue the green bonds and than private players and corporate also came with green bonds. Due to the sustainable practice and benefits of green bond towards environment and climate, this innovative Green financial Instrument has immense potential and challenges also. So this research work is an attempt to study the concept, potential benefits and Challenges or barriers of Green Bond. Researcher attempts to study the Green Bond initiatives in India in terms of Issues since inception of the concept till date of research work.

KEYWORD- Barriers, Climate, Environment, Initiatives, Green Bond, Sustainable, potential benefits

Introduction-

Finance is always said to be life blood of business as needed in a variety of business decision making and performance. Climate Change and environmental positive measures are also burning topic of discussion amongst the nations. Managing business with sustainable approaches is must for survival. It is need of today’s world to achieve financial targets while taking into consideration of environmental and climate impact. To address these challenges, green bond is innovative financial instrument which seeks to create balance between the Sustainable growths with environmental consideration. Green Bonds are understood to be debt instrument having all the features of ordinary bond to raise capital from the investors for the projects and practices having positive climate and environmental benefits. Green Bond is labeled as ‘Green’ due to use of proceeds towards environmental friendly approaches and projects. As per the study conducted by Moody’s and Climate Bond Initiative, It is predicted that \$ 250 billion will be expected penetration by 2018. And As per the study of BNEF, By August 2018 green bond issuance had over with penetration of \$ 100.7 billion. So from data it can be stated that Green bonds have intense potential prospect in global as well as in Indian market. This study attempts to focus on the following mentioned objectives.

Objectives of the study-

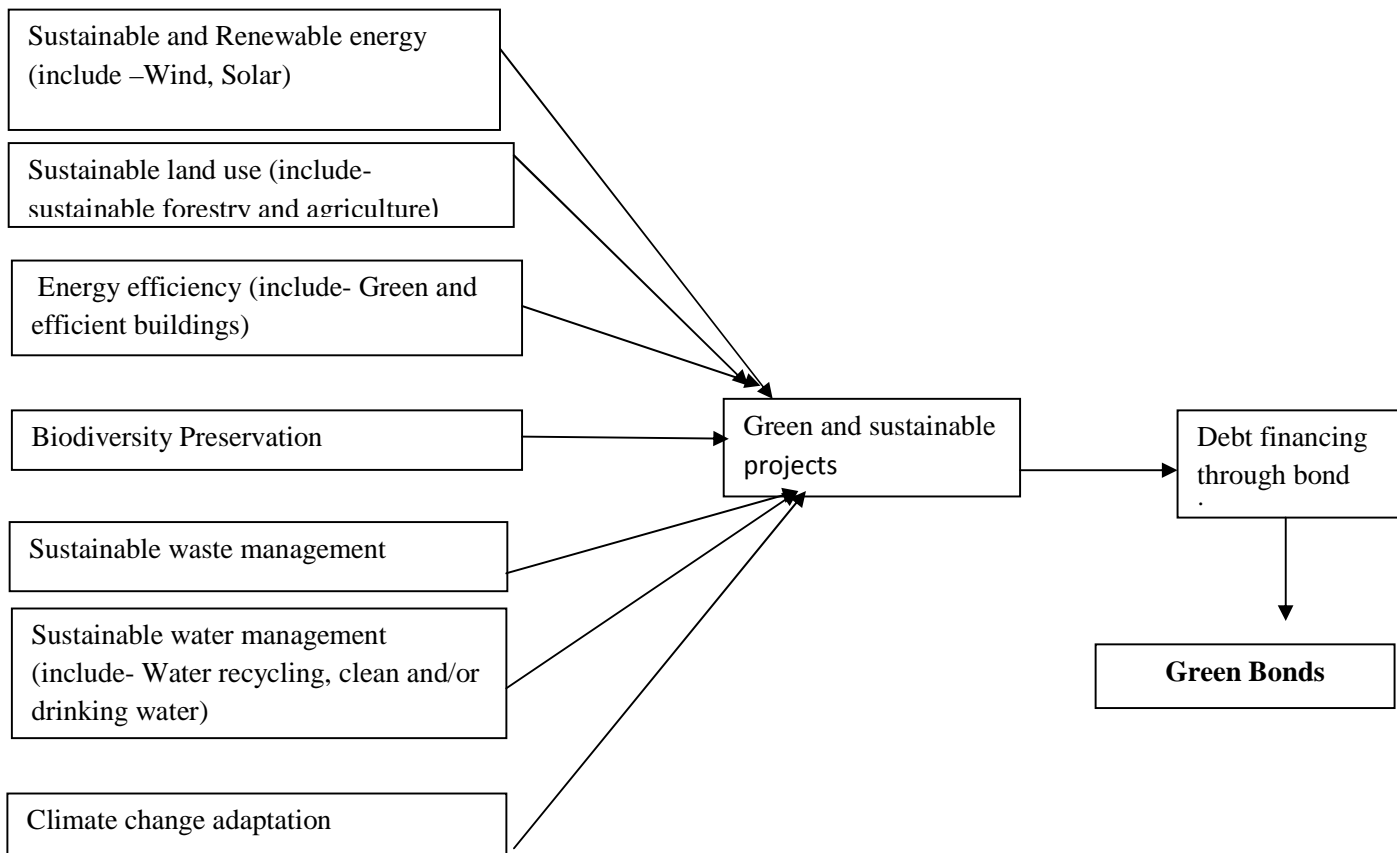
- To study and understand the concept of Green Bonds
- To Study the Potential Benefits of Green Bond
- To study the challenges or barriers for growth of Green Bond Market
- To study the green bonds initiatives/issues with reference to India

Conceptual understanding of Green Bonds-

Green bonds are defined as debt instruments which are issued to fund the potential green projects which have encouraging environmental and climate benefits. Green bonds are generally had either backing of balance sheet of issuer or linking of assets.

It can be further defined as-Instrument issued in Capital market to raise funds from the investors to fund sustainable and green projects or initiatives in form of debt financing. generally green bonds are having all the features of like as an ordinary bond but major difference comes into labeling as that are nominated as “green” by the issuer in which issuer make commitment to use the fund raised in a transparent manner and entirely for the green or sustainable projects and initiatives carrying the positive environmental or climate benefits.

To assign a bond, as the label of Green bond, the broad categories of investment areas or projects are mentioned below-



Principles for issuance of Green Bonds –

For issue of Green bond, Regulations for issue of corporate Bonds which is mentioned in SEBI (Issue and Listing of Debt Securities) regulations, 2008 with additional information about the Green bonds having foundation on the Green bond principles, 2015 need to be followed which is pointed out by ICMA. Green Bond Principles delineates the practices and principals followed for the issue of Green Bonds. It consist four major components which are mentioned as-

1. **Use of proceed**-Issuer must clearly describe and disclose the criteria to label bond as green and projects, activities or assets considered to be as eligible under green bond.
2. **Project Evaluation and selection** –Criteria and process to be followed or imposed to label a specific activities or projects.
3. **Management of proceeds:** Explanation for procedures and control measures to flow for ensuring surety for use of funds towards green and sustainable projects.
4. **Reporting:** Criteria for project evaluation and reporting for progress while taking the consideration for financing and environmental aspects.

Evolution of Green Bond-

The ‘Green bond’ concept was initiated in 2007 by development banks .European Investment bank was first to come with by issuing ‘Climate Awareness bond’ and later World Bank has come with. Issue of “Green Bond” in 2008.From 2007 to 2012 many governments along with International Organizations issued their own Green bonds. By 2013 Corporate also started coming with Green bonds which has accelerated the further growth for issue of green bonds.In India Yes bank initiated the issue of ‘Green Bond’ by coming with the issue of rs.1000 crore for providing funding to green and sustainable energy projects. Later other banks like EXIM Bank of India, Axis bank and IDBI also issued the ‘Green Bonds” for positive environmental or Climate Benefits. In January 2017, India’s first International Exchange (INX) is established to connect global investors with Indian and foreign issuers. In December 2017 IRFC was the first one to come with green bond listed on INX. CLP India was the first corporate (non banking) in India to come with ‘Green Bond’ in September 2015.Company raised rs.6 billion for sustainable and renewable projects.

Green Bond Initiative/Issues in India -

In India, Green Bond Market has started in the year 2015 when the leading private bank Yes Bank has come with first issue of Green Bond and awarded as the Pioneer Award at a ceremony held in London, United Kingdom. India is expected to be amongst top ten Green Bond markets in the world by 2017 to reach volume of \$4.3 Billion as per the study done by the energy research firm bridge to India. To achieve sustainable growth by

aiming the positive environmental benefit, India is estimated as one of the leading country amongst developing nations.

‘Green Bond’ Issues done in India since 2015 –

Sr. No.	Issuer	Industry	Year of Issue	Amount	Use of Proceeds
1.	YES Bank-Green Infrastructure Bonds	Banking	2015	INR 1000 Crore	Renewable energy include-wind power, solar power, small hydropower projects and biomass
2.	EXIM Bank of India	Banking	March,2015	\$ 500 Million	Green projects in countries like Sri lanka and Bangladesh
3.	Axis Bank	Banking	February 2015	\$ 500 Million	Green energy in urban and rural areas, green blue Infrastructure projects in India and abroad, transportation
4.	IDBI Bank	Banking	November 2015	\$ 350 Million	Renewable energy projects
5.	IREDA	NBFC under administrative control of MNRE	January 2016	INR 10 Billion	Tax Free-Green Bonds
6.	CLP Wind Farms	Power	September 2015	Rs. 6 Billion	100MW of wind energy assets in the pipeline across 6 states
7.	Re New Power Ventures	Clean Energy	September 2015	Rs. 4.51 Billion	85 MW wind power plant in Maharashtra
8.	Hero Future Energies	Energy	February 2016	\$ 44 Million	Climate Bonds Standard to finance wind energy projects in the state of Madhya Pradesh, Telengana and Andhra Pradesh
9.	NTPC	Power & Energy	August 2016	\$ 300 Million	Green Masala Bonds - Renewable energy projects

10.	L & T	IT	July 2017	\$ 103 Million	Green bonds issued in India
11.	IREDA	NBFC under administrative control of MNRE	September 2017	\$19.5 Billion	Issued Green Masala Bonds
12.	IRFC	Railway	December 2017	\$ 500 Million	First listed Green Bond on INX - first debt security at IFSC

Potential benefits of issuing ‘Green Bond’-

Green Bond as funding strategy tries to achieve sustainable growth by having environmental and climate concerns. India is targeting ambition for building 175 gigawatt of renewable energy capacity by 2022, form the target just 30 gigawatt is over till date which require huge funding of approx \$200 billion. To achieve this funding target is not easy, as per the reports unattractive terms and high interest rate on debt borrowing available in India elevate the cost of renewable energy by 24-32 percent compared to other nations like US and Europe. So Green Bond is required to be promoted for positive environmental benefits. It brings certain benefits for issuer, investors as well as for the policy makers also which are mentioned below-

- It facilitate issuer to communicate and eloquent the business strategy as Sustainable Strategy
- Green Bond aid in expanding the investors’ base for the issuer and assist in improving the association with debt providers.
- It gives issuer as reputational advantage by labeling Bond as ‘Green Bond’ which helps in creating goodwill for the company as environmental friendly.
- It helps in improving corporate governance structure and communication as due to check imposed for tracking use of proceeds and reporting.
- Green Bond assists in creating internal synergies by linking the financial and sustainable strategies.
- It adds to additional investment opportunity for investors by providing new innovative financial instrument.

- It facilitate in financing long-term sustainable and climate oriented projects which lead to help in reducing global warming.
- It helps to policy makers also to promote the green sustainable projects by having particular financing strategy in form of Green Bond.

Challenges or Barriers for growth of Green Bond Market-

- Cost of capital is sometimes more for the Green Bond as compared to other funding alternatives.
- Credit enhancement strategies are lacking in issue of Green bond which need to be improved may be by guarantee provided for international financial institutions.
- Lack of awareness and clear guideline are also one of the challenges for issue of Green Bonds.
- Scale and variance amongst the projects, bonds and institutional investors.
- Investors with restricted competence to scrutinize the green investments.
- Long term governmental commitment is required for sustainable development project which is missing.

Recommendations to intensify and expand the Green Bonds Market in India-

- High cost of Capital is one of the major setbacks in expansion of Green Bond market as restricting developer to raise affordable financing in deploying renewable energy project in which investors perceive more risk in the project. Steps can be taken to provide tax subsidies to issuer or tax incentives to investors.
- There is need to encourage the demand for the renewable energy market by stimulating demand amongst institutional and retail investors by providing tax incentives or mandates for public Investment.
- Issuer base for the Green Bond should be enhanced by creating the awareness and Training programmes, or by credit enhancements or by simplification or standardization.

Conclusion-

Green Bond is indeed a good initiate and move for doing business with sustainable approach with positive environmental and climate benefit. From the research work it can also be stated that Green Bond is in pioneering stage in India as from 2015 onwards it had started with yes bank Green Infrastructure Bond issue. Green Bond came up as positive and innovative financing Instrument to fund the projects which have sustainable growth. To further penetrate the Indian debt market, Green Bond awareness should be there amongst issuer, investors and market players for which more attention of regulators and policy makers are required to promote its issue and investment.

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