India’s Sovereign Green Bonds

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India’s Sovereign Green Bonds: Challenges and the Path Forward

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Introduction

India has issued **Sovereign Green Bonds (SGrBs)** to finance its transition to a low-carbon economy. These bonds are meant to raise capital for **renewable energy, climate resilience, and environmental sustainability projects**. However, investor demand has been weak, limiting their effectiveness in securing **lower borrowing costs (greenium)** and leading to funding shortfalls for key green initiatives, such as grid-scale solar projects.

With limited market interest, the government has had to **depend on general revenue to cover the funding gap**, which goes against the primary purpose of green finance. Addressing this challenge requires **improving liquidity, enhancing transparency, and diversifying bond instruments** to attract investors and strengthen India’s green finance ecosystem.

Understanding Sovereign Green Bonds

Sovereign Green Bonds are **debt instruments issued by the government** to fund projects that contribute to environmental sustainability. The Government of India established a framework for their issuance in 2022, aligning with global green finance standards.

These bonds support projects that help **reduce carbon emissions, improve energy efficiency, develop renewable energy infrastructure, enhance climate resilience, and promote afforestation**.

Since 2022-23, India has issued SGrBs eight times, raising approximately **₹53,000 crore** for various green projects. In the **2024-25 budget**, funds from SGrBs have been allocated to electric locomotive manufacturing, metro rail projects, renewable energy (including the National Green Hydrogen Mission), and afforestation under the National Mission for a Green India.

Despite these efforts, India’s green bond market has **failed to attract significant investor interest**, limiting the benefits of lower borrowing costs.

Challenges in India's Sovereign Green Bond Market

Weak Investor Demand and Limited Greenium

India's SGrBs have struggled to achieve a meaningful greenium. While green bonds globally secure **7-8 basis points (bps) greenium**, India's bonds have only achieved **2-3 bps**. This limits the government's ability to lower borrowing costs, making SGrBs a **less attractive** financing tool.

Even after **relaxing investment rules for foreign investors**, auctions have seen **low participation**, with primary dealers often absorbing unsold bonds.

Liquidity Constraints in the Secondary Market

The **small issue size** of Indian green bonds, combined with investors preferring to **hold them until maturity**, has **limited secondary market trading**. This lack of liquidity reduces the attractiveness of SGrBs for institutional investors who require an active bond market.

Lack of an Impact-Driven Investment Ecosystem

In developed markets, demand for green bonds is driven by **social impact funds and responsible investment mandates**. India **lacks a well-established ESG (Environmental, Social, and Governance) investment ecosystem**, which has resulted in weak investor enthusiasm for SGrBs.

Impact of Weak Investor Demand

Due to limited demand, India has struggled to raise sufficient funds through SGrBs, leading to **funding cuts for key green projects**.

The **initial funding requirement for 2024-25** was **₹32,061 crore**, but due to high borrowing costs, the government has **revised the estimate to ₹25,298 crore**. The biggest impact has been on **grid-scale solar projects**, whose allocation has been reduced from **₹10,000 crore to just ₹1,300 crore**.

With **SGrBs expected to raise ₹21,697 crore**, the remaining **₹3,600 crore must be covered through general revenue**, which contradicts the objective of using dedicated green finance mechanisms.

Way Forward for Strengthening India's Green Bond Market

Exploring Sustainability Bonds

Emerging markets often issue **sustainability bonds**, which finance both **green and social projects**, instead of pure green bonds. A **World Bank report** highlights that this approach attracts a **wider investor base** and increases funding potential. India should **consider issuing sustainability bonds** to diversify its green finance instruments.

Enhancing Post-Issuance Transparency

Investor confidence depends on **timely and detailed allocation and impact reports**. However, India’s **2023-24 green bond allocation report is yet to be published**, reducing transparency and trust. Strengthening post-issuance reporting will help attract investors looking for **accountability in fund utilization**.

Improving Liquidity and Market Participation

Increasing **bond issue sizes**, introducing **partial early redemption options**, and creating a **dedicated green bond index** could enhance secondary market trading. This would encourage **mutual funds, pension funds, and foreign investors** to participate in the green bond market.

Leveraging Multilateral Partnerships

India’s **sovereign credit rating is relatively low**, which affects investor confidence. Partnering with **multilateral development banks such as the World Bank or Asian Development Bank** could provide **credit enhancement** for India’s green bonds, making them more attractive to global investors.

Conclusion

India’s Sovereign Green Bonds are an important step toward financing a **low-carbon economy**, but **weak investor demand, low greenium, limited liquidity, and lack of ESG-focused investments** pose major challenges.

To make SGrBs more effective, India must **diversify bond offerings, improve transparency, boost liquidity, and seek international partnerships**. These steps will help attract investors, **reduce reliance on general revenue**, and ensure **long-term financial sustainability** for India’s green initiatives.

By strengthening its green bond market, India can secure **stable funding for its clean energy transition** and accelerate its progress toward a sustainable future.