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SUSTAINABLE GREEN ECONOMIC GROWTH IN INDIA THROUGH GREEN FINANCE

Dr. Nasrin Begum[1], Dr. Abul Khair Choudhury[2]

[1] Assistant Professor, Department of Economics NEF College, Guwahati, Assam, India
[2] Assistant Professor, S.R. College, Cachar, Assam, India

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ABSTRACT

Green finance connects the financial sector, environmental enhancement, and economic growth is an important aspect of low-carbon green growth. The study aims to examine green finance and assess the viability of the concept in Indian business sector for mitigating ecological degradation resulting from the assimilation of carbon emissions in the atmosphere. Green finance is a market-driven financing or investment program that uses environmental incentives to influence business decisions or that incorporates environmental effect into risk assessment. The paper thus explores into current trends as well as the prospects and constraints that lie ahead for green finance in developing India. In addition to aiming to enhance social justice and human well-being, green investment also acknowledges the importance of the environment and its natural capital and attempts to mitigate environmental risks and maintain ecological integrity.

Keywords: Green Finance, Environment Friendly Investment, Green Growth and Development

1. INTRODUCTION

The term "green growth" refers to balanced green economic growth, which is achieved by maximizing the positive circulation of both the green and the economy. This develops a pattern of economic growth with a new "green" driving force, enabling the acquisition of new eco-friendly growth opportunities. The principles of green growth include continuous improvement in manufacturing capacity, lowering environmental pollution by means of the use of green technology and knowledge, and enhancing the availability of energy and resources. Green financing is a fundamental activity to accomplish the green growth. Green environmental management has been regarded as a corporate social responsibility (CSR) activity that the firms should attempt to take action for the society as a whole (Carroll 1979) and green financing is further a CSR activity of finance firms such as the banks, mutual fund companies, stock companies and so forth (Koo 2010). This indicates that the financial companies should make efforts on green financing, though it is not economically viable right now, as a CSR activity.

Green finance is a type of targeted financing that encourages the flow of sufficient funds into the target through the intervention of public agencies to the market process, as it is estimated that the autonomic mechanism of the market does not provide the sufficient fund to the green economic activities. Green financing simultaneously pursues economic growth, environmental improvement, and the development of the finance industry. Furthermore, it is the so-called

typical targeted finance since it distinguishes between the constraints on non-green economic activities and is highly supportive of green economic activity (Noh 2010b).

The global warming phenomena are the outcome of excessive carbon dioxide emissions into the atmosphere, which cause an ecological imbalance. For the benefit of future generations, this has compelled governments all over the world to give it serious consideration. They have also started the process of overcoming this calamity by adhering to the Kyoto Protocol or numerous other UN initiatives. The concepts of "green financing," "green investment," "green technologies," and many other green initiatives cross these lines and can all be merged into one cohesive concept: "green finance" (Chopra et al. 2005). In order to spread green products and increase green consumption, governments should support and control green industrial markets. Green growth necessitates green financing because it provides the capital that businesses need to seize market opportunities. The green industry won't be properly stimulated, green products will be removed from the market, and customers won't be able to buy them if green finance is so insufficient. It will eventually cause the failure of going green on a full scale (Rutherford 1994).

CONCEPTS RELATED TO GREEN ECONOMY:

A "green economy" is one whereby public and private investments that reduce pollution and carbon emissions, boost energy and resource efficiency, and prevent the extinction of biodiversity and ecosystem services constitute the main forces of economic growth and creation of employment.

Green Growth is a strategic approach to economic growth designed to minimize adverse environmental impacts, generate additional opportunities for employment and income generation, and shape established economic processes in accordance with ecological principles.

Green finance is a strategic methodology to include the financial sector in a transition to resource-efficient, low-carbon economies, in addition to in the regulatory structure of climate change adaptation.

2. OBJECTIVES

The specific objectives of the present article are as follows:

a) To highlight the strengths and challenges of green finance in India.
b) To discuss the implementing strategies and role of banks for green finance in the country.

3. METHODOLOGY AND DATA

The paper will be dependent mainly on the review literatures available in published journals, books and other secondary data sources. For fulfilling the first objective we will go through the literatures related to definitions of green economy and its related concepts such as working of green finance and prospects and challenges of green finance in India. For fulfilling the second objective we will go through the published works of different scholars who has made an in depth study relating to role of banks for green finance along with role off SIDBI and government's policies for it. This objective will be fulfilled drawing a conclusion from the analysis related to fulfillment of first and second objectives

4. DISCUSSIONS AND ANALYSIS

4.1 WORKING OF GREEN FINANCE:

Different types of finance from multiple sources of capital are required for different green industries and technologies due to their diverse stages of maturation (Schmidheiny et al., 1996).
In general, there are three sources:
(1) Domestic Public finance.
(2) Public finance at international level.
(3) Private sector public finance.
A government's direct funding is referred to as domestic public finance, whilst funding from multilateral development banks and international organizations is referred to as international public finance. Private sector financing is made up of both domestic and foreign financial sources. Different investment structures can be used to bundle green money in different ways.
Green finance products.

The green financial products that are essential to be studied and created is divided into four major headings:
(1) Retail Finance
(2) Asset Management
(3) Corporate Finance
(4) Insurance
Through green finance initiatives, governments often aim to accomplish the following goals:
Create and guarantee capital for environmentally sensitive industries and sustainable growth; Encourage low-carbon, environmentally friendly growth by creating innovative financial solution; Attract in private funding for the building and maintenance of green infrastructure.

Boost financial support to enterprises that pursue green management techniques and strengthen corporate disclosure of such activities; Develop the markets for goods and services relevant to the environment, such as carbon markets using carbon credits.

4.2 STRENGTHS OF GREEN FINANCE:

4.2.1 IT FOSTERS THE WIDESPREAD ADOPTION OF ECO-EFFICIENT INFRASTRUCTURE AND TECHNOLOGY:

Investing in environmentally friendly technologies, including clean energy, may reduce their costs and accelerate the spread of technology. Because a large portion of green investment goes into infrastructure, developing nations can escape the "grow first, clean up later" development model. A nation should make use of this opportunity to make progress towards eco-efficient infrastructure. The responsibility therefore shifts to governments to set up the infrastructure needed for improved long-term resource management, which will boost national competitiveness and direct private sector investment into the nation's green markets.

4.2.2 IT PROVIDES A COMPARATIVE ADVANTAGE

As pressure from climate change and other environmental and economic problems increases, low-carbon green development may eventually transition from being a voluntary strategy to one that is required. When environmental regulations become stricter, businesses that are expanding their green financing now will have an edge over their competitors.

4.2.3 ADDS VALUE

By strengthening and promoting their involvement in green finance, companies, organizations, and businesses can add value to their portfolio. As a result, they may offer their business a green edge and attract in more environmentally conscientious customers and investors.

4.2.4 PROMOTES ECONOMIC PROSPECTS

By creating and fostering domestic markets for alternative resources and technology, governments that support green financing assist to protect their communities from the day when resources become scarce. By entering new markets with significant employment-generating potential, they expand their economic prospects even more.

4.3 CHALLENGES TO GREEN FINANCE

4.3.1 PRESENT AND ANTICIPATED COMPETITIVENESS

Activity-specific and nation-specific obstacles have a negative impact on the allure of private investment in green growth in emerging nations, limiting it in terms of risk management and investment returns. Enhancing private investment in sustainable development will be contingent upon how appealing these ventures prove to be in comparison to alternative prospects, both in the country and outside. International investors can search across borders for opportunities, thus governments may need to enact a number of public actions to increase the acceptability of green investment possibilities (Thompson 1995).

4.3.2 INACCURATE VALUATION AND ABSENCE OF RISK PRICING

A nation's ability to draw in private investors is influenced by its entire investment and regulatory landscape. In certain nations, the capital markets are inefficient at valuing the risks associated with green growth. A barrier is the degree to

which the market misprices certain risks or declines to price them. These risks typically relate to the creation, stability, and openness of domestic policies, as well as those connected to novel technologies or poorly understood processes.

4.3.3 MARKET FLAWS AND DISTORTIONS

Investments in green energy will struggle to provide investors with profitable returns as long as fossil fuel subsidies and the refusal to internalize environmental externalities persist in distorting the market price of energy. The restricted quantity and variety of green financing instruments, as well as the specific markets in which they can be exchanged, further compound that.

4.3.4 COMPETING OBJECTIVES

Public green finance providers desire to achieve the greatest possible environmental improvement, while host-country policymakers are interested in achieving the best development prospects. Private investors want to maximize the risk-adjusted returns on their investments.

4.3.5 LIMITED CAPITAL AND LACK OF AWARENESS

Many small and medium-sized companies have trouble participating in the green financing market because they have trouble obtaining funding and have little liquidity. Another major obstacle to private investments is the current narrow time horizon of company strategy, which overlooks the advantages of green industries that will manifest in the distant future. The dearth of specialists who comprehend the intricate connection between environmental concerns and financial markets only serves to exacerbate that.

4.3.6 REGULATORY GAPS

The absence of sufficient technical and regulatory infrastructure to measure, evaluates, and analyzes green business plans and financing is another obstacle to the growth of green finance.

4.4 IMPLEMENTING STRATEGIES

While there isn't a single ideal answer for all the many scenarios and initiatives that require green finance, there are a number of interventions and actions that might be suitable for the shared limitations and stages of development. Businesses typically consider the degree of good governance, the likelihood of conflict, and macroeconomic stability when comparing favorable business and investment conditions. If public interventions are to encourage private investment, they must deal with these issues and be implemented in a clear, enduring, and consistent manner (Jeucken 2001). The different policy approaches that can strengthen the regulatory framework in order to deal with investment issues are outlined as follows:

POLICY FOR INFORMATION BUILDING:

Investors, manufacturers, and consumers alike must be aware of the benefits that low-carbon green growth brings to the economy and environment. It is crucial that students understand that this approach is an opportunity rather than a burden and that, in the long term, it will probably change from being a voluntary path to a required one. The UN Principles for Responsible Investment and the Carbon Disclosure Project are two examples of the kinds of corporate social responsibility initiatives that need to be developed in order to provide the transparency required to support a green financial market. Adopting strict verification procedures for green technologies and green businesses is also crucial in order to keep consumers informed, guarantee that only legitimately green businesses profit from the green industry's reputation, and give investors the knowledge they need to make wise investment decisions.

4.4.1 ENVIRONMENTAL REGULATIONS:

Environmental regulations cover things like pollution standards and controls, making environmental impacts publicly known, getting rid of implicit subsidies for unsustainable or environmentally harmful growth (like building codes, land use regulations, land use planning, buffer zones protection, water management, and pricing), and better sector governance and surveillance.

4.4.2 MARKETS FOR ENVIRONMENTAL GOODS AND SERVICES AS WELL AS GREEN FINANCIAL PRODUCTS:

The carbon market is an often used illustration of a green market created and promoted by governments. Up to now, an emissions trading scheme has been established first in many nations; this has often involved passing laws governing membership, trading terms, and market monitoring for the carbon trading. Governments can smooth the transition by implementing voluntary trading schemes or pilot projects first, then gradually introducing an obligatory trading system that incorporates lessons learned from the pilot phase, a shift in the legal basis to "cap and trade," and product diversity within the traded market.

4.4.3 PUBLIC FINANCING

Governments should provide some financial assistance to green investment projects, including renewable energy facilities, as they are typically costlier than conventional projects. This will help to draw in investors. Public competitive bidding, public procurement, and public loans, grants, or funds, such as venture capital funds, are instances of financing mechanisms.

The government's assistance is limited to the initial phases of development. Green businesses require government support, particularly in the early stages of their development, because of the risks involved in using new technologies and their generally soft stance against well-established brown technologies, which externalize environmental costs and profit from well-developed supply chains and appropriate infrastructure. Once green businesses reach a mature level, governments should work to entice and enable other financial institutions to assume the role of active facilitators.

4.5 ROLES OF VARIOUS BANKS IN GREEN FINANCING

Domestic banks have started to finance renewable energy projects, including the State Bank of India, IDBI Bank, and ICICI Bank. Foreign banks that specialize in financing renewable energy include Standard Chartered and ABN Amro. In response to investors' increasing desire for exposure to GHG prices, Barclays introduced some of the earliest investment instruments. Investors now have access to the global carbon markets thanks to Barclays' creation of the BGCI, the first global carbon index of its type.

Emissions Trading Scheme (ETS), Clean Development Mechanism (CDM), Joint Implementation (JI), and Regional Greenhouse Gas Initiative (RGGI) are just a few of the programs that Barclays offers to investors, funds, and the industry as a leading provider of financial and commodity risk management solutions. Barclays is in an ideal position to assist its clients in managing and comprehending their exposure to carbon risk.

The Bank of Baroda has introduced a program to help SMEs finance the purchase of services, equipment, and other items, as well as the implementation of strategies to improve energy saving. In order to provide funding for the implementation of CDM projects, advisory services, and value-added products in the area of carbon credit finance (such as the securitization of carbon credit receivables, the carbon credit delivery guarantees, and the escrow mechanism for carbon credits), the State Bank of India has entered into an MOU with a consortium of leading CDM consultants. Additionally, the SBI is offering a new Green Home Loan program to help finance ecologically friendly residential developments. Concessions offered by the scheme include a 5% margin discount, a 0.25% interest rate concession, and a 0% processing charge for projects that have received an Indian Green Building Council (IGBC) rating. In order to partially offset its thermal power usage at its offices in Tamil Nadu, Maharashtra, and Gujarat, the State Bank of India owns wind farms.

With the installation of solar-powered ATMs in several locations as part of the IndusInd Bank's Green Office Project, energy savings and a decrease in CO_2 emissions are anticipated. The ICICI Bank has been supporting numerous organizations' projects and activities related to clean energy and environmental sustainability. Projects that particularly support energy efficiency, renewable energy, biomass cogeneration, biomass gasification, wastes heat recovery, etc. has received financial support from it. The bank has been providing finance for clean technology and initiatives that help reduce greenhouse gas emissions.

The projects in the portfolio of Yes Bank comprise investments in the Tatva Investment Program, the South Asia Clean Energy Fund, and clean technology and alternative energy projects. The Canara Bank has developed a program to help

SMEs purchase and implement energy-saving devices and practices. They approve term loans up to a maximum of ₹100 lakhs.

The Bank of Maharashtra promoted the use of solar home systems and the promotion of renewable energy techniques. Installing solar-powered equipment, such as solar water pumps with photovoltaic cells, solar home systems, and equipment powered by photovoltaic cells. Bioenergy includes products made from biomass power cogeneration, waste-to-energy equipment, biodiesel, and equipment supporting clean energy programs. The UNEP and the Bureau of Indian Standards (BIS)-approved manufacturers should produce the equipment. Farmers, rural artisans, salaried workers, business owners, and independent contractors are the users. The applicant's net annual income must be at least ₹50,000. In general, they offer consumer loans to borrowers so they can buy consumer durables, and the interest rate they charge is BPLR. The tools and supplies that will be acquired through the program will contribute to maintaining ecological equilibrium. The scheme's borrowers will be eligible for an interest rate reduction of 50 basis points. As a result, the interest rate will be at the current 10.75%, or the BPLR – 0.50%. Having been involved in environmental banking for more than 17 years, the IDBI bank has assumed the lead in this field within the Indian banking industry. In order to assist clients in interacting with the Clean Development Mechanism (CDM)/Carbon Credits of the Kyoto Protocol and the Voluntary Emission Reductions (VERs) authorities, the IDBI Bank has established an exclusive group dedicated to climate change. This team has developed a structured product that offer upfront financing secured by the receivables for carbon credits. The Indian project developers are happy with the product.

The World Bank and the carbon credit group work closely together to provide Indian chiller users with an end-to-end solution for transitioning from high-carbon to low-carbon, energy-efficient chillers. Additionally, the IDBI Bank releases a newsletter known as "IDBI Carbon Developments" once a month. The magazine examines the pricing of Certified Emission Reductions (CERs), European Union Allowances (EUAs), the status of CDM project registration, and a number of other developments in the carbon market.

The World Bank, in collaboration with the Ministry of Environment and Forests (MoEF), the Government of India, and IDBI Bank Ltd (the Project Implementing Entity), began implementing the India Chiller Energy Efficiency Project (ICEEP) in August 2009. The project is supported by a US$ 7.3 million grant from the Global Environment Facility (GEF) (US$ 6.30 million) and the Ozone Trust Fund (OTF) (US$ 1.00 million).

In accordance with the Montreal Protocol, the ICEEP aims to promote energy efficiency in the refrigeration and air conditioning (RAC) sector and help the phase-out of the use of Chlorofluorocarbon (CFC), an Ozone Depleting Substance (ODS). This will be accomplished by encouraging the faster replacement of outdated CFC chillers with energy-efficient non-CFC chillers, thanks to the ICEEP. In order to help chiller owners get past obstacles like upfront capital expenses and perceived technological hazards, the project would directly give them financial incentives. It is anticipated that the ICEEP will show that alternative energy-saving strategies, whether free or inexpensive, may be successfully implemented in large buildings.

The primary goal of the ICEEP is to replace all current CFC-based (R11 and R12) centrifugal, screw, reciprocating, and scroll type chillers and systems with new ones that have a specific energy consumption of no more than or equal to 0.63 kW/TR, regardless of the systems' capacity or age at the time of installation. A 20% upfront grant subsidy would be provided for the purchase of new, energy-efficient chillers, based on the normative price of US$ 400/TR, or ₹20,000/TR (at a fixed exchange rate of ₹50/USD). In light of the projected 30% energy savings from replacing the outdated, inefficient CFC chillers with new, efficient non-CFC chillers, the beneficiaries should be able to recoup their initial investment in less than two years.

4.6 ROLE OF SIDBI IN CREATING THE GREEN MSMES

MSMEs are included in the global emphasis on a clean and green environment. The green growth agenda has also been embraced in India. Concern over the damaging effects of industrialization on the environment has grown, as has the understanding that remedial action must be taken to preserve the ecosystem. In addition to updating the technologies and manufacturing processes employed by MSMEs, the emphasis now is on implementing the suitable (alternative

technologies) production processes to optimize energy saving. Reuse, recycle, and reduce (waste) are now becoming the main focus of a number of initiatives. The main causes of MSMEs' behind-the-scenes facility upgrades and modernization are a lack of knowledge about alternative clean technologies, a lack of understanding of the benefits of investing in such technologies, and a lack of skills among the current workforce to adopt new technologies. For the sector to invest in Cleaner Production (CP) choices, it must be offered financial facilities on more lenient conditions in addition to technology support services.

The SIDBI has taken the lead in the field of sustainable development of the MSME sector as a key and accountable development finance institution involved in the promotion, financing, and growth of Indian MSMEs. The SIDBI has consistently been at the forefront of initiatives to further modernization and quality improvements at the cluster level, evolve the technology mission for MSMEs with the Vision 2010 initiative, institutionalize technology needs through a technology bank, or serve as a pivotal nodal agency for government programs aimed at creating niches in particular industries through technological advancements.

4.6.1 ENERGY EFFICIENCY FINANCING

SIDBI has launched a number of programs to encourage MSME lending for eco-friendly and energy-efficient technologies. The SIDBI has been focused on lending programs that encourage investments in clean production and energy-efficient technology and manufacturing processes through bilateral credit lines from Japan's JICA and Germany's KfW. Two strategies are utilized in these targeted programs: the first is the introduction of cluster-specific information dissemination, and the second is concessional funding to promote investments in green or energy-efficient technologies. ***Green Financing:*** Under the JICA plan, the SIDBI has so far given more than 2000 MSMEs assistance totaling more than ₹800 crores for investments in energy-saving technologies and greener production. The following are a few of the SIDBI's main projects for achieving energy efficiency, which has helped a lot of MSMEs in clusters:

BANGALORE FACILITY FOR RECYCLING ELECTRONIC WASTE: For the project of recycling electronic waste, E-Parisara Pvt. Ltd. received assistance from the SIDBI. The initiative handles waste produced by Bangalore's IT, telecom, and electronics industries. The project's benefits include assisting over 100 MSMEs in complying with environmental audits and regulatory standards, lowering the cost of treating waste, and reusing and recycling treated metals and minerals.

COMMON EFFLUENT TREATMENT PLANT (CETP)

(A) MSME TEXTILE DYEING AND PRINTING UNITS IN AND AROUND SURAT –

To assist the MSME textile dyeing and printing units in proper waste disposal, Gujarat Environ Protection & Infrastructure Ltd. has been aided in setting up the Treatment Storage and Disposal Facilities (TSDF) in Surat. Over 300 MSME member units have successfully complied with pollution control regulations.

(b) CETP, BANGALORE:

The establishment of a Treatment Storage and Disposal Facilities (TSDF), a facility for handling toxic waste produced by the powder coating, electroplating, and metal finishing industries in and around Bangalore, has received assistance from Eco Green Solution Systems (P) Ltd. The utilization and recycling of treated wastewater, as well as the decrease in the cost per unit of waste treatment, have all benefited more than 300 MSMEs.

(C) MUMBAI TAXI FINANCING SCHEME:

In collaboration with Maruti Suzuki Ltd. and the Mumbai Taxmen's Association/Union, the SIDBI has made agreements to help taxi drivers—micro entrepreneurs—phase out their outdated vehicles. Without requiring any collateral security under the CGTMSE coverage, the Scheme has helped taxi drivers purchase new vehicles. Through this arrangement, funding has been made available to over 700 micro-entrepreneurs thus far. By encouraging clean technologies, the program has assisted in reducing pollution.

(D) FINANCE FOR AUTO RICKSHAWS:

The Delhi Finance Corporation (DFC) helped finance 600 auto rickshaws equipped with compressed natural gas (CNG) in Chandigarh. For this sustainable energy project, the DFC received refinancing from the SIDBI.

(E) SOLAR LIGHTS: An aid of ₹10 crore was approved for the Friends of Women's World Banking (FWWB), an MFI, to help micro entrepreneurs purchase solar lights with a capacity of two watts apiece. The aid is intended to cover 50,000 micro entrepreneurs.

(F) RICKSHAW SANGH PROGRAM:

The American India Foundation (AIF) and the SIDBI recently inked a Memorandum of Understanding (MoU) to support low-income groups' means of subsistence through a collaborative effort known as the "Rickshaw Sangh Programme." Under this program, the SIDBI has approved a financial contribution of ₹50 lakh to the Bhartiya Micro Credit (BMC) through its Micro Credit Scheme for both microfinance and program support. Under the program, the BMC, with technical assistance from the AIF and credit support from the SIDBI, has given 500 rickshaws to low-income residents of Lucknow and the surrounding areas. The beneficiaries of the program would also receive the license, the municipal permit, the uniform, the client's and his spouse's life insurance, the accident insurance, etc.

(G) INFORMATION DISSEMINATION:

To raise awareness about the environmentally and energy-friendly technologies that are appropriate for each cluster, the SIDBI has organized a number of awareness campaigns to promote the JICA-supported scheme for achieving energy efficiency in the high energy intensive MSME clusters. The campaigns have gotten positive feedback. During these seminars, the MSMEs received information on improved production methods, green technology, necessary investments, and cost-benefit analyses of each investment. In the MSME clusters around the nation, 18 awareness programs have been held thus far.

4.6.2 FURTHERING GREEN GROWTH WITH DEVELOPMENTAL SUPPORT:

Numerous activities are being carried out to facilitate the formation of competitive MSMEs that offer financial and non-financial services under the multi-activity, multi-agency MSME Financing and Development Project (MSMEFDP) being conducted by the SIDBI. The Credit Facility (CF) has been directed towards more than 2050 MSMEs located in the primary cluster centers throughout the nation. The project's appraisal procedure is based on the global best practice of the Environment and Social Risk Assessment framework (E&S). Over a hundred credit officers have received training on the E&S. With a long-term intervention strategy, the project is working to improve soft infrastructure through its cluster development effort. Following a cluster's value chain mapping, an action plan is created in collaboration with the stakeholders and pursued from a sustainability perspective. One of the cross-cutting concerns that have surfaced is the need to implement Energy Efficiency (EE) in these clusters. Under the MSMEFDP, the following significant initiatives have been addressed in the EE area:

ENERGY EFFICIENCY INITIATIVE WITH THE BUREAU OF ENERGY EFFICIENCY - The SIDBI and the Bureau for Energy Efficiency (BEE) have signed a Memorandum of Understanding (MoU) for the establishment of an energy-efficient technology shelf for 25 MSME clusters, as well as for raising awareness and developing the capacity of the regional Business Development Services (BDS) providers to implement the energy-efficient technologies. This will be combined with financial assistance for qualified proposals to implement energy-saving devices and practices.

KNOWLEDGE SERIES: To address the issues of information asymmetry, the project has released publications in the knowledge series about energy efficiency in the clusters of engineering, ceramics, foundries, and fruit and vegetable processing. These have been extensively distributed among MSMEs, coupled with a "Tip Sheet on Energy Efficiency" that offers basic housekeeping advice. As a result of the project, India SME Technology Services Ltd.—which is supported by the leading public sector banks and the SIDBi) was able to update its existing basket of 800 technologies and designate them as clean, energy-efficient, and carbon-free technologies. It also prepared the Carbon Credit Guidebook for MSMEs. The initiative has started working with the Ministry of Science and Technology's DSIR to update the "Technology Vision for Indian MSMEs-2020" policy document. It is anticipated to serve as a tool to support the innovative qualities of Indian MSMEs.

GREEN RATING: A SIDBI affiliate, the SME Rating Agency (SMERA) is steadily offering rating variants, the most recent of which is the "Green Rating" model, with backing from the MSMEFDP. In order to minimize irreversible environmental damage, this project aims to encourage MSMEs involved in industrial activity to adopt improved technologies and

procedures. It will function as a risk-reduction tool to help MSMEs successfully manage the risks to company continuity that come with the swiftly evolving environmental governance and compliance regulations.

4.7 POLICY COORDINATION AMONG LEVELS OF GOVERNMENT:

a) National policies are crucial: It will be simpler to handle city-specific issues and guarantee coherence and consistency between national and local policies the more environmentally friendly the national framework is. In terms of pricing signals for non-localized environmental externalities, such GHG emissions, the national framework is very significant. Furthermore, the central government must act in many nations to modify the urban revenue streams.
b) Eliminate obstacles to local government action: The removal of existing restrictions that hinder the ability of local governments to take action is a good place to start for national governments, even though they may encounter difficulties in enacting comprehensive reforms.
c) Comprehensive strategy is required: The distributional effects of attempts to green urban revenue sources might not be desired. Rather than attempting to guarantee that every single policy initiative fulfills the environmental and equality objectives, these concerns should be addressed in the context of the overall tax and benefit system.
d) Maintain a basic policy package: While the overall policy package should be kept as basic as feasible, the design of individual instruments may frequently need to be very complex. The impact assessment process is hampered and the possibility of unanticipated interaction effects or perverse incentives is increased by a too complicated system of environmental taxes, charges, and fees.
e) Internalizing externalities is the main goal: To that end, taxes, fees, and charges should be formulated in a way that forces the agents to bear the entire marginal societal cost of their actions that impact the environment. This entails, at the very least, getting rid of the detrimental subsidies to the environment and the anti-green bias of the current municipal tax laws.
f) Road pricing regulations may lessen pollution and traffic: Differentiating road pricing schemes based on peak hours, congestion levels, or both is likely to be the most effective way to reduce emissions and traffic. Incentives to convert to more environmentally friendly modes of transportation might be increased by tying pricing schemes to certain car models.
g) Transportation-related revenue streams necessitate coherent planning: When alternative mobility options are available, the use of congestion charges to achieve green goals will be more successful and less expensive for users; governments may want to consider designating such revenues to finance public transit.
h) Fees for water and waste services should be more responsive to the actual resource use: Water and waste service fees should reflect resource scarcity while also paying infrastructure investment and service costs.
i) More access to carbon finance for cities: One requirement of the carbon finance should be use of a harmonized emission inventory for cities. Cities and central governments can collaborate to better utilize the carbon-offsetting programmes (e.g., the Clean Development Mechanism and the Joint Implementation) and to ensure that these (and other) resources may come directly to cities.
j) The financing of development projects should take into account the infrastructure requirements associated with increased development: Development charges and other financial contributions, for instance, could be used to recoup the costs associated with the sprawl from the developers. New developments should consider the cost of investing in alternate water sources.
k) Developing access to new types of green finance requires national-local cooperation: Several tools are available to help link private investment with policy priorities and access private money for urban greening. These consist of green bonds, banks for green infrastructure, and private-public partnerships. But they all bring up issues of opportunism, moral hazard, and inadequate scale. In order to develop the necessary capacity and to guarantee that they have the necessary financial, technical, and legal competence as well as the necessary bargaining leverage when negotiating the private-sector financing, cities must collaborate with one another and with the federal governments (For instance, forfeiting development fees in the event that a space is made into a public park). Grants that are either targeted or linked can help local governments compensate for the spillover effects of green initiatives that have localized costs but widespread benefits.

5. CONCLUSION

The foundation of green growth is green financing. In conclusion, green growth is a collaborative effort involving technology development companies, financial institutions, governments, and consumers. Instead of creating a

cacophony, each component should work in harmony with one another. India now has the chance to develop in a way that diminishes the consequences of environmental deterioration, which opens up a wide range of opportunities for the country's financial sector. In addition to directly funding sustainable development, banks must use their indirect influence over management and investment choices to persuade companies to pursue more ambitious social and environmental objectives. Banks can effectively make use of a multitude of opportunities in the sphere of environmentally responsible finance. With a focus on People, Planet, and Profit, the bank would continue to actively act as a change agent and engage in activities that are in line with the government's national priorities and the Millennium Development Goals, keeping in mind the SIDBI's dominant role in the promotion, financing, and development of the MSME sector. Indian banks face an enormous challenge. However, they are impotent in preventing it: sustainable finance is the way of the future, especially for Indian banks eager to make an impact for themselves on the global scene.

CONFLICT OF INTERESTS

None.

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