Social Science

A descriptive study of role of corporate citizen in sustainable development through green finance framework

Dr. Pankaj Yadav

Associate Professor, Department of Commerce, Bareilly College, Bareilly, Uttar Pradesh, India

Correspondence Author: Dr. Pankaj Yadav

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Abstract

With the robust concern of preservation of environment and atmospheric change there is a requirement of the classic way that helps in reducing the carbon emissions. The unreliable extraction of natural resources due to man-made activities is the sole reason of environmental damage. This reason leads to the alarming interrelation between human kind and earth. It presents a room to maneuver to corporate citizens to reassess the 'Business-as-usual' and orient it with SDGs although the gap is unfulfilled with the current scenario. Businesses are often considered as the engine of the economy and adding up the sustainability to the businesses may help in stepping towards carbon neutrality. The huge amount of funding is required for the sector for renewable development so there is urgent need of requirement of different sources of financing that may help in achievement of SDGs. Besides the different ways of sourcing of finance, it also needs a way of channelizing these funds in the economy with the alignment of earth friendly manner.

Keywords: sustainable corporate citizen, green finance framework, patient capital

Introduction

The alliance among revolution and span of firm and its effect on earth is the growing concern of the today's world. The new concept arise with this effect is going green which shows the clear view point of awareness among corporate citizen to rehabilitate the economy as a whole. The rehabilitation comes with the incorporation of sustainability entrepreneurship. It is a form of entrepreneurship which includes the redesigning of business activities. The redesigning involves the mitigation of social crisis with policy making inspiring from developed nations such as Japan, Germany, Sweden and Denmark. The sustainable development goals focusing on balancing the social, economy and environment crisis at the same time. The life cycle of firm and green industry associated directly with each other. The role of firms is still investigating in sustainable initiatives. This initiative refers to shift in the traditional practices and capitalism operations. In order to combine the environment, economic and social aspects society need ecopreneurs. The action plan for selection ecosystem and ecosystem mapping and analysis. The socio-economic system that benefits and value and their response. It includes the species richness and biotic interactions. It quantifies and value ecosystem services and evaluate uncertainties.

Conceptual definitions

➢ Green finance framework

The Green finance framework refers to the framework that not only works on continuity of the business activities but also initiates towards the protection of earth. It creates a substantial relationship among nature and corporate citizens. Green finance is a way of investing the funds in those business activities or in those projects which are earth friendly and not results in devastations the environment. The Green Finance Framework is a structured approach that directs financial investments toward projects and activities that support environmental sustainability. It goes beyond simply funding business operations, emphasizing the need to protect and preserve the planet. The framework fosters a strong connection between businesses and nature, encouraging corporate entities to adopt eco-friendly practices while pursuing their financial goals.

Green finance involves channeling funds into projects such as renewable energy, sustainable agriculture, conservation, and infrastructure that reduces carbon emissions. According to the Climate Bonds Initiative, the green bond market reached a record $269.5 billion in 2020, reflecting the growing global commitment to funding projects that positively impact the environment. This framework ensures that businesses not only contribute to economic growth but also help mitigate climate change, reduce pollution, and protect biodiversity.

➢ Sustainable corporate citizen

A sustainable corporate citizen refers to any business, whether small, medium, or large, that actively incorporates environmentally responsible practices into its operations. These companies go beyond merely pursuing profit—they seek to minimize their ecological footprint while contributing to the well-being of society. Sustainable corporate citizens prioritize practices such as reducing waste, conserving energy, utilizing renewable resources, and ensuring ethical supply chains. By doing so, they align their business strategies with the broader goal of environmental preservation and social responsibility.

This concept encompasses a wide range of businesses, from local small and medium enterprises (SMEs) to global corporations. SMEs may focus on eco-friendly practices such as recycling, energy-efficient operations, or sourcing sustainable materials, while larger firms may invest in renewable energy, sustainable product development, or corporate social responsibility initiatives. In either case, the aim is to create long-term value not just for shareholders, but for all stakeholders, including employees, communities, and the planet.

Ultimately, being a sustainable corporate citizen means recognizing the interconnectedness of economic activities and the environment. These businesses understand that their success is tied to the health of the planet, and they take proactive steps to operate in ways that benefit both the environment and society at large.

- **Patient capital**

Patient capital, while not defined by any formal legislative framework, refers to long-term investments made with the understanding that returns will take time to materialize, often over a period of several years or even decades. This form of capital is particularly critical for sustainable projects, which typically require more time to generate financial returns due to their focus on long-term environmental and social impacts. Unlike conventional investments, which prioritize short-term gains, patient capital aligns with the timelines of projects that aim to address systemic issues like climate change, biodiversity loss, and resource conservation.

Investors in patient capital are often those who prioritize the creditworthiness and long-term viability of projects over immediate profitability. These investors, which may include impact investors, foundations, or development finance institutions, are committed to supporting ventures that generate both financial returns and positive societal or environmental outcomes. They are willing to accept lower returns in the short term in exchange for sustainable, long-term benefits. A key aspect of patient capital is the strong engagement and loyalty of stakeholders. These investors typically work closely with project developers to ensure that the projects remain on track, adapting strategies as needed to achieve long-term success.

In practice, patient capital plays a pivotal role in sectors like renewable energy, reforestation, and sustainable agriculture. For example, the Global Impact Investing Network (GIIN) reported that in 2020, the impact investment market grew to over $715 billion, much of which is directed toward projects with long-term horizons. Such capital is essential for addressing global challenges where immediate returns are unlikely but where long-term impact is invaluable.

By enabling sustainable projects to flourish, patient capital helps to close the funding gap for critical environmental initiatives, ensuring that these projects can deliver on their promise of a more sustainable future.

Review of literature

Bhatnagar, M., Taneja, S., & Özen, E. (2022)

In this research paper researchers studied the present status of sustainable entrepreneurship with implementation of green finance and how startups in India carried forward their businesses despite government had made several initiatives for the same and the impact of green finance. Green finance act as a support system to enhance the sustainability in entrepreneurship. In this research paper compares the public sector banks, private sector banks and foreign banks' lending towards sustainable projects and their return on investments and outstanding credit of banks for the promotion of green models. It also discusses the cost of projects of different countries. The research paper concludes that India has the highest level of cost of project on the other hand BSE (Bombay Stock Exchange) and NSE (National Stock Exchange) are excel in this field and have ESG index.

Cárdenas-Pérez, Alisva (2022)

This research paper based on bibliometric analysis of sustainable finance and corporate social responsibility. In this research paper data has been collected in three phases. In this research paper researcher discussed about the social gap around the world specially in emerging economies and not achieved the benefits that aligned with environment. In research paper also analysis the spread of knowledge in distribution of scientific production and interest groups among the corporates.

C Moon & E Bace (2020)

This research paper overviewed the perspective of green finance and its sources. The researcher discussed the several pros and cons green finance from the point of view of entrepreneur. In the research paper analysed the European and US market's entrepreneur and their aim towards the sustainability aligned with the factors such as collateral, return on investment, payback period, leverages, perceptions, risks. It also discussed the threaten to communities due to climate change resulted in unseen opportunities of adopting green finance and its projects.

Pelin Demirel & et.al (2019)

In this research paper researchers discussed about the increased level of green start-ups all over world and problem related to their ventures. This paper talks about the life cycle of start-ups, knowledge spillovers and firm behavior. The existing literature focused on the emerging field of green entrepreneurship that serves the goods and services environmentally sustainable in nature. This results in emergence of Low Carbon Environmental Goods and Services (LCEGS) sector which is 4% approx. of all global sectors. It revives the competitive advantages and certainty of creating job opportunities. It works on the concepts of "going green". It acts as a catalytic role for the "green wave". The paper focuses on the drivers that contribute to the infrastructure and fulfills the knowledge gaps and potential future areas. Small and Medium Enterprises (SMEs) attains sustainability and feasibility in long run.

Lucky Nurgroho and et.al (2017)

The research paper emphasized how microfinance institutions plays a pivotal role in development of business and in maintaining the sustainability in environment. The paper discussed the implementation of CSR in MFIs, their role in preserving environment and promoting green activity. The methodology used in research paper is based on stakeholder theory which means the ability of achieving to balance the conflicting demands of stakeholders. It discussed the regulation and legitimacy of MFIs by implementing green activities.

Research methodology

The data has been collected from the secondary sources such as magazines, books, articles, newspaper, research paper, thesis and websites.

Significance of the study

Green finance, much like traditional financial instruments, operates through two main mechanisms: debt and equity. These financial structures provide the necessary capital for sustainable projects, but the success of green finance depends on the efficient flow of funds, which requires the involvement of intermediaries, clear agreements, and well-established channels for fund distribution. Understanding how these components interact is essential for bridging the gap between project needs and financial resources in the green economy.

In the early stages of green projects, equity finance is commonly used. Equity investors provide the necessary capital in exchange for ownership interests in the project. These investors bear a greater share of the risk but also stand to benefit from any potential profits or growth. As the project matures and reaches later stages, debt financing becomes increasingly relevant. Debt financing introduces lenders who provide funds but do not take ownership stakes. Instead, they prioritize repayment with interest, and their claims take precedence in the event of liquidation. A balanced approach between debt and equity financing is crucial, as it can help accelerate the growth of green projects while managing risks effectively.

In the green finance sector, one of the most prominent sources of funding is bond issuance. Bonds allow qualified investors to purchase a portion of a green project's debt, which can be repaid with interest over time. Green bonds, specifically, are designed to finance environmentally friendly projects, making them a key instrument for investors looking to support sustainable initiatives while generating returns. Alongside bonds, lender loans serve as another significant source of debt financing. These loans, provided by banks or other financial institutions, often come with favorable terms for green projects, especially those aimed at preserving or restoring ecosystems.

However, debt financing typically involves lower risk for investors compared to equity financing, which is why the return potential tends to be lower as well. The relatively low risk stems from the fact that debt holders, particularly in the case of green bonds or loans, are prioritized for repayment before equity investors in times of financial difficulty. This structure, while safer for lenders, may result in a lower overall return, making it necessary to attract a broader base of investors who are motivated by both financial returns and environmental impact.

To further mitigate risk and encourage private investment, public finance institutions play a crucial role in supporting green finance. These institutions often provide loans and credit guarantees to green projects, effectively reducing the risk for private investors. By assuming a portion of the risk, public entities make green finance more attractive to private sector players who may otherwise be hesitant to invest in long-term, high-cost environmental projects. This arrangement shifts a significant amount of risk onto public finance institutions, ensuring that investors are protected and incentivized to participate in the green finance market.

Recent developments in green finance have opened new opportunities for the private sector, which is expected to be a driving force in closing the funding gap needed to preserve ecosystems and address climate change. The global push toward sustainability requires billions of dollars in investment, and the private sector will play a critical role in supplying this capital. By integrating debt and equity financing strategies, leveraging bonds, and collaborating with public finance institutions, the private sector can help fund large-scale green projects that will preserve ecosystems, mitigate climate risks, and promote long-term economic stability.

Ultimately, the significance of green finance lies in its ability to mobilize vast amounts of capital for environmental restoration and climate change mitigation. Through well-designed financial instruments and public-private partnerships, green finance can accelerate the transition to a sustainable future while providing opportunities for investors to align their portfolios with environmental goals.

Objectives of the study

It is the study of cognitive pattern of behavioral decision of today's entrepreneur and finding out the solutions for the growing concern of complexities of climate change. The growing captivation of GenZ in the industry and rising level of unicorns may tends to workplace that helps in achieving the co-creation experience. The emerging aspirations of generation seems in the dynamic shift in their needs in a novel comprehensive and immersive way. The research paper also focuses on the current trends for redefining the futuristic startups by using technology upgradation and developing the new ideas using brainstorming. The concern is not only about the formation of regulations but also implantation of the same. In order of achieving the goals there is a need of creating certain policies and strategies. This research paper investigates the following questions:

- What is the role of corporate citizen in sustainable development?
- How is the role of corporate citizen in achieving the goals sustainably?
- How does patient capital works in sustainable development?

Findings and analysis

The transformation of ecological activities requires restructuring from production till its decomposition or consumption. It promotes the green business start-ups model. Corporate citizens should advance their concepts so it enables the funding in to earth friendly projects.

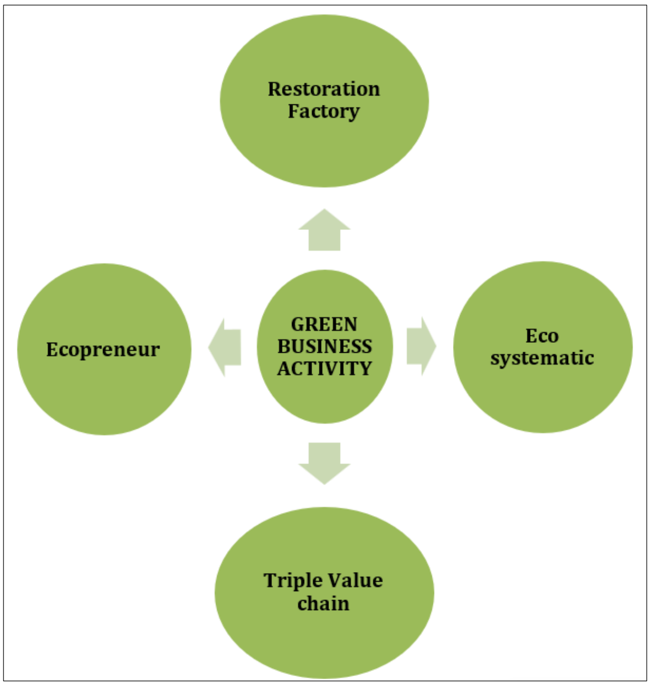

Fig 1

- **Restoration Factory (UNEP)**

The Restoration Factory, an initiative led by the United Nations Environment Programme (UNEP) in collaboration with the International Union for Conservation of Nature (IUCN) and the Food and Agriculture Organization (FAO), aims to bridge the gap between environmental restoration and economic growth. By focusing on sustainable business models, the program seeks to reframe how financial investments can be mobilized toward ecosystem restoration, thereby redefining the role of the private sector in addressing environmental challenges.

At its core, the Restoration Factory is an e-learning platform designed to support corporate entities and entrepreneurs. Its purpose is to enhance expertise and leadership in sustainable business practices that contribute to environmental restoration. Through a comprehensive six-month training program, participants are exposed to eight key business processes, including value creation, competition analysis, and business proposition development. This program equips corporate leaders with the knowledge and tools needed to integrate ecological restoration into their business models, aligning profitability with sustainability.

One of the key motivations behind the Restoration Factory is the urgency of global environmental crises. As climate change continues to threaten ecosystems worldwide, there is an increasing demand for large-scale investments in restoration projects. The program serves as a pipeline for sustainable projects that are investment-ready, highlighting the need for immediate financial engagement to scale these efforts. By connecting businesses with opportunities to invest in ecological restoration, the initiative not only addresses the environmental crisis but also emphasizes the economic potential of such endeavors.

The ultimate goal of the Restoration Factory is to drive private-sector investment in projects that restore ecosystems and address climate change impacts. By fostering innovation in business models, the initiative helps entrepreneurs develop scalable solutions that can restore degraded landscapes, enhance biodiversity, and improve the resilience of communities. It recognizes that ecosystems are foundational to global economic stability and that restoring these systems is critical for sustainable development. Furthermore, the Restoration Factory engages local communities, ensuring that the social dimensions of ecosystem restoration are addressed. This includes fostering resilience to climate change and promoting inclusive economic growth that benefits both the environment and the people who rely on it. In this way, the program not only supports environmental restoration but also contributes to broader social and economic goals, reinforcing the interconnectedness of ecosystems and human well-being.

- **Triple Value chain- (FAO-FIBL, 2014)**

In this value of business to make it successful. Businesses is valued by the customer possess the satisfaction and generator better value and position in the market to overwhelm the profit and create its own value by considering the environment and retain its sales with the help of research and development. It works on the holistic approach which includes valuable insights to the consumer and also in the best interest of environment. It also enables businesses which are service based. Its emphasis the design, research and development, standardization, innovation with the maintenance of marketing, deployment and at the same time alignment with the nature friendly activities. The Triple Value Chain concept, as highlighted by FAO-FIBL (2014), is an approach that emphasizes the interconnectedness of business success, customer satisfaction, and environmental sustainability. In this framework, businesses are not only measured by their profitability but also by how well they meet customer expectations and their ability to maintain a positive environmental impact. The key idea is that a successful business must generate value for its customers, improve its market position, and ensure that its operations align with the principles of sustainability.

At the heart of the Triple Value Chain is the holistic integration of key business components such as research and development, design, standardization, and innovation. These elements work together to ensure that businesses are continually evolving, meeting customer demands, and staying competitive in the market. For example, through ongoing research and development, companies can innovate new products or services that are not only appealing to consumers but also environmentally friendly, thereby fostering long-term customer loyalty and market differentiation.

The framework also places a strong emphasis on service-based businesses, recognizing their potential to drive sustainability through efficient design and operational practices. By focusing on environmentally conscious methods—whether through energy-efficient technologies, waste reduction strategies, or ethical sourcing practices—service-based businesses can enhance their value propositions while minimizing their environmental footprint.

Moreover, the Triple Value Chain encourages the alignment of marketing, deployment, and business activities with nature-friendly practices. It urges businesses to consider the environmental impacts of their operations at every stage, from product design and production to marketing and distribution. By doing so, companies can create a competitive advantage, as consumers are increasingly seeking brands that align with their values and prioritize sustainability.

In sum, the Triple Value Chain is a forward-thinking approach that not only seeks to generate profit but also emphasizes the importance of customer satisfaction and environmental responsibility, helping businesses thrive in a competitive and sustainability-conscious market.

➢ **Eco systematic**

It is the vision of financing through multiple sources for facilitating nature friendly activities. It focuses on the customer ecosystem, analysis of ecosystem, ecosystem categorization, framework, learning, marketing strategy, and its structure, innovative ecosystem activities. Taxonomies based on considering those businesses connecting with the digital neighborhood that makes you connect online ecosystem. It helps in wicked problems of ecosystem to form a system of income inequality and tax avoidance ecosystem analysis comprehensive integrated, degradation and their implication. The rationalization of natural resources uses as well components of ecosystem of sustainable development. Recycling becomes more attractive of the today's scenario.

➢ **Ecopreneur**

Ecopreneurs are those who think the holistic approach for the development. It is the combination of social, environment and economy to perform corporate social responsibility and sustainability and retains the intellectual property rights. The challenges like energy efficiency, clean energy, climate change and their analytics with principals of ecological and environmental economics.

Ecopreneurs represent a groundbreaking approach to entrepreneurship, one that integrates social, environmental, and economic considerations into business practices. These innovators are dedicated to achieving corporate social responsibility and sustainability while also safeguarding intellectual property rights. By addressing critical challenges such as energy efficiency, clean energy, and climate change, ecopreneurs use principles of ecological and environmental economics to guide their business strategies. This holistic approach ensures that their operations not only contribute to economic growth but also promote environmental conservation and social well-being.

Defining ecopreneurship

Ecopreneurship is more than just a business model; it is a philosophy that redefines the role of businesses in society. Unlike traditional entrepreneurs who might prioritize profit above all else, ecopreneurs strive to balance profitability with environmental stewardship and social responsibility. They understand that long-term success depends on sustainable practices that preserve resources and benefit communities. This mindset drives them to develop innovative solutions that address pressing global issues while also ensuring economic viability.

Challenges and opportunities of ecopreneurs

One of the primary challenges faced by ecopreneurs is optimizing energy efficiency. Traditional energy sources, such as fossil fuels, have significant environmental impacts, including greenhouse gas emissions and resource depletion. Ecopreneurs seek to overcome these challenges by investing in clean energy technologies and promoting energy-efficient practices. This includes the development of renewable energy sources such as solar, wind, and bioenergy, which help reduce reliance on non-renewable resources and mitigate climate change.

Climate change itself poses a significant challenge for ecopreneurs. As global temperatures rise and weather patterns become more unpredictable, businesses must adapt to new environmental conditions. Ecopreneurs leverage advanced analytics and ecological economics to anticipate and respond to these changes. By integrating climate risk assessments into their business models, they can develop strategies that minimize their environmental footprint and enhance resilience to climate-related disruptions.

Ecopreneurs are businessmen who choose models which are earth-friendly. Ecopreneurs' businesses include the following:

- **Honey production:** Ecopreneur in the honey production industry focus on sustainable beekeeping practices that support biodiversity and ecosystem health. They ensure that their operations do not harm local flora and fauna and often employ organic methods to produce high-quality honey. By promoting pollinator health and supporting local ecosystems, these businesses contribute to environmental sustainability while offering a valuable product.
- **Organic based fertilizers:** Traditional fertilizers can have detrimental effects on soil health and water systems due to the runoff of chemicals. Ecopreneurs producing organic-based fertilizers use natural ingredients that enhance soil fertility without causing harm to the environment. These fertilizers support sustainable agriculture practices by reducing chemical inputs and promoting healthier ecosystems.
- **Herbs:** The cultivation of herbs by ecopreneurs often involves organic farming practices that minimize the use of synthetic pesticides and fertilizers. These businesses prioritize soil health, water conservation, and biodiversity, contributing to more sustainable food systems. By focusing on eco-friendly methods, herb producers support both environmental sustainability and the health of their consumers.
- **Essential oils:** Essential oil production can also align with sustainable practices. Ecopreneurs in this field often use organic farming methods and ensure that their extraction

processes are environmentally friendly. They may also engage in fair trade practices, supporting local communities and promoting ethical sourcing. Essential oils produced in this manner offer a sustainable alternative to synthetic fragrances and health products.

Conclusion and Suggestions

The modern approach suggested the alignment of private sector businesses to gain ecological modernization. The optimization of businesses leads to control pollution, better environment for work, eco-friendly goods and services, diffusion of new technology economizes the business and society both. The bottlenecks are to forecast the limitations to established corporation "going green". Many countries like United nation, Saudi Arabia and Kenya are accelerating their steps towards global land restoration and desertification process. CSR (Corporate Social Responsibility) is a new era emerging field in the area of research and the need of the hour. Government and institutions act as a legitimacy theory for new ventures. The question arises on the survival and performance of green entrepreneur which is lacking behind due to asymmetries of information and evaluation of framework. According to UN environment programme the investment should double by 2025 and by 2030 it should be triple in solutions which are nature-based businesses. In order to scale up the actions in environment positive investments there must be alignment of private sector.

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