



# GURUGRAM UNIVERSITY BUSINESS REVIEW (GUBR)

An International Bi-Annual Peer-Reviewed Journal

**GURUGRAM UNIVERSITY, GURUGRAM**

(A State Govt. University Established Under Haryana Act 17 of 2017)

VOLUME 3

ISSUE 2

JULY–DECEMBER 2023

- Benefits of Being Green: Advancements in the Field of Green Finance  
*Dr. Renuka Sharma*
- Towards Sustainable Marketing: Exploring Global Challenges in Green Marketing  
*Sakshi, Dr. Krishan Kumar Boora and Mansi*
- Extent and Determinants of Environmental Reporting and Disclosures:  
A Comprehensive Review  
*Dr. Amarjeet Kaur, Kanika Bhambri Bajaj and Kaina Bindra*
- Re-Imagining Sustainable Employer Value Proposition for Fast Food Chains  
*Dr. Rashmi, Dr. Sajni Devi and Vikas Yadav*
- Exploring the Potential of Augmented Reality and Virtual Reality on Indian  
Tourism Industry  
*Sarthak Chourasia, Dr. Lokeshver Singh Jodhana, Dr. B.L. Verma and Avishi Shrivastava*
- Green Finance for Sustainable Green Economic Growth in India: The Initiatives by Indian  
Financial System  
*Dr. Kalpana Hooda and Ambika Sangwan*
- Study the Effectiveness of Performance Management System in Context of Higher  
Educational Institution's Faculty  
*Jyoti and Dr. Farhat Mohsin*
- Green Finance: A Pillar of Sustainability in Indian Economy  
*Dr. Narpal Yadav, Dr. Joginder Singh and Dr. Ramniwas Sangwan*
- Gaining Popularity of the Ayurvedic Cuisine: Challenges, Solutions and Emerging Trends  
*Rekha Sharma, Debpriya De and Apurva Kapur*
- Business Responsibility and Sustainability Reporting and Its Relationship with Companies  
Performance: A Conceptual Framework and Review  
*Dr. Garima Dadhich and Priyanka Yadav*
- An Empirical Investigation of Impact of Green Human Resource Management Practices on  
Employee Behavior  
*Dr. Hawa Singh, Rachna Kumari and Dr. Bhanwar Singh*

Book Review

Call for Papers

Editorial Team Profiles

**Patron**  
**Prof. (Dr.) Dinesh Kumar**  
**Vice Chancellor, Gurugram University, Gurugram, Haryana, India**

**Editor-in-Chief**  
**Prof. (Dr.) Amarjeet Kaur**  
**Dean, Faculty of Commerce and Management, Gurugram University, Gurugram, Haryana, India**

**Editor**  
**Dr. Naveen Kumar**  
**Faculty, Department of Management, Gurugram University, Gurugram, Haryana, India**

**Associate Editors**  
**Dr. Hawa Singh**  
**Faculty, Department of Management, Gurugram University, Gurugram, Haryana, India**

**Dr. Ritu Yadav**  
**Faculty, Department of Management, Gurugram University, Gurugram, Haryana, India**

**Gurugram University Business Review is published Bi-Annually by Department of Management,  
Gurugram University, Gurugram © Copyright Gurugram University, Gurugram.**  
**The views expressed in this journal are those of the authors. No part of this publication may  
be reproduced in any form without the written permission of the publisher.**

**Gurugram University Business Review**  
**Gurugram University, Gurugram, Haryana, India**  
**Mayfield Garden, Sec 51, Gurugram, Haryana 122003**  
**E-mail: editor.gubr@gmail.com | Website: gurugramuniversity.ac.in | Ph. +91 8802485693**

**Published by**  
**Pen to Print Publishing, Ring Road, Naraina, New Delhi 110028**  
**E-mail: pen2print.publishing@gmail.com | Ph. +91 9868029307**

**For**  
**Department of Management**  
**Gurugram University, Gurugram, Haryana, India**  
**Mayfield Garden, Sec 51, Gurugram, Haryana 122018**



# Gurugram University Business Review (GUBR)

**GURUGRAM UNIVERSITY, GURUGRAM**

(A State Govt. University Established Under Haryana Act 17 of 2017)

Volume 3, Issue 2

ISSN: 2582-9718 (Online)

July–December 2023

## International Advisory Board Members

- **Prof. (Dr.) Jai Shankar Raman**, Director of International Programs, California State University, USA
- **Prof. (Dr.) Yamen Koubaa**, Academic Director, EM Normandie Business School, France
- **Prof. (Dr.) Csaba Moldicz**, Head of Research, Oriental Business and Innovation Center, Budapest Business School, Hungary
- **Prof. (Dr.) James Brodzinski**, Former Dean, CoB & Consultant, Valparaiso University, USA
- **Prof. (Dr.) Elaine Crable**, Professor Business Analytics/Information Systems, Co-Director International Business, Xavier University, USA
- **Prof. (Dr.) Amit Sharma**, Vice Dean, College of International Business, Zhejiang Yuexiu University of Foreign Languages, China
- **Prof. (Dr.) Sanjay**, Richard E. Meier Professor of Management, Valparaiso University, USA
- **Prof. (Dr.) Sunil Sahadev**, Professor of Marketing and Responsible Enterprise, University of Brighton, UK
- **Prof. (Dr.) Abdelkader SBIHI**, Professor of Logistics, SCM Analytics & Operations Management, Brest Business School, France
- **Prof. (Dr.) Rameshwar Dubey**, Reader-Operations Management, Liverpool Business School, Liverpool John Moores University, UK
- **Prof. (Dr.) Vishal Gupta**, Associate Professor, University of Alabama Tuscaloosa, Alabama, USA
- **Prof. (Dr.) Jiangxia (Renee) Liu**, Associate Professor, Valparaiso University, USA
- **Prof. (Dr.) Jatin Pancholi**, Faculty Member, University of Southampton, England, UK
- **Prof. (Dr.) Cungki Kusdarjito**, Lecturer, Janabadra University, Yogyakarta, Indonesia

## National Advisory Board Members

- **Prof. (Dr.) Raj Nehru**, Hon'ble Vice Chancellor, Skill Vishwakarma University, Haryana, India
- **Prof. (Dr.) R.K. Mittal**, Hon'ble Vice Chancellor, Chaudhary Bansi Lal University, Haryana, India
- **Dr. Anju Ahuja**, Pro-Vice Chancellor (Ex.), BMU, Rohtak, Haryana, India
- **Prof. (Dr.) D.P. Goyal**, Director, IIM Shillong, Meghalaya, India
- **Prof. (Dr.) Arnab Laha**, Professor, IIM Ahmedabad, Gujarat, India
- **Prof. (Dr.) Sanjeev Sharma**, Professor & Chairperson-MDP, FMS, DU, India
- **Group Captain Rajendra Kumar Joshi**, Retd., Senior Vice President-Strategy & Planning, Jio Platforms Ltd, Mumbai, India
- **Prof. (Dr.) N.K. Garg**, Professor, Department of Commerce, Maharshi Dayanand University, Haryana, India
- **Prof. (Dr.) Raj Kumar Sharma**, Controller of Examination, Guru Ghasidas Viswavidyalaya, Bilaspur, India
- **Prof. (Dr.) Sanjeev Sharma**, Professor, School of Management, Punjab University, India
- **Prof. (Dr.) Gurdip Singh Batra**, Dean Academic Affairs, Jagat Guru Nanak Dev Punjab State Open University, Patiala, Punjab, India
- **Prof. (Dr.) Deepak Tandon**, Professor, Finance & Accounting, IMI, New Delhi, India
- **Prof. (Dr.) Ajay Kumar Chauhan**, CEO, Research Sikhsa.com, New Delhi, India
- **Prof. (Dr.) Shalini Singh**, Professor, Department of Psychology, Maharshi Dayanand University, Rohtak, India
- **Dr. Shweta Mittal**, Post-Doctoral Scholar, IIT Delhi, India





## Contents

<i>Foreword</i>	v
<i>Editorial Note</i>	vii
1. Benefits of Being Green: Advancements in the Field of Green Finance <i>Dr. Renuka Sharma</i>	1
2. Towards Sustainable Marketing: Exploring Global Challenges in Green Marketing <i>Sakshi, Dr. Krishan Kumar Boora and Mansi</i>	10
3. Extent and Determinants of Environmental Reporting and Disclosures: A Comprehensive Review <i>Dr. Amarjeet Kaur, Kanika Bhambri Bajaj and Kaina Bindra</i>	21
4. Re-Imagining Sustainable Employer Value Proposition for Fast Food Chains <i>Dr. Rashmi, Dr. Sajni Devi and Vikas Yadav</i>	31
5. Exploring the Potential of Augmented Reality and Virtual Reality on Indian Tourism Industry <i>Sarthak Chourasia, Dr. Lokeshver Singh Jodhana, Dr. B.L. Verma and Avishi Shrivastava</i>	40
6. Green Finance for Sustainable Green Economic Growth in India: The Initiatives by Indian Financial System <i>Dr. Kalpana Hooda and Ambika Sangwan</i>	50
7. Study the Effectiveness of Performance Management System in Context of Higher Educational Institution's Faculty <i>Jyoti and Dr. Farhat Mohsin</i>	54
8. Green Finance: A Pillar of Sustainability in Indian Economy <i>Dr. Narpal Yadav, Dr. Joginder Singh and Dr. Ramniwas Sangwan</i>	61
9. Gaining Popularity of the Ayurvedic Cuisine: Challenges, Solutions and Emerging Trends <i>Rekha Sharma, Debpriya De and Apurva Kapur</i>	66
10. Business Responsibility and Sustainability Reporting and Its Relationship with Companies Performance: A Conceptual Framework and Review <i>Dr. Garima Dadhich and Priyanka Yadav</i>	75
11. An Empirical Investigation of Impact of Green Human Resource Management Practices on Employee Behavior <i>Dr. Hawa Singh, Rachna Kumari and Dr. Bhanwar Singh</i>	81
Book Review	87
Call for Papers	89
Editorial Team Profiles	93





## Foreword

It is my profound privilege to present to you yet another issue of an International peer-reviewed refereed Journal of repute; *Gurugram University Business Review (GUBR)* of the Department of Management, which is published Bi-Annually.

Undoubtedly, the growth of any discipline relies on the accumulation of knowledge. If we need to reach a critical mass, we need a richer flow of knowledge, and we need a progressive research program to support continuing growth of our field. In addition to achieving the necessary critical mass of researchers in all domains of management, we need avenues so that new theories, practices, stimulations can be proposed, analyzed, challenged, and confirmed or rejected. Such constraints inhibit the healthy development of the emerging areas for research and GUBR represents such an avenue for that purpose.

GUBR is a globally respected multidisciplinary international journal which provides an international forum for knowledge sharing and dissemination from researchers across different cultures. Articles written with an objective to advance knowledge creation and dissemination in fields such as strategy, international business, organizational behavior, accounting & finance, human psychology, resource management, entrepreneurship, innovation, machine learning, data analytics, information technology and critical management studies find its place in the GUBR.

In this pursuit, I extend my sincere gratefulness to Prof. (Dr.) Dinesh Kumar, the Hon'ble Vice Chancellor of the Gurugram University for his worthy direction and support and also for having such a strong trust in the capabilities of the editorial team. I also express my sincere thanks to Prof. S.C. Kundu, a self-acclaimed eminent researcher and Dean Academic Affairs at Gurugram University for his kind guidance.

I will like to put on record and thereby acknowledge the contribution made by the very dedicated editorial team and Dr. Naveen Kumar and Dr. Ritu Yadav in particular for their persistent efforts in bringing out the sixth issue of the Journal. I will hereby, urge the team to work hard to get the journal listed in citation databases of repute.

I owe my sincere thanks to all the contributors of this journal as the journal is made of anything but the articles by researchers. I feel privileged and humbled to be associated with GUBR which will constantly thrive upon high quality of research.

Happy Learning!!

**Prof. (Dr.) Amarjeet Kaur**  
*Editor-in-Chief*







## Editorial Note

Research is an ongoing journey from acquiring knowledge towards gaining wisdom. The growth of the society depends a lot on the revitalisation and discovery of unexplored facets by the researchers. In this context, we are pleased to introduce the second issue of Volume 3 of the *Gurugram University Business Review (GUBR)*, a renowned International bi-annual peer-reviewed journal brought forth by the esteemed Department of Management at Gurugram University, Gurugram.

The journal has been articulated and organized into two distinct sections: (i) Research papers and (ii) Book reviews. The primary focus of the first section is to publish both empirical and conceptual research articles pertaining to diverse aspects of business within a global perspective. The second section is dedicated to presenting book reviews, offering valuable insights and critiques.

In the opening section, the readers will find a compilation of 11 research articles covering a wide range of topics related to business and management. Moreover, the dedicated book review segment provides an in-depth analysis of the captivating book titled “Rich Dad Poor Dad”.

In the first publication, Dr. Renuka Sharma highlights the need of green finance for achieving the sustainable development goals. This research examines the value of making green investments in businesses and identifying the variables that influence decisions over how to use green investments. It focuses on various obstacles to overcome, including a lack of knowledge about green finance, inconsistent definitions, a lack of coordination between government policies on green financing, inconsistent laws, and a lack of profitable incentives for investors and financial institutions to make environmentally friendly mitigation investments. The findings show that green financing has the potential to have a significant influence on society, on the environment, and attempts to slow down climate change.

In the subsequent paper, authored by Ms. Sakshi, Dr. Krishan Kumar Boora, Ms. Mansi, the key challenges associated with global green marketing initiatives using extensive review of literature, case studies, and expert opinions have been identified and analyzed. The research outcome reveals that regulatory and policy hurdles, consumer perception and behavior, product development and innovation, supply chain management, communication and transparency, competitive landscape, measurement and evaluation are the key hurdles towards sustainable marketing.

The third paper, authored by Prof. (Dr.) Amarjeet Kaur, Ms. Kanika Bhambri Bajaj and Ms. Kaina Bindra, targets to study the level and extent of environment disclosures across the globe, and determines the factors influencing the level of such disclosures. Findings of the research reflect that the main factors influencing the environmental disclosures are size, profitability, environmental performance and corporate governance structure of the company.

The next research of Dr. Rashmi, Dr. Sajni Devi and Mr. Vikas Yadav focuses on developing the employer value proposition for crafting a sustainable employer brand in the labor-intensive food service industry, which faces challenges such as a shortage of skilled manpower and a high attrition rate. Through empirical investigation, this research identifies the eight value propositions namely Reputational Value (RV), Developmental Value (DevV), Interest Value (IntV), Diversity Value (DivV), Non-Monetary Benefits (NMB), Technology Driven Value (TDV), Social Value (SV), and Economic Value (EV) in the food service industry.

Fifth research by Mr. Sarthak Chourasia, Dr. Lokeshver Singh Jodhana, Dr. B.L. Verma and Ms. Avishi Shrivastava intends to explore the potential of augmented reality and virtual reality in the Indian Tourism Industry. By using both quantitative and qualitative research methods, research findings reveal that the integration of AR and VR significantly enhances tourist engagement, knowledge acquisition, and overall satisfaction with their travel experiences in India.

In the forthcoming paper, Dr. Kalpana Hooda and Ms. Ambika Sangwan present a comprehensive view of initiatives taken by the Indian Financial System for Green Finance and Sustainable Green Economic Growth. Although the government has taken various steps for sustainable growth, private sector participation for sustainability is in the nascent stage. Because of the limited public finance, private finance has immense importance in sustainable development. So, the development of green finance is essential.

In the seventh paper, Ms. Jyoti and Ms. Farhat Mohsin focus on studying the effectiveness of the performance management system for the academicians in higher education institutions. The study reveals that factors such as Weightage on research, Accessibility to work performance equipment, Institution's directness to impart scope for employee's skill and knowledge enhancement, Support from Top Management, Culture, Reward Management, Educational Quality influence the effectiveness of a Performance Management System adoption in an organization.

In the next paper, Dr. Narpal Yadav, Dr. Joginder Singh and Dr. Ramniwas Sangwan highlight the importance of green finance to increase funding for climate solutions in the hopes that the market will create "green jobs". This study considered green finance as an important component that changed the behavior from traditional form of financing to more environment friendly financing.

The forthcoming research of Rekha Sharma, Debpriya De and Apurva Kapur highlights the gaining popularity of the Ayurveda for wellness and promotes a harmonious balance between one's physical, mental, emotional, and spiritual well-being. This research comprehends the significance of Ayurvedic cuisine as well as the historical significance of Ayurveda as a healing diet and its benefits for health post Covid-19.

In the tenth paper, Dr. Garima Dadhich and Ms. Priyanka Yadav have developed a conceptual framework for business responsibility and sustainability reporting. This study seeks to determine how sustainability reporting affects business performance. Results are conflicting, inconsistent, and mixed; they range from a statistically significant association to a negative relationship.

The last paper by Dr. Hawa Singh, Ms. Rachna Kumari and Dr. Bhanwar Singh conducts an Empirical investigation on impact of green human resource management practices on employee behavior. Results of the study demonstrate the substantial impact of green HRM practices on employee behavior.

In the review section, Dr. Chand Prakash provided an engaging book review, discussing the book "Rich Dad Poor Dad" by Robert Kiyosaki. The review highlights the importance of financial education, assets versus liabilities, and the mindset required to attain financial independence. The message of the book is simple yet powerful: financial education is essential for achieving financial freedom, and traditional education often fails to provide it.

We extend our deepest gratitude to all the authors for their sincere contribution through the research articles. We would also like to express our sincere thanks to our Editor-in-Chief, Prof. (Dr.) Amarjeet Kaur for being the guiding light for putting up this issue of GUBR. We express a genuine and heartfelt thanks and appreciation to Prof. (Dr.) Dinesh Kumar, the Chief Patron and Vice Chancellor of Gurugram University, Gurugram, for being the torch bearer for carrying out various research activities at the university. We genuinely believe that this edition of GUBR will prove to be immensely valuable and thought – provoking for our readers.

**Dr. Naveen Kumar**  
*Editor*

**Dr. Hawa Singh**  
**Dr. Ritu Yadav**  
*Associate Editors*



## Benefits of Being Green

### *Advancements in the Field of Green Finance*

Dr. Renuka Sharma\*

---

#### ABSTRACT

*By generating environmental advantages, green financing is essential for promoting inclusive, robust, and cleaner economic growth. It aids in boosting the amount of money going to sustainable development initiatives from the governmental, corporate, and non-profit sectors. UN Environment has been striving to connect the financial systems of the nations to channel financial flows towards achieving the 2030 Sustainable Development Goals after realising the importance of Green Finance. It is significant because it represents the financial sector's first concerted effort to combine financial success with a favourable environmental effect. To attain sustainability, green financial solutions are being created suitably. Each organisation today places a strong emphasis on adopting green, sustainable, and responsible investments in addition to optimising profits and fostering environmental harmony given the growing warning signs regarding environmental concerns. Green finance must be used if the nation is to survive. It is often known as climate finance and requires a shift in emphasis and conducts from conventional forms of funding to more environmentally friendly financing. India needs a green finance plan if it is to meet its lofty objectives for sustainable development. It is necessary to persuade Indian, as well as global, financial institutions and corporations, to refocus on the topic of green finance. There have been several promises and difficulties on this front. Examining the value of making green investments inside businesses and identifying the variables that influence decisions over how to use green investments are the two main goals of this study. To analyse the evolution of green finance and identify the objectives that have so far been met as a result of the Indian government's effort, the research has focused on the most current trends, possibilities, obstacles, and different investment routes in India. The goal of the current study is to explore the need, constraints, and government actions for green financing using secondary data. The paper concludes with a few recommendations for firms that must switch from passive to active strategies concerning green investments in India. The findings show that green financing has the potential to have a significant influence on the society, on the environment, and attempts to slow down climate change. but there are numerous obstacles to overcome, including a lack of knowledge about green finance, inconsistent definitions, a lack of coordination between government policies on green financing, inconsistent laws, and a lack of profitable incentives for investors and financial institutions to make environmentally friendly mitigation investments. It also makes an attempt to provide new insights on green finance as an effective tool for sustainability by evaluating the potential and challenges for it in developing countries like India with the help of recent literature. The latest problems and difficulties were also emphasised in the study. The study has several limitations as well, and it is finished by offering ideas and implications for further research.*

**Keywords:** Green Finance, Sustainable Finance, Sustainable Development, Green Initiatives, Green Investments

---

#### INTRODUCTION

Financial and natural resources are crucial indicators that, contribute to substantially minimise environmental degradation and promote economic growth (Usman et al., 2022a; Usman et al., 2022b; Zhang C. et al., 2022). To promote sustainable development while assuring economic growth, green finance combines financial and natural resource considerations

and allocates financial resources to conserve energy and emission-reducing industrial activities (Criscuolo & Menon, 2015). The “green” characteristic mandates that financial resources be allocated to climate change, green buildings, clean energy, preservation of the environment, and corporate governance across every sector of the economy (Yuan & Gallagher, 2018, Urban & Wójcik, 2019). The subsection of sustainable finance

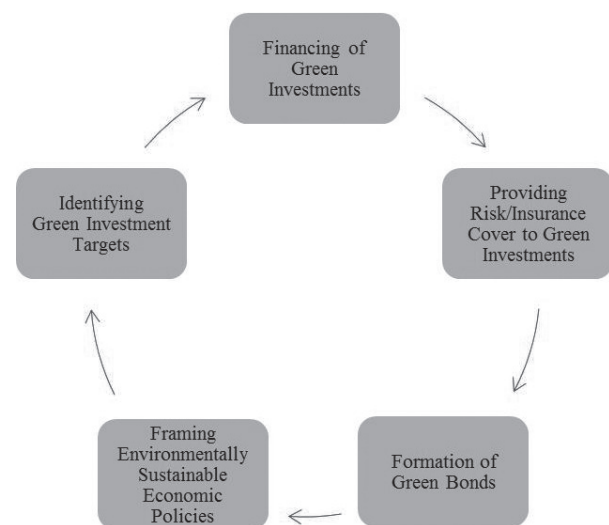
---

\* Assistant Professor, Amity University, Gurugram, Haryana. E-mail: renuka.sharma1907@gmail.com

known as “green finance”. It alludes to the growth in financial support for sustainable development initiatives coming from both the public and private sectors. Despite the numerous obstacles in its way, it is crucial to make progress since it helps the economy in accomplishing a goal that balances economic development with environmental advantages. A growing area of finance is green finance. According to UNEP, a sustainable financial system is one which involves the generation of values and aids in the transaction of financial assets in a way that real wealth can be used to meet the needs of an inclusive economy that is environmentally friendly over the long term is known as sustainable financial system. Green Finance Study Committee of G20 (2020) included the notion that green finance is funding that encourages the deployment of technologies to lessen pollution. According to the OECD (2020), it is the finance designed to achieve economic growth while also lowering pollution overall, increasing the effectiveness of waste management, and making better use of natural resources. Green finance sources, also known as green finance instruments, include things like carbon financing, green bonds, and green banks. India is still in the process of developing. The crucial role that green finance has committed to playing on the path to sustainability is not without its flaws and difficulties, which range from information asymmetry to the lack of precise definitions, the inadequate level of political commitment, and the legal and regulatory issues that have been a barrier ever since the initiative’s inception. The difficulty in emerging markets is not in acquiring capital; rather, it is in choosing appropriate projects and structuring the accompanying financing (Guild, 2019). These are serious worries about the future of green finance and the market, and the scientific community as a whole agrees that there is a mismatch between ambition and execution that might undo the previous efforts and advancement. Green financing is a strategy used by nations to promote economic growth that converges with actions that protect the environment through the creative expansion of the financial sector. The findings of the investigation also point to the need for an integrated strategy from the government, financial system, decision-makers, business sector, and non-governmental organisations to promote Green Finance to diversify markets and reduce risk (Bhatnagar and Sharma, 2022).

Mohd. and Kaushal (2018) paper titled “Green Finance: A Step Towards Sustainable Development”, India has

a huge potential to construct the green infrastructure required for green finance by removing obstacles and raising corporate citizens’ understanding of the need for sustainable growth. The application of green finance, which strives to achieve important sustainable development goals, can increase capital inflows from the public and non-public sectors (Ahmad et al., 2022). The financial and environmentally friendly industries are connected through green financing (Ngo et al., 2021). Additionally, it can control capital flows, aiding in the optimisation of industrial structures (Salazar, 1998). Sustainable development has led to the development of green financial products. These include financial services such as conducting venture investments, risk analysis, and greener project activities that support professional energy preservation, promote sustainable development, and protect the environment (Ding et al., 2022). Chami et al. (2002) revealed that the major role of green finance was to enhance the credibility of financial organisations and assists in risk management. The study’s major goal was to strengthen green funding across the country at the local level. The investigation involved data collection from readily accessible secondary sources. The study led to the conclusion that green finance became a major worldwide issue in terms of sustainable and financial development. This paper presents an ecosystem of green financial systems. It is a network of interconnected financial entities working together to develop a sustainable economy and address environmental issues at the same time. Figure 1 depicts the several interconnected financial components of the green financial system.



**Figure 1:** Green Financial System

Source: Malhotra & Thakur (2020), Evolution of Green Finance: A Bibliometric Approach



## LITERATURE REVIEW

European Parliament (2021) defined Green Finance as the gathering of money used to solve climatic and environmental challenges as well as the management of financial risk associated with the aforementioned issues. According to this distinction, green financing stands for “financing the green economy”, whereas green finance refers to “greening the financial system”. The EP also distinguishes between three types of financing: climate finance, which addresses the funding required for addressing climate change mitigation and adaptation; green finance, which incorporates climate finance while also addressing a variety of environmental goals; and sustainable finance, which is an evolution of the previous and incorporates the other ESG factors, namely, social and governance.

Bloomberg & Jun (2016) studied the importance of green finance and the necessity for private investment and described various strategies for motivating the private sector, such as offering a variety of green financial instruments and enacting regulatory incentives. Using all available public funding, establishing early warning and risk-sharing systems, establishing standards, and keeping watch on the execution of green project initiatives. In the context of some less developed Chinese cities that are anticipated to see significant increases in energy consumption, they highlighted the clean energy concept of Green Finance. On the contrary, management is overburdened with the duty of ensuring a sufficient energy supply, ensuring the preservation of the environment, and minimising energy costs. The author discusses the obstacles to clean energy, including the traditional finance model, a lack of standardisation that results in high trade costs, etc. He suggests that new green financial instruments be developed and that government investment must be supported.

Sudhalakshmi & Chinnadorai (2014), Lindenberg (2014) examined the idea of green finance and determine whether it might work in India. The author employed an experimental technique and a macro-level strategy. The authors claim that Green Finance is a crucial component of low-carbon green growth for a growing nation like India because it connects environmental betterment, economic growth, and the financial industry—all of which are critical for our nation. The Green Climate Fund, climate change adaptation, energy efficiency, and renewable energy sources are a few examples

of the financial system components that specifically deal with green investments that are aided by this funding.

Lindenberg (2014), Zadek and Flynn (2013), Höhne et al. (2012) described “green finance” as a broad phrase that encompasses climate financing but is not exclusively made up of it. It refers to the financial investments that go into various initiatives, goods, projects, and policies that support a sustainable economy. On the contrary, Bloomberg New Energy financing views green financing as a more all-encompassing variation of green investment that includes accounts for land acquisition and project preparation expenditures. Green finance includes not only the overall funding of public and private environmentally friendly investments (along with their preparatory and capital costs) that focus on environmentally friendly products and services or the prevention, minimising, the funding of public policies that promote the execution of initiatives and incentives that serve the adaptation and mitigation of environmental harm, as well as the compensation for environmental and climatic damage.

Hyun et al. (2020), Kanamura (2020), Gianfrate and Peri (2019), Hachenberg and Schiereck (2018) elucidated green bonds are more “financially convenient” than traditional bonds, with this difference playing a larger role in the primary market while also existing in the secondary market. They concluded that these tools can revolutionise the economy while not putting investors’ finances in danger. They further generalised green bonds did not exhibit an important yield difference when compared with synthetic traditional bonds but externally examined green bonds did, which supports the idea that the greenness standard of these instruments is a significant factor in their success and the growth of the market. Specifically focusing on financial and corporate bonds, green bonds traded at a tighter spread than conventional bonds of the same issuer. They link the price variance to the industry and Environmental, Social & Governance rating, answering that issue size, maturity, and currency had no discernible bearing on the situation. In recent years, green bond investments have outperformed conventional bond investments, although this advantage has waned with time.

Sharma and Roy (2021), Dhoot and Awate (2021), Tu et al., Tolliver et al. (2020) illustrated the state of green financial products in India today. The report emphasises

the potential for adding more eco-friendly financial products in India. According to the findings, Indian banks actively offer green financial products. By altering their procedures and adhering to international financial sustainability initiatives, stock exchanges in India are also seen integrating green financing. Dhoot examined the types of green finance goods and services available in the Indian market and analysed the developments in green finance in India. Websites of financial institutions and various reports were used to collect data for the study. It was noted that the Indian green financing business is still developing and has not been successful in drawing a sufficient number of investors. The success of financial instruments is being seriously hampered by present market practices and market-monitoring legislation. Tooliver suggested that specialised financial products, such as green bonds, loans, or funds, will be essential to finance the necessary policies, projects, and investments and to contribute to a more environmentally friendly economy to support the transition to a low- or zero-carbon economy.

### **Why Green Finance is Important**

Ozili (2022a), Barber et al. (2021), Li et al. (2021), He et al. (2020), Wang and Wang (2020), Sachs et al. (2019a), Reboredo (2018), Tang and Zhang (2020). Given its stated benefits, green funding is important. Green financing over the long run promotes the growth of smart cities. It encourages inclusive economic growth. Investments in green initiatives can lower carbon emission levels in the short- and long-term. Institutional shareholders engaged in impact investing will gain from green finance. Corporate and treasury market investors can benefit from green financing diversification effects. An increase in green financing may result in less money being allocated to climate- and environment-damaging fossil fuel operations.

### **Green Finance Products and Instruments**

Li et al. (2021) stated that if a traditional financial product, service, or piece of equipment is utilised to raise money for investments that support the environment it becomes a part of green initiatives. Some examples include a low-interest loan provided to communities to help them plant trees, syndicated financing to fund international green initiatives, green mortgage loans, funding for solar energy, and clean-air vehicle loan products.

### **Promoters of Green Finance**

Ozili (2022b), Ozili, (2019), Oh and Kim (2018), Berensmann and Lindenberg (2016) emphasised that the main factors promoting the growth and development of green finance include banks, significant investors, research organisations, government organisations, central banks, financial regulators, international financial institutions, and universities and demonstrate the critical role that private companies like commercial banks and private equity funds play in advancing green financing.

### **Strategies for Increasing Green Financing and Investments**

Berensmann and Lindenberg (2016) offered a few tactics to increase the amount of private investment going for green activities and projects. One of them is creating a corporate climate that supports green finance. Developing standards and guidelines for disclosure that would promote the growth of green finance assets is just one of many. Others include providing financial and regulatory incentives to promote green financing and investments, fostering greater transparency and enhancing the coordination of current financial, environmental, and regulatory policies.

### **Using Technology to Advance Green Finance and Green Investment**

Nassiry (2018), Zhang et al. (2018) suggested that there are three key areas where Fintech can support green finance, they are:

1. blockchain applications for sustainable development;
2. blockchain use-cases for renewable energy, decentralised electricity markets, carbon credits, and climate finance; and
3. financial instrument innovation, such as green bonds. In order to accomplish sustainable growth and environmental goals, the government should provide a friendly regulatory framework that allows blockchain and other cutting-edge technology to supplement existing institutional structures.

### **The Role of Regulatory Agencies and Institutions**

Volz (2017) stated the contribution of central banks to the financial system. Central banks may employ a variety of tools and policy instruments to make the financial sector more environmentally friendly. Some potential

tools that central banks might use include the discount policy, reserve requirements, capital requirements, open market operations, foreign exchange intervention, macroprudential policies, risk guidance, central bank communication, and international cooperation among central banks.

## METHODOLOGY

This research is descriptive in nature and is based on secondary data collected from several government papers released by the Indian government as well as other publications from banks and organisations from the public and private sectors of India. Various research papers, journals, magazines were also used to collect the data.

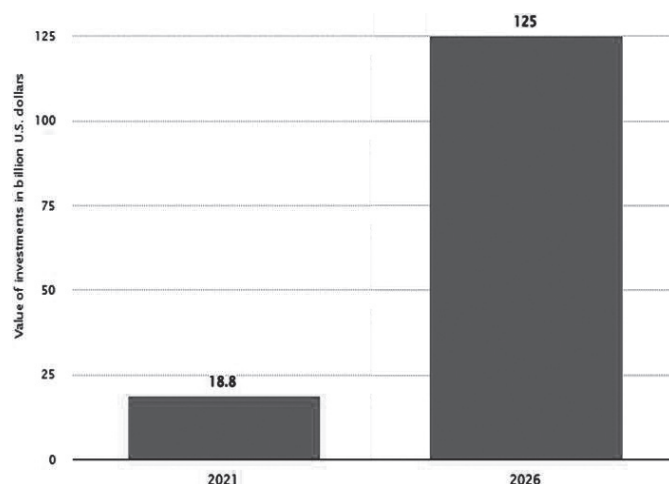
## SOURCES OF GREEN FINANCE

- **Green Bonds:** It is a fixed green tool that is raised for sustainable or green activities. They are also known as “climate bonds” at times. Their issuers include banks, governments, and international financial institutions in addition to businesses. Tax exemptions, tax credits, and other tax advantages could be included in them. The World Bank is the largest issuer of green bonds, having sold about \$14.4 billion worth of bonds between 2008 and 2020. (Bezpalnyi, 2018). The global market for “green” bonds is expanding quickly. Numerous renewable energy projects have been started in certain European countries, the United States of America, and China thanks to “green bond” emissions. Although the Ukrainian market for “green” bonds is still in its infancy, it has a great deal of adoption potential and might eventually provide funding for national clean energy efforts (Cheberyako and Gnatyuk, 2019).
- **Sustainable Equity:** Both companies and homeowners can profit from this kind of financing. The most typical sort of illustration for this is solar power. You can get cash payments or tax credits for installing solar panels on your house in exchange for the energy they produce. This option has the advantage of being reliable and guaranteed for 20 years.
- **Green Credit Cards:** Waste Management uses green credit cards to fuel its green financing, and for every dollar spent with Waste Management, these cards also offer additional benefits for green financing. This choice could be worthwhile to consider if you invest a significant amount of money in green initiatives each month.
- **SEITs (Solar Investment Trusts):** It is a tool created to make it easier for small-scale rooftop solar entrepreneurs to acquire funding. It resembles mutual funds quite a bit.
- **Sustainable Energy Bonds (SEBs):** It is a type of green financing that can help make the economy more sustainable by exposing investors to debt, providing enough returns, and providing standardised metrics for impact investors.
- **Green Securitization:** It is the small loans that can be bundled together, which also helps to draw in new investors. It’s important to highlight that the securitization of present loans enables banks and other big lenders to reorganise existing loan portfolios and redeploy resources to create new “green” loan portfolios. There are other structures that can be used, including secured bonds and asset-backed securities.
- **Green Leasing:** which is still in its early stages of development, encompasses leasing of assets, machinery, etc. for the completion of “green” investment projects. It applies to several categories: “green” mortgages, energy efficiency, “green” rental homes, and “green” automobile rentals.
- **Green Venture Capital:** Private equity investors pay more attention to environmental factors. Investment banks support enterprises that provide goods and services to the environment with their IPO entries. Through specialised private capital management divisions, banks can also provide an investment foundation for environmental initiatives.
- **Green Insurance:** Environmentally friendly insurance not only safeguards individuals in the event of harm or loss but also preserves our natural ecosystem. This might imply that a portion of the insurance premium is given to environmental groups to plant trees and other such things. It focuses on two areas: first, insurance products that charge varying rates depending on environmental factors; and second, insurance based on clean technology and emissions. Environmental insurance comes in a variety of forms: Green company, greenhouse, green life, and green health insurance are all environmentally friendly options.

## PROGRESS OF GREEN FINANCE IN INDIA

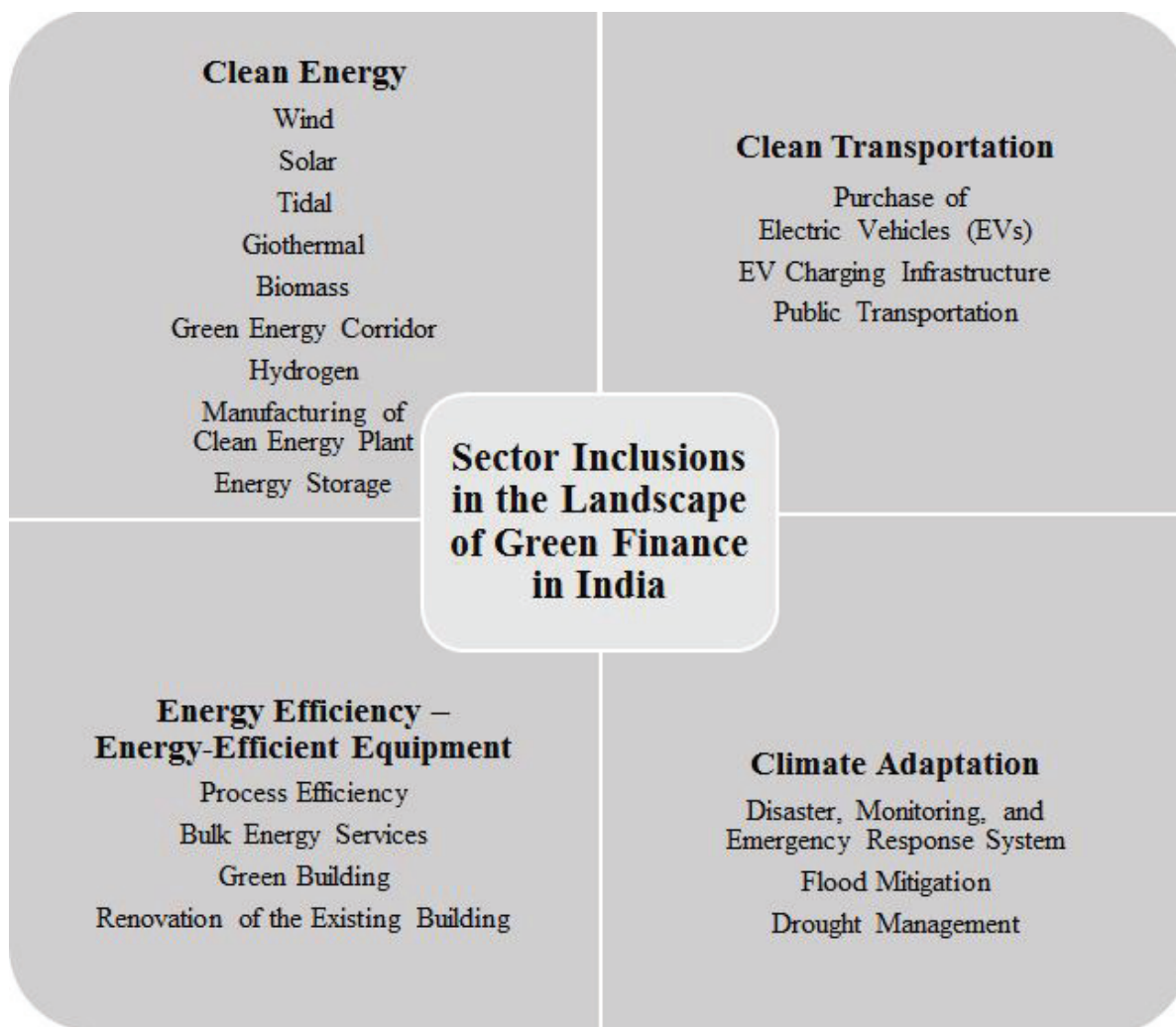
Green Finance and investments in sustainable businesses are beginning to appear promising. Several large investors are setting up billions of dollars for green finance after several years following COVID-19. This departure from fossil fuels is appreciated. India has become the second-largest emerging market for green finance investments at \$10.3 billion, which is justified given the financial risk produced by the country's influence on the environment and sustainability. According to experts, the nation needs more than 170 billion dollars to achieve the sustainability targets of the Paris Agreement.

The green banking industry now confronts several risks and constraints. Because funding brown assets generates income for them and will be hard to quit, there is a



**Figure 2:** Estimate Value of the Sustainable Investment by Asset under Management in India for 2021 and 2026 (in billion U.S. dollars)

Source: Statista 2023



**Figure 3:** Sector Inclusions in the Landscape of Green Finance in India

Source: Khanna, Purkayastha, Jain (2020). Landscape of Green Finance in India Supported by India's green investment flows in FY 2019-20 climate policy initiative.



transition risk for the bank and its assistance to move from traditional finance to financing green initiatives. In addition, there are difficulties in financing green bonds and attracting overseas investors. But organisations like HSBC and others are reversing this pattern by allocating funds specifically for supporting sustainable projects.

## CHALLENGES OF GREEN FINANCING IN INDIA

- In terms of green finance, there is no precise definition. All governmental organisations must agree on a precise definition of the phrase “green investment.”
- Green finance projects are subject to some technological hazards, such as weather dependence and energy storage issues with solar panels. As a result, it is challenging for financial institutions to assess the financial risk associated with these kinds of green initiatives. This is exacerbated by the problem of incomplete information.
- Due to the lack of transparency from many government organisations and businesses regarding their environmental performance and advancement, financial institutions find it extremely challenging to develop a finance structure, value their environmental issues and financial risk, and effectively manage it.
- Many initiatives for green infrastructure suffer from a maturity mismatch problem. A maturity mismatch exists because short- to medium-investments dominate the financial system. Since a large portion of a bank’s resources originates from deposits, this is considerably more obvious in banks. Also, because the majority of individuals who deposit money in banks want their money back within one to five years, deposits are typically utilised for short- to medium-term investments.
- There are currently no trustworthy frameworks for financial policy that encourage financial institutions to engage in green initiatives. This is made more challenging by the fact that many of these frameworks continue to give incentives for fossil fuels.
- Cost of borrowing: In India, the cost of green bond issuance is greater than that of other types of bonds. The biggest issue now is undoubtedly the high cost of borrowing. High-interest rates, short maturity

periods, and a lack of non-recourse debt are all factors that contribute to high debt costs.

- Market infrastructure development: Despite the enormous scale of the domestic marketplace, which has to be captured, green instruments have a significantly lower penetration thus far. The Indian green bond market is still in its infancy and has struggled to draw in a sufficient number of investors. Investors often choose for high-rated bonds or low-risk investing options. The bond market needs a suitable framework to make these bonds appealing to investors.
- The accessibility of financial resources is hampered by many hazards connected to green finance, such as those relating to technology, currency, and off-takers.
- Another obstacle to green finance is a lack of knowledge among investors about new financial tools.
- Funding for green projects is challenging to direct since there is no efficient framework for project evaluation of a sustainable project, especially in the case of early-stage innovation.

## CONCLUSION

India has been working to finance green projects for several years, and the financial system of the nation has undergone significant modifications to include ecologically friendly practices. Businesses are the engine of the economy, and using environmentally friendly practices in daily operations is crucial to being carbon neutral. Considering the alarming rise in pollution levels in India, it is essential to use green finance’s unexplored possibilities to fund green initiatives or investments. Blended financing is required to lower the overall cost of capital for private investors. Experts from KPMG said that to achieve carbon reduction targets and shift economies to a “green” model, unprecedented investment levels would be necessary. It’s unlikely that existing “green” investment funds and bonds in certain nations will be able to deliver this amount of finance. Therefore, it is vital to increase the financial system’s capacity to raise private funds for environmentally friendly investments in sustainable development. The Indian government should develop a concise green investment plan with a long-term, systemic perspective. To foster confidence and trust among investors, the regulatory policy should be more open and friendly. India ought to concentrate on both indigenous and foreign investment. The green

finance instruments must be created in a way that would appeal to both domestic and foreign investors. For the successful implementation of significant changes, the state's assistance must be strengthened. As simply public money cannot cover these expenses, it is increasingly evident that a combination of public and private sector investments will be required to enable the transition to a decarbonized future. Investing in education to develop a highly skilled workforce and a suitable professional environment in the area of "green" finance. If the nation wants to achieve this breakthrough and develop into a successful new, economically advantageous engine that supports a "green" economy, it requires highly qualified personnel.

## REFERENCES

- Barber, B.M., Morse, A., & Yasuda, A. (2021). Impact investing. *Journal of Financial Economics*, 139(1), 162–185.
- Berensmann, K., & Lindenberg, N. (2016). Green finance: Actors, challenges and policy recommendations. German Development Institute, Briefing Paper, 23. Bonn
- Berensmann, K., Volz, U., Bak, C., Bhattacharya, A., Huifang, T., Leipold, G., MacDonald, L., Schindler, H., Alloisio, & I., Yang, Q. (2017). Fostering sustainable global growth through green finance – What role for the G20?, [https://www.g20-insights.org/policy\\_briefs/fostering-sustainable-global-growth-green-finance-role-g20/](https://www.g20-insights.org/policy_briefs/fostering-sustainable-global-growth-green-finance-role-g20/)
- Bezpalyy, R. (2018). Green bonds as a tool for financing environmental projects. *Environment and development economics*, 24(6), 608–623.
- Bhatnagar, S., & Sharma, D. (2022). Green Investment in Renewable Energy Projects: A Path to Cleaner Revival in Post-pandemic India, *Vision: The Journal of Business Perceptive*.
- Bloomberg, M.R., & Jun, M. (2016). Green Finance for Low Carbon Cities. In *Clean Energy*.
- Cheberyako, O.V., Varnalii, Z.S., Borysenko, O.A., & Miedviedkova, N.S. (2021). "Green" finance as a modern tool for social and environmental security. In *IOP Conference Series: Earth and Environmental Science*, 915(1), 012017.
- Criscuolo, C., & Menon, C. (2015). Environmental Policies and Risk Finance in the Green Sector: Cross-Country Evidence, *Energy Policy*, 83, 38–56.
- Dhoot, P. & Awate, S. (2021). Green Financing: An emerging form of sustainable development in India, *Vidyabharati International Interdisciplinary Research Journal*, 12(2), 698–712.
- Gianfrate, G., & Peri, M. (2019). The green advantage: Exploring the convenience of issuing green bonds. *Journal of Cleaner Production*, 219, 127–135.
- Green Finance and Investment (n.d.). Retrieved April 2020, from OECD Library: [https://www.oecd-ilibrary.org/environment/green-finance-and-investment\\_24090344](https://www.oecd-ilibrary.org/environment/green-finance-and-investment_24090344)
- Guild, J. (2020). The political and institutional constraints on green finance in Indonesia. *Journal of Sustainable Finance and Investment*, 10(2), 157–170.
- Hachenberg, B., & Schiereck, D. (2018). Are green bonds priced differently from conventional bonds? *Journal of Asset Management*, 19(6), 371–383.
- He, Z., Liu, Z., Wu, H., Gu, X., Zhao, Y., & Yue, X. (2020). Research on the Impact of Green Finance and Fintech in Smart City. *Complexity*, 1–10.
- Höhne et al. (2012). Mapping of Green Finance Delivered by IDFC Members in 2011, *Ecofy sustainable energy for everyone*, 1–26.
- Hyun, S., Park, D., & Tian, S. (2020). The price of going green: the role of greenness in green bond markets. *Accounting & Finance*, 60(1), 73–95.
- Kanamura, T., Kanamura, & Takashi (2020). Are green bonds environmentally friendly and good performing assets? *Energy Economics*, 88(C).
- Khanna, Purkayastha, Jain (2020). Landscape of Green Finance in India Supported by India's green investment flows in FY 2019-20 climate policy initiative.
- Li, Z.Z., Li, R.Y.M., Malik, M.Y., Murshed, M., Khan, Z., & Umar, M. (2021). Determinants of carbon emission in China: how good is green investment? *Sustainable Production and Consumption*, 27, 392–401.
- Lindenberg, N. (2014). Public Instruments to Leverage Private Capital for Green Investments in Developing Countries. *German Development Institute, Discussion Paper*, 1–59.
- Mahmood, A., Zahoor, A., Bai, Y., Qiao, G., Popp, J., & Oláh, J. (2022). Financial inclusion, technological innovations, and environmental quality: Analyzing the role of green openness. *Frontiers in Environmental Science*, 10, 1–12.
- Malhotra & Thakur (2020). Evolution of Green Finance: A Bibliometric Approach, *Gedrag & Organisatie Review*, 33(2), 217–224.
- Mohd. & Kaushal (2018). Green Finance: A step towards sustainable development, *MUDRA – Journal of Finance and Accounting*, 5(1), 59–74.
- Nassiry, D. (2018). The role of fintech in unlocking green finance: Policy insights for developing countries. ADBI Working Paper, No. 883.
- Ngo, Thanh, Q., Anh Tran, H., & Tran. H. (2021). The impact of green finance and COVID-19 on economic development: Capital formation and educational

- expenditure of ASEAN economies. *China Finance Review International*, 12(2), 261–79.
- Oh, D., & Kim, S.H. (2018). Green Finance in the Republic of Korea: Barriers and Solutions (No. 897). ADBI Working Paper. Tokyo.
  - Ozili, P.K. (2022a). Theories of sustainable finance. *Managing Global Transitions*, 21(1), 5–22.
  - Ozili, P.K. (2022b). Policy perspectives in promoting green finance. Working Paper. Forthcoming.
  - Ralph, C., Thomas, F. Cosimano & Fullenkamp, C. (2002). Managing ethical risk: How investing in ethics adds value. *Journal of Banking & Finance*, 26(9), 1697–718.
  - Reboredo, J.C. (2018). Green bond and financial markets: Co-movement, diversification and price spillover effects. *Energy Economics*, 74(C), 38–50.
  - Sachs, J., Woo, W.T., Yoshino, N., & Taghizadeh-Hesary, F. (2019a). Importance of green finance for achieving sustainable development goals and energy security. *Handbook of green finance: Energy security and sustainable development*, 3–12.
  - Salazar, J. (1998). Environmental finance: Linking two worlds. Paper presented at *A Workshop on Financial Innovations for Biodiversity Bratislava, Bratislava, Slovakia*, 1, 2–18.
  - Sharma & Roy (2021). Green Financial Instruments in India: a study on its current status and future prospects, *International Journal of Business Innovation and Research*, 26(2).
  - Stefano, Spinaci (2021). Corporate sustainability due diligence, European Parliament, European Parliamentary Research Service.
  - Sudhalakshmi, K., & Chinnadorai, K. (2014). Concept of Green Finance in India. *International Journal of Social Science and Interdisciplinary Research*, 2(1), 96–99.
  - Tang, D.Y., & Zhang, Y. (2020). Do shareholders benefit from green bonds? *Journal of Corporate Finance*, 61(C), 101427.
  - Tolliver, C., Keeley, A.R., & Managi, S. (2020). Drivers of Green Bond Market Growth: The Importance of Nationally Determined Contributions to the Paris Agreement and Implications for Sustainability. *Journal of Cleaner Production*, 244, 118643.
  - Tu, C.A., Rasoulinezhad, E., & Sarker, T. (2020). Investigating solutions for the development of a green bond market: Evidence from analytic hierarchy process. *Finance Research Letters*, 34(C).
  - Urban, M., & Wójcik, D. (2019). Dirty Banking: Probing the Gap in Sustainable Finance. *Sustainability*, 11(6), 1745.
  - Usman, M., Balsalobre-Lorente, D., Jahanger, A., & Ahmad, P. (2022a). Pollution Concern during Globalization Mode in Financially Resource-Rich Countries: Do Financial Development, Natural Resources, and Renewable Energy Consumption Matter? *Renewable Energy*, 183(6), 90–102.
  - Usman, M., Jahanger, A., Makhdom, M.S.A., Balsalobre-Lorente, D., & Bashir, A. (2022b). How Do Financial Development, Energy Consumption, Natural Resources, and Globalization Affect Arctic Countries' Economic Growth and Environmental Quality? An Advanced Panel Data Simulation, *Energy*, 241(C), 122515.
  - Volz, U. (2017). On the role of central banks in enhancing green finance. UNEP Working Paper, Nairobi, Kenya.
  - Wang, X., & Wang, S. (2020). The Impact of Green Finance on Inclusive Economic Growth—Empirical Analysis Based on Spatial Panel. *Open Journal of Business and Management*, 8(05), 2093–2112.
  - Xue, D., Li, W., Huang, D., & Qin, X. (2022). Does Innovation Climate Help to Effectiveness of Green Finance Product R&D Team? The Mediating Role of Knowledge Sharing and Moderating Effect of Knowledge Heterogeneity, *Sustainability*, 14(11), 3926
  - Yuan, F., & Gallagher, K.P. (2018). Greening Development Lending in the Americas: Trends and Determinants. *Ecological Economics*, 154, 189–200.
  - Zadek, S., & C. Flynn (2013). South Originating Green Finance: Exploring the Potential, Geneva International Finance Dialogues, Geneva.
  - Zhang, C., Pan, D., Yang, M., & Pu, Z. (2022). A Lead-Lag Relationship and Forecast Research between China's Crude Oil Futures and Spot Markets. *Complexity in Financial Markets*, 6162671.
  - Zhang, X., Aranguiz, M., Xu, D., Zhang, X., & Xu, X. (2018). Utilizing blockchain for better enforcement of green finance law and regulations. In *Transforming Climate Finance and Green Investment with Blockchains*, 289–301, Academic Press.



# Towards Sustainable Marketing

## *Exploring Global Challenges in Green Marketing*

Sakshi\*, Dr. Krishan Kumar Boora\*\* and Mansi\*\*\*

---

### ABSTRACT

*This research paper delves into the challenges faced by organizations in implementing green marketing strategies on a global scale. As societies increasingly prioritize sustainability, businesses are adopting green marketing practices to meet consumer demands and contribute to environmental conservation. However, various obstacles hinder the successful execution of these strategies. Through an extensive review of literature, case studies, and expert opinions, this paper identifies and analyzes the key challenges associated with global green marketing initiatives. Regulatory and policy hurdles, consumer perception and behavior, product development and innovation, supply chain management, communication and transparency, competitive landscape, and measurement and evaluation are explored in detail. The paper also presents strategies and recommendations to overcome these challenges, empowering businesses to navigate the complex landscape of green marketing and foster sustainable development. This research contributes valuable insights to the field, enabling organizations to align their marketing efforts with the demand for environmentally responsible products and services, thus promoting a more sustainable future.*

**Keywords:** Sustainable Marketing, Global Challenges, Green Marketing, Sustainability, Environmental Impact

---

### INTRODUCTION

It's terrifying to read the following information from the *New York Times*: "Air pollution harms people, crops, and wildlife in the United States." Each year, tens of billions of dollars are spent. "More than a dozen other studies in the United States, Brazil, Europe, Mexico, South Korea, and Taiwan have found links between air pollutants and low birth weight, premature birth, stillbirth, and infant death." Because resources are limited and human desires are limitless, it is critical for marketers to use resources properly and without waste in order to achieve the organization's goal (Mishra & Sharma, 2014).

Green marketing, also known as sustainable marketing or eco-marketing, has gained significant attention in recent years due to the increasing global concern for environmental sustainability. The concept of green marketing emerged as a response to environmental issues such as climate change, pollution, and resource

depletion. It involves promoting products, services, and corporate practices that are environmentally friendly and socially responsible (Polonsky, 2011).

Consumers' growing awareness and concern for the environment have driven the significance of green marketing. As consumers become more environmentally conscious, they seek products and services that align with their values and contribute to a sustainable future (Kotler, Kartajaya, & Setiawan, 2016). Studies have shown that a significant portion of consumers are willing to pay a premium for environmentally friendly products (Porter & Kramer, 2011). This demand presents an opportunity for businesses to tap into the green market segment and gain a competitive advantage.

Furthermore, green marketing is crucial for addressing pressing environmental challenges. It encourages companies to adopt sustainable practices, reduce their carbon footprint, and conserve resources. By promoting environmentally friendly products and practices,

---

\* Research Scholar, Department of Management Studies, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonipat, Haryana, India. E-mail: sakshimalik169@gmail.com

\*\* Associate Professor, Department of Management Studies, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonipat, Haryana, India. E-mail: krishanboora@gmail.com

\*\*\* Student (M.Com), Department of Commerce, Delhi School of Economics, University of Delhi. E-mail: mansiboora2000@gmail.com



businesses can drive innovation and contribute to the overall transition towards a more sustainable economy (Peattie & Charter, 2013).

In addition to environmental benefits, green marketing can have a positive impact on a company's reputation and brand image. Consumers are increasingly favoring brands that demonstrate a commitment to sustainability, ethics, and social responsibility (Hartmann, Apaolaza-Ibañez, & Bigné, 2016). Effective communication of green initiatives can build trust, loyalty, and long-term relationships with environmentally conscious consumers (Polonsky, 2016).

However, the implementation of green marketing strategies is not without challenges. Organizations face hurdles such as regulatory complexities, changing consumer behaviors and attitudes, resource limitations, supply chain issues, communication and transparency demands, and the competitive landscape (Charter & Polonsky, 2001). Overcoming these challenges is critical for businesses to successfully integrate green marketing practices into their operations and achieve their sustainability goals.

## LITERATURE REVIEW

Green marketing refers to the development and promotion of products and services that are environmentally friendly throughout their life cycle (Polonsky, 2018). It encompasses strategies aimed at reducing negative environmental impacts, addressing consumer sustainability concerns, and meeting regulatory requirements. The significance of green marketing has grown as consumers demand sustainable products and governments implement environmental regulations (Kotler et al., 2020). Global sustainability challenges, such as climate change and resource depletion, highlight the urgent need for businesses to adopt green marketing strategies. Implementing green marketing initiatives offers several benefits to organizations. These include improved brand reputation, enhanced customer loyalty, increased market share, and reduced operational costs (Peattie, 2010). Green marketing also fosters innovation and positions businesses as socially responsible entities. Consumer behavior plays a vital role in the success of green marketing strategies. Factors influencing green purchasing decisions include environmental awareness, perceived product quality, price, and social influences (Vermeir & Verbeke, 2006). Organizations must understand consumer motivations and address

barriers to green consumption. Regulatory frameworks differ across countries and regions, posing challenges for global green marketing. Varied environmental standards, labeling requirements, and certifications necessitate adaptability and compliance by businesses (Kotler et al., 2020). Harmonization of regulations is critical for facilitating global green marketing efforts.

## STATISTICS RELATED TO GREEN MARKETING

### Consumer Demand

A study by Nielsen found that 73% of global consumers say they would definitely or probably change their consumption habits to reduce their environmental impact.

According to a survey by Deloitte, 42% of consumers in the United States actively seek out and buy sustainable products.

### Market Growth

The global market for green products and services is projected to reach \$11.5 trillion by 2023, according to a report by Zion Market Research.

The sustainable packaging market is expected to reach \$244.9 billion by 2025, growing at a CAGR of 7.9% from 2020 to 2025, as per a report by MarketsandMarkets.

### Corporate Initiatives

A survey by Cone Communications revealed that 87% of consumers would purchase a product because a company advocated for an issue they cared about.

Many companies are setting sustainability goals. For example, Walmart aims to achieve zero waste to landfill in its operations by 2025, while Google has pledged to operate on 100% renewable energy by 2030.

### Influencing Factors

Price remains a key factor for consumers when choosing sustainable products. In a survey conducted by Statista, 62% of respondents cited price as a significant obstacle to purchasing green products.

Trust and transparency are important to consumers. A survey by IBM found that 73% of consumers are willing to pay a higher price for a product if the company is transparent about its sustainability efforts.

## Consumer Behavior

A study published in the Journal of Advertising Research revealed that consumers are more likely to purchase products with specific environmental claims, such as “recyclable” or “made with renewable energy”.

Millennials and Gen Z consumers tend to prioritize sustainability. A study by Nielsen found that 73% of Millennials and 72% of Gen Z respondents are willing to pay more for sustainable products.

## CHALLENGES IN IMPLEMENTING GLOBAL GREEN MARKETING STRATEGIES

- **Lack of Consumer Awareness and Education:** Limited consumer knowledge about sustainability issues and green product attributes hampers the adoption of green products (Chen & Chang, 2013). Organizations must invest in consumer education campaigns to raise awareness and communicate the benefits of sustainable choices.
- **Consumer Skepticism and Greenwashing:** Consumer skepticism towards green claims and the prevalence of greenwashing undermine trust in green marketing efforts (Delmas & Burbano, 2011). To overcome skepticism, companies should ensure transparency and credibility in their environmental claims through third-party certifications and robust communication strategies.
- **Cross-Cultural Variations in Environmental Concerns:** Cultural values and norms influence consumer attitudes towards environmental issues (Chan & Lau, 2018). Organizations need to tailor their green marketing messages and strategies to align with diverse cultural perspectives and prioritize locally relevant sustainability concerns.
- **Inconsistent Global Regulatory Standards:** Divergent environmental regulations and standards across countries create complexities for businesses operating globally (Do Paço et al., 2017). Organizations must navigate the regulatory landscape, monitor changes, and ensure compliance to avoid legal and reputational risks.
- **Supply Chain Complexities and Green Sourcing:** Implementing sustainable practices across the supply chain presents challenges such as identifying environmentally friendly suppliers, ensuring ethical sourcing, and managing carbon emissions (Carter & Rogers, 2008). Collaboration with suppliers and the

adoption of green procurement policies are essential for addressing these challenges.

- **Communication and Messaging Strategies:** Effective communication of green initiatives requires clear and persuasive messaging that resonates with consumers (Kang & Hustvedt, 2014). Organizations should emphasize the environmental benefits of their products while avoiding complex jargon, thus enabling consumers to make informed green purchasing decisions.
- **Green Product Development and Innovation:** Developing sustainable products that meet consumer needs while minimizing environmental impacts is a critical challenge (Goworek et al., 2012). Investment in research and development, eco-design, and lifecycle assessments are essential for driving green product innovation.
- **Financial and Economic Considerations:** Implementing green marketing strategies may entail additional costs, such as investing in renewable energy or sustainable materials (Kotler et al., 2020). Organizations must consider the financial viability of green initiatives and explore cost-saving opportunities through resource efficiency and operational optimizations.
- **Competitor Analysis and Market Positioning:** Understanding competitors’ green marketing strategies and market positioning is crucial for differentiation and identifying opportunities (González-Benito & González-Benito, 2006). Organizations need to conduct thorough competitor analysis to develop unique value propositions and effectively position their green offerings.
- **Measurement and Evaluation of Green Marketing Initiatives:** Measuring the effectiveness and impact of green marketing initiatives is essential for continuous improvement (Sarkis et al., 2011). Organizations should establish performance metrics, conduct regular evaluations, and communicate the results internally and externally to stakeholders.

## CASE STUDIES FROM THE WORLD

### Case Study 1: Coca-Cola’s Sustainable Packaging Initiative

- **Introduction:** Coca-Cola, a leading global beverage company, has made significant efforts to address sustainability challenges through its sustainable packaging initiative. The company recognizes the

environmental impact of its packaging and has implemented various strategies to reduce waste, promote recycling, and develop more sustainable packaging materials.

- **Background:** Coca-Cola's sustainable packaging initiative aims to achieve three primary goals: reducing packaging, recycling packaging, and replenishing water resources (Coca-Cola, n.d.). The company acknowledges the need to minimize its environmental footprint and actively works towards sustainable packaging solutions.

### **Implementation**

- **Packaging Reduction:** Coca-Cola focuses on lightweighting its packaging to reduce material usage. Through innovations in bottle design and manufacturing processes, the company has reduced the weight of its plastic bottles while maintaining product integrity. This initiative has resulted in significant resource savings and reduced greenhouse gas emissions.
- **Recycling and Recovery:** Coca-Cola promotes the recycling and recovery of its packaging materials. The company collaborates with stakeholders across the value chain to improve recycling infrastructure and raise consumer awareness. Additionally, Coca-Cola invests in technologies to enhance the recyclability of its packaging, such as introducing recyclable closures and labels.
- **Sustainable Packaging Materials:** Coca-Cola explores the use of sustainable packaging materials to reduce its reliance on traditional plastics. The company has introduced PlantBottle, a packaging solution partially made from plant-based materials, contributing to a reduction in carbon emissions and non-renewable resource consumption.
- **Results and Impact:** Coca-Cola's sustainable packaging initiative has yielded significant results and positive environmental impacts. The company has achieved a considerable reduction in packaging material usage and has supported the recycling of billions of beverage containers worldwide. Moreover, the introduction of PlantBottle has showcased the potential for sustainable packaging alternatives.
- **Lessons Learned:** Coca-Cola's sustainable packaging initiative highlights the importance of collaboration and innovation in addressing global green marketing challenges. By engaging with

stakeholders, investing in research and development, and actively promoting recycling, the company has demonstrated its commitment to sustainable packaging and environmental responsibility.

### **Case Study 2: Patagonia's Environmental Activism**

- **Introduction:** Patagonia, an outdoor clothing and gear company, is renowned for its strong commitment to environmental sustainability and activism. The company has integrated its environmental values into its business model, demonstrating how a brand can effectively engage in green marketing and make a positive impact on global environmental challenges.
- **Background:** Founded in 1973, Patagonia has always placed a high emphasis on environmental stewardship. The company's mission is to build the best products without causing unnecessary harm to the environment, inspiring and implementing solutions to the environmental crisis (Patagonia, n.d.). Patagonia's environmental activism extends beyond its product offerings and marketing campaigns.

### **Environmental Activism Initiatives**

- **Worn Wear Program:** Patagonia's Worn Wear program promotes the repair, reuse, and recycling of its products. The company offers repair services to extend the life of its garments and encourages customers to buy used items through its online marketplace. By encouraging product longevity, Patagonia reduces waste and promotes a circular economy.
- **"Don't Buy This Jacket" Campaign:** In 2011, Patagonia launched a bold advertising campaign with the slogan "Don't Buy This Jacket". The campaign aimed to raise awareness about the environmental impact of excessive consumerism and the need for more responsible consumption. By encouraging customers to think twice before making a purchase, Patagonia aimed to reduce unnecessary consumption and promote mindful buying habits.
- **1% for the Planet:** Patagonia is a founding member of the 1% for the Planet initiative, committing to donate 1% of its sales to environmental organizations. This ongoing commitment has resulted in substantial financial support for various environmental causes worldwide, reinforcing the

company's dedication to addressing environmental challenges beyond its own operations.

- **The Footprint Chronicles:** Patagonia's Footprint Chronicles is an online platform that provides transparency into its supply chain. It allows customers to trace the environmental and social impacts associated with the production of Patagonia's products, fostering accountability and encouraging sustainable practices throughout the supply chain.
- **Results and Impact:** Patagonia's environmental activism initiatives have had a significant impact on promoting sustainable practices and raising awareness. The Worn Wear program has extended the life of thousands of products, reducing waste and resource consumption. The "Don't Buy This Jacket" campaign sparked conversations about responsible consumption, challenging the traditional notion of constant product replacement. Additionally, Patagonia's financial contributions through 1% for the Planet have supported numerous environmental organizations, furthering environmental causes globally.
- **Lessons Learned:** Patagonia's case demonstrates that a company's commitment to environmental activism can align with its business objectives and foster consumer loyalty. By integrating environmental values into its brand identity and engaging in impactful initiatives, Patagonia has effectively communicated its commitment to sustainability and inspired other companies to follow suit.

### Case Study 3: Unilever's Sustainable Living Plan

- **Introduction:** Unilever, a multinational consumer goods company, has developed the Sustainable Living Plan as a comprehensive framework to address global sustainability challenges. This case study explores how Unilever integrates sustainability into its business practices, supply chain, and product portfolio.
- **Background:** Unilever launched the Sustainable Living Plan in 2010 with the goal of decoupling its growth from environmental impact while increasing its positive social impact. The plan focuses on three key areas: improving health and well-being, reducing environmental footprint, and enhancing livelihoods (Unilever, n.d.). It sets ambitious targets to be achieved by 2030.

### Implementation

- **Sustainable Sourcing:** Unilever works closely with suppliers to ensure sustainable sourcing of raw materials. The company has committed to sourcing 100% of its agricultural raw materials sustainably and aims to eliminate deforestation from its supply chain. This involves collaboration with stakeholders and certification programs to promote responsible agricultural practices.
- **Environmental Impact Reduction:** Unilever strives to reduce its environmental footprint through various initiatives. This includes improving energy efficiency, reducing greenhouse gas emissions, and minimizing water usage in its manufacturing processes. The company also promotes sustainable packaging solutions, waste reduction, and recycling efforts.
- **Enhancing Livelihoods:** Unilever aims to enhance the livelihoods of people across its value chain. This involves initiatives such as promoting fair wages, providing training and skills development opportunities for small-scale farmers and suppliers, and empowering women through its programs.
- **Sustainable Product Innovation:** Unilever focuses on developing sustainable products that meet consumer needs while minimizing environmental impact. The company has introduced numerous eco-friendly product lines, such as concentrated detergents that require less packaging and water, as well as personal care products with reduced environmental footprints.
- **Results and Impact:** Unilever's Sustainable Living Plan has demonstrated significant results and positive impacts. The company has achieved notable milestones, including sourcing 77% of its agricultural raw materials sustainably, reducing CO2 emissions from its manufacturing operations, and positively impacting millions of lives through its livelihood programs.
- **Lessons Learned:** Unilever's Sustainable Living Plan exemplifies how a multinational corporation can integrate sustainability into its core business strategy. By setting ambitious targets, collaborating with stakeholders, and focusing on sustainable sourcing, environmental impact reduction, livelihood enhancement, and product innovation, Unilever showcases the potential for large-scale sustainable practices.



## CASE STUDIES FROM INDIA

### Case Study of Tata Motors

Tata Motors, one of India's largest automotive companies, has implemented several green marketing initiatives. Here are two case studies that highlight Tata Motors' green marketing practices:

#### *Tata Motors' Electric Vehicles*

Tata Motors has been actively promoting electric vehicles (EVs) as part of its green marketing strategy. One notable case is the Tata Tigor EV, an all-electric compact sedan. Tata Motors positioned the Tigor EV as an eco-friendly and sustainable alternative to traditional petrol or diesel-powered vehicles. They highlighted the zero-emission aspect of the car, emphasizing its positive impact on reducing air pollution and carbon footprint. Tata Motors targeted fleet operators, government agencies, and environmentally conscious consumers, showcasing the Tigor EV as a greener transportation solution.

#### *The Greenovation Campaign*

Tata Motors launched the Greenovation campaign to promote its commitment to sustainable mobility. The campaign aimed to raise awareness about Tata Motors' efforts in developing and manufacturing eco-friendly vehicles. It showcased various technologies and features incorporated into Tata Motors' vehicles, such as advanced fuel-efficient engines, lightweight materials, and hybrid powertrains. The Greenovation campaign highlighted Tata Motors' vision for a greener future and encouraged customers to choose their vehicles for their environmental benefits.

Tata Motors, an Indian automotive company, launched the Tata Nano, which is considered one of the most affordable cars in the world. To promote its eco-friendly features, Tata Motors emphasized the Nano's low carbon emissions and fuel efficiency. They marketed the Nano as an environmentally friendly option for budget-conscious consumers. This green marketing strategy helped Tata Motors attract environmentally conscious customers and create a positive brand image.

These case studies demonstrate Tata Motors' focus on promoting electric vehicles and sustainable mobility solutions through their green marketing initiatives. By emphasizing the environmental benefits of their vehicles and aligning their messaging with sustainability, Tata

Motors has positioned itself as a leading player in the green automotive sector in India.

### Case Study of ITC Limited

ITC Limited, a diversified conglomerate in India, has implemented various green marketing initiatives. Here is a case study that highlights ITC Limited's green marketing practices:

#### *ITC's e-Choupal Initiative*

The e-Choupal initiative by ITC Limited is a prime example of their green marketing efforts. The program aimed to empower rural farmers while promoting sustainable agricultural practices and environmentally friendly sourcing.

The e-Choupal initiative involved setting up internet kiosks in rural villages, providing farmers with access to real-time information on crop prices, weather forecasts, and best agricultural practices. Through these kiosks, farmers could directly connect with ITC's network of agricultural experts and access knowledge and resources that helped them make informed decisions.

The initiative focused on promoting sustainable farming practices and reducing the environmental impact of agricultural activities. It provided farmers with information and training on techniques such as organic farming, efficient water usage, soil conservation, and crop diversification. By adopting these practices, farmers could reduce their reliance on chemical fertilizers and pesticides, conserve water resources, and improve soil health.

ITC used green marketing strategies to communicate the environmental benefits of the e-Choupal initiative. They highlighted the reduction in chemical usage, water conservation, and overall sustainability of farming practices. ITC positioned itself as a responsible and environmentally conscious company that supported farmers in adopting eco-friendly agricultural methods.

Furthermore, ITC leveraged the e-Choupal initiative to source sustainably produced agricultural commodities for its various products, such as food, personal care, and paper. This enabled ITC to promote the traceability and sustainability of its products, appealing to consumers who prioritize environmentally friendly choices.

The e-Choupal initiative not only contributed to sustainable agriculture but also created a positive

brand image for ITC. It showcased the company's commitment to social and environmental responsibility while improving the livelihoods of rural farmers. The initiative also helped ITC establish stronger relationships with farmers, ensuring a sustainable supply chain for their products.

Overall, ITC's e-Choupal initiative serves as a successful case study of green marketing, demonstrating how a company can promote sustainable practices, empower communities, and build a strong brand image by integrating environmental considerations into their business strategy.

### **Case Study of Godrej Appliances**

Godrej Appliances, a leading appliance manufacturer in India, has implemented several green marketing initiatives. Here is a case study that highlights Godrej Appliances' green marketing practices:

#### ***Energy-Efficient Refrigerators***

Godrej Appliances has been a pioneer in promoting energy-efficient refrigerators in the Indian market. They introduced a range of refrigerators that were designed to consume less electricity while delivering optimal cooling performance.

Godrej Appliances focused on highlighting the energy-saving features of their refrigerators in their green marketing campaigns. They emphasized the use of advanced technologies such as inverter compressors, intelligent defrosting systems, and efficient insulation materials. These features resulted in significant energy savings and reduced carbon emissions.

To communicate the environmental benefits of their refrigerators, Godrej Appliances used eco-labeling and energy efficiency certifications. They prominently displayed energy ratings and certifications such as the Bureau of Energy Efficiency (BEE) star ratings on their products. This helped consumers identify and choose energy-efficient models that aligned with their sustainability goals.

In addition to their product features and certifications, Godrej Appliances engaged in consumer education campaigns to raise awareness about the importance of energy efficiency. They provided tips and resources on reducing energy consumption and adopting eco-friendly habits in daily life.

Godrej Appliances' green marketing efforts successfully positioned their refrigerators as environmentally friendly and energy-efficient choices in the market. By highlighting the energy-saving features and certifications, they catered to environmentally conscious consumers who prioritize sustainable and energy-efficient appliances.

Furthermore, Godrej Appliances extended their commitment to green practices beyond their products. They focused on implementing eco-friendly manufacturing processes and sustainable packaging solutions. For instance, they reduced the use of harmful chemicals in their manufacturing processes and introduced recyclable and eco-friendly packaging materials.

By incorporating green marketing practices into their strategies, Godrej Appliances not only contributed to reducing energy consumption and environmental impact but also enhanced their brand reputation. They established themselves as a responsible and sustainable brand, capturing the attention and loyalty of environmentally conscious consumers.

This case study illustrates how Godrej Appliances successfully integrated green marketing into their product development, communication strategies, and manufacturing processes. They effectively positioned their energy-efficient refrigerators as eco-friendly choices and showcased their commitment to sustainability throughout their operations.

### **Case Study of Hindustan Unilever Limited (HUL)**

Hindustan Unilever Limited (HUL), one of India's largest consumer goods companies, has implemented various green marketing initiatives. Here is a case study that highlights HUL's green marketing practices:

#### ***Project Shakti***

Project Shakti is a notable green marketing initiative by HUL that focuses on empowering rural women while promoting sustainable practices. The program aims to provide livelihood opportunities to women by training and equipping them to become rural entrepreneurs, distributing HUL's products in their communities.

Under Project Shakti, HUL identifies and trains women from rural areas to become "Shakti Ammas" or sales agents. These women are provided with micro-entrepreneurship training, knowledge about HUL's

products, and marketing support. They then sell HUL's products door-to-door in their communities, earning income and contributing to the rural economy.

One of the significant aspects of Project Shakti is its emphasis on sustainable practices. HUL trains the Shakti Ammas on various sustainable techniques, such as eco-friendly packaging, waste management, and conservation. They educate the sales agents and the communities about the importance of responsible consumption, water conservation, and hygiene practices.

HUL effectively communicates the sustainability aspects of Project Shakti through its green marketing efforts. They highlight the social and environmental impact of the initiative, showcasing the economic empowerment of women and the promotion of sustainable practices. HUL positions itself as a responsible company that actively engages in promoting social and environmental sustainability through its business activities.

Furthermore, HUL leverages the success of Project Shakti to market its products. The initiative enables HUL to reach rural consumers directly and provide them with sustainable and affordable products, such as personal care items and hygiene products. By integrating sustainable practices and community development into their marketing approach, HUL creates a positive brand image and fosters customer loyalty.

Project Shakti serves as a notable case study of green marketing for HUL, demonstrating how the company combines social empowerment, sustainable practices, and product marketing. The initiative not only supports rural communities and promotes sustainable behaviors but also strengthens HUL's market presence and reputation as a socially and environmentally responsible brand.

## OVERCOMING GLOBAL GREEN MARKETING CHALLENGES

- **Collaborative Partnerships and Stakeholder Engagement:** Collaborating with various stakeholders such as suppliers, NGOs, governments, and consumers is crucial for addressing global green marketing challenges. Building partnerships and engaging stakeholders can lead to shared resources, knowledge exchange, and collective efforts toward sustainability (Koç & Ceylan, 2019).
- **Education and Awareness Campaigns:** Investing in consumer education and awareness campaigns can help overcome the lack of consumer knowledge and awareness about sustainability issues. Informing consumers about the environmental benefits of green products and the importance of sustainable choices can drive behavioral change (Nguyen & Le, 2021).
- **Transparent Communication and Authenticity:** Transparency in green marketing communications is essential to build consumer trust and combat skepticism and greenwashing. Providing clear and honest information about a company's sustainability efforts and impacts helps establish authenticity and credibility (Delmas & Burbano, 2011).
- **Tailored Strategies for Different Cultures and Markets:** Recognizing cross-cultural variations in environmental concerns is crucial for global green marketing success. Tailoring marketing strategies to specific cultural contexts and local sustainability priorities ensures relevance and resonance with diverse consumer segments (Chan & Lau, 2018).
- **Compliance with Global Environmental Standards:** Adhering to global environmental standards and certifications helps businesses navigate inconsistent regulatory frameworks. Compliance ensures legal compliance, mitigates reputational risks, and enhances consumer confidence in green marketing claims (Chen & Chang, 2013).
- **Incorporating Sustainability throughout the Supply Chain:** Addressing supply chain complexities is vital for global green marketing. Businesses should promote sustainable sourcing practices, reduce carbon emissions, and engage suppliers in adopting environmentally friendly practices (Carter & Rogers, 2008).
- **Green Innovation and Product Development:** Investing in green innovation and product development helps overcome challenges associated with green product offerings. Companies should prioritize research and development efforts to create sustainable products that meet consumer needs and reduce environmental impacts (Goworek et al., 2012).
- **Financial Incentives and Investment:** Financial considerations often hinder the adoption of green marketing strategies. Governments and organizations should provide financial incentives, grants, and investment opportunities to support businesses in implementing sustainable practices.

and overcoming financial barriers (Kotler et al., 2020).

- **Competitive Analysis and Differentiation:** Conducting thorough competitor analysis helps identify opportunities for differentiation and competitive advantage. Analyzing competitors' green marketing strategies enables businesses to innovate, position themselves uniquely, and communicate their sustainability efforts effectively (González-Benito & González-Benito, 2006).
- **Performance Measurement and Reporting:** Establishing robust measurement systems and reporting frameworks is essential for evaluating the effectiveness and impact of green marketing initiatives. Regular assessment and transparent reporting enable organizations to track progress, identify areas for improvement, and communicate their sustainability achievements to stakeholders (Sarkis et al., 2011).

## CONCLUSION

The implementation of global green marketing strategies presents numerous challenges for businesses aiming to address sustainability concerns and meet consumer expectations. This research paper has provided a comprehensive analysis of the key challenges faced in global green marketing and offered recommendations for overcoming them.

Consumer awareness and education emerged as a significant challenge, highlighting the need for businesses to invest in consumer education campaigns to raise awareness about sustainability issues and the benefits of green products. Overcoming consumer skepticism and greenwashing requires transparent communication and authenticity in green marketing efforts.

Cross-cultural variations in environmental concerns emphasize the importance of tailoring strategies to specific cultures and markets. Adhering to global environmental standards and certifications ensures compliance and builds consumer trust. The complexities of supply chains necessitate collaboration and sustainability practices throughout the value chain.

Innovation in green product development, supported by financial incentives and investment, enables businesses to meet consumer demands for sustainable alternatives. Conducting competitive analysis and

differentiating through unique value propositions helps organizations position themselves effectively in the market.

Measurement, evaluation, and reporting are vital for tracking progress, identifying areas for improvement, and communicating sustainability achievements to stakeholders.

By addressing these challenges and implementing the recommended strategies, businesses can navigate the complexities of global green marketing and contribute to a more sustainable future. Successful implementation of global green marketing initiatives requires collaboration, stakeholder engagement, tailored strategies, compliance, innovation, and effective communication.

As the demand for sustainability continues to grow, organizations must embrace the challenges of global green marketing and view them as opportunities for differentiation, market leadership, and positive environmental impact.

## IMPLICATIONS

Here are some key implications of green marketing:

- **Business Opportunities:** Green marketing opens up new business opportunities for companies. By offering environmentally friendly products and services, businesses can tap into the growing demand for sustainable solutions. This can lead to increased market share, revenue growth, and competitive advantage. Green marketing allows businesses to differentiate themselves and appeal to environmentally conscious consumers.
- **Environmental Sustainability:** Green marketing plays a crucial role in promoting environmental sustainability. By promoting eco-friendly products, encouraging sustainable practices, and reducing the environmental impact of operations, companies contribute to a greener future. Green marketing can drive the adoption of sustainable technologies, encourage resource conservation, and reduce carbon emissions.
- **Consumer Awareness and Education:** Green marketing helps raise consumer awareness and educate them about the environmental impact of their purchasing decisions. It provides information about sustainable products, their benefits, and the importance of responsible consumption. Through



green marketing efforts, companies can empower consumers to make informed choices and contribute to environmental conservation.

- **Improved Corporate Reputation:** Implementing green marketing initiatives enhances a company's reputation and brand image. By demonstrating environmental responsibility and sustainability commitments, companies build trust and credibility among consumers, stakeholders, and the public. A positive corporate reputation can lead to increased customer loyalty, brand loyalty, and long-term business success.
- **Regulatory Compliance:** Green marketing encourages businesses to comply with environmental regulations and standards. By aligning marketing strategies with regulatory requirements, companies demonstrate their commitment to environmental responsibility. This not only helps avoid legal and reputational risks but also promotes a culture of compliance and ethical business practices.
- **Innovation and Product Development:** Green marketing stimulates innovation and encourages companies to develop environmentally friendly products and services. It drives research and development efforts toward finding sustainable solutions, improving resource efficiency, and reducing waste. By focusing on green marketing, companies become catalysts for technological advancements that benefit both the environment and society.
- **Stakeholder Engagement:** Green marketing provides a platform for companies to engage with stakeholders, including customers, employees, investors, and communities. By involving stakeholders in sustainability initiatives and seeking their input, companies can build stronger relationships and foster a sense of shared responsibility. Green marketing allows businesses to communicate their sustainability efforts, listen to feedback, and collaborate on sustainable solutions.

Overall, green marketing has implications for business growth, environmental sustainability, consumer education, corporate reputation, regulatory compliance, innovation, and stakeholder engagement. It is a powerful tool that can drive positive change, benefit the planet, and create long-term value for businesses and society.

## REFERENCES

- Carter, C.R., & Rogers, D.S. (2008). A framework of sustainable supply chain management: moving toward new theory. *International journal of physical distribution & logistics management*, 38(5), 360–387.
- Charter, M., & Polonsky, M.J. (2001). Green marketing: A global perspective. Routledge.
- Chen, Y.S., & Chang, C.H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. *Journal of business ethics*, 114, 489–500.
- Chin, C.H., Chin, C.L., & Wong, W.P.M. (2018). The implementation of green marketing tools in rural tourism: the readiness of tourists? *Journal of Hospitality Marketing & Management*, 27(3), 261–280.
- Coca-Cola (n.d.). Packaging and recycling. Retrieved from <https://www.coca-colacompany.com/topics/packaging-and-recycling>
- Delmas, M.A., & Burbano, V.C. (2011). The drivers of greenwashing. *California management review*, 54(1), 64–87.
- Diamandis, P.H., & Kotler, S. (2020). The future is faster than you think: How converging technologies are transforming business, industries, and our lives. Simon & Schuster.
- González-Benito, J., & González-Benito, Ó. (2006). A review of determinant factors of environmental proactivity. *Business Strategy and the environment*, 15(2), 87–102.
- Goworek, H., Fisher, T., Cooper, T., Woodward, S., & Hiller, A. (2012). The sustainable clothing market: an evaluation of potential strategies for UK retailers. *International journal of retail & distribution management*, 40(12), 935–955.
- Hartmann, P., Apaolaza-Ibáñez, V., & Bigné, E. (2016). Sustainable fashion consumption and the fast fashion conundrum: fashionable consumers and attitudes to sustainability in clothing choice. *International Journal of Consumer Studies*, 40(3), 294–302.
- Kang, J., & Hustvedt, G. (2014). Building trust between consumers and corporations: The role of consumer perceptions of transparency and social responsibility. *Journal of business ethics*, 125, 253–265.
- Koc, B., & Ceylan, M. (2013). Effects of climate change on rice production: The case of Turkey. *African Journal of Agricultural Research*, 8(23), 2903–2910.
- Kotler, P., Kartajaya, H., & Setiawan, I. (2016). Marketing 4.0: Moving from traditional to digital. John Wiley & Sons.
- Mishra, P., & Sharma, P. (2014). Green marketing: Challenges and opportunities for business. *BVIMR Management Edge*, 7(1).

- Paço, A., & Lavrador, T. (2017). Environmental knowledge and attitudes and behaviours towards energy consumption. *Journal of environmental management*, 197, 384–392.
- Patagonia. (n.d.). Our Mission. Retrieved from <https://www.patagonia.com/our-mission.html>
- Peattie, S., & Charter, M. (2013). Sustainability marketing: A global perspective. John Wiley & Sons.
- Polonsky, M.J. (2011). Transformative green marketing: Impediments and opportunities. *Journal of Business Research*, 64(12), 1311–1319.
- Polonsky, M.J. (2016). Green marketing management. Routledge.
- Porter, M.E., & Kramer, M.R. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.
- Sarkis, J., Zhu, Q., & Lai, K.H. (2011). An organizational theoretic review of green supply chain management literature. *International journal of production economics*, 130(1), 1–15.
- Unilever (n.d.). Our Sustainable Living Plan. Retrieved from <https://www.unilever.com/sustainable-living/our-strategy/>
- Van Le, Q., Nguyen, V.H., Nguyen, T.D., Sharma, A., Rahman, G., & Nguyen, D.L.T. (2021). Light-driven reduction of carbon dioxide: Altering the reaction pathways and designing photocatalysts toward value-added and renewable fuels. *Chemical Engineering Science*, 237, 116547.
- <https://www.hul.co.in/>
- <https://www.godrej.com/appliances>
- <https://www.tatamotors.com/>
- <https://www.itcportal.com/>



# Extent and Determinants of Environmental Reporting and Disclosures *A Comprehensive Review*

Dr. Amarjeet Kaur\*, Kanika Bhambri Bajaj\*\* and Kaina Bindra\*\*\*

---

## ABSTRACT

*This research paper attempts to present a narrative review of the extant literature present in the domain of Environmental reporting and disclosures. It aims to elaborate on the concept of environmental disclosures. This paper also targets to study the level and extent of these disclosures across the globe, and determine the factors influencing the level of such disclosures. To meet the aforesaid objectives, around 35 research articles from top reputed academic journals have been considered. An inclusion-exclusion criteria has been followed for selection of relevant articles. In-depth analysis of the subject reflects that environmental reporting and disclosures is a rich and fast changing phenomenon, although primarily unstructured till date. There has been a wide variation in the manner and extent of these environmental disclosures across countries, industries and companies. It used to be studied as a part of social disclosures/reporting till the last two decades, and notably research on this topic has been dominated by the developed nations. The major findings of the literature survey reflect that the main factors influencing the environmental disclosures are size, profitability, environmental performance and corporate governance structure of the company. The researchers have suggested a few significant areas for further research such as a comparative study showing inter-industry comparison, a longitudinal study describing Environmental reporting over a long period and a comprehensive study to explain the factors responsible for these disclosures.*

**Keywords:** Environmental disclosures, Sustainable reporting, Integrated Reporting, Legitimacy Theory

---

## INTRODUCTION

Environmental consciousness has increased manifold in the recent past. The rapid industrialisation although has led to significant economic growth but it has been causing a greater damage to the environment. (Chatterjee and Mir, 2008) have highlighted that there has been an increasing awareness about environment protection and sustainability in the Indian context since 1990s, after introduction of the Conservation, Pollution and Forestry Law. The individuals, corporates and economies in the larger perspective are expected to do their bit towards the restoration of environmental damage.

As the business organisations are held to be the major contributor to the environmental degeneration, they are expected to be more sensitive and responsible towards

environment than ever. The wealth maximisation principle is not just enough for the corporates to survive in the long run (Gray, 2006). There has been an ever-increasing pressure on the business organisations for being socially and environmentally accountable for their actions (Raman, 2006). Hence, for sustaining in the global scenario, it is imperative for the business organisations to adopt a balanced approach by synergising their economic objectives with their social and environmental goals. The corporates have to go for a holistic approach taking into consideration their economic, social and environmental objectives.

Moreover, in order to gain acceptance from the society, the corporations have to be transparent and communicate with these stakeholders regularly. One of the most important mediums through which these corporations keep the various interested parties informed is through

---

\* Professor & Dean, Faculty of Commerce & Management, Gurugram University, Gurugram

\*\* Associate Professor, Department of Commerce, Dyal Singh College, University of Delhi, Delhi

\*\*\* SWC, Calgary, Canada

their annual business reports. With the changing times, there has been a shift in the reporting pattern of the business organisations. The corporations are constantly monitored and are required to provide a lot more information than before. To add to this, they are expected not only to report their business operations but also their social and environmental actions and impacts (Dumay et al., 2016). This accountability towards environment has given way for a new domain of reporting, namely environmental reporting. Environmental Reporting is a step towards Integrated Reporting where the corporations are required to include environmental information along with the financial information.

Environmental reporting refers to the communication of information regarding the impact of actions taken by the company towards environmental damage, upliftment, policies designed to restore the environment, strategies adopted in the direction etc. It is considered to be a vital tool towards sustaining in the long run. Environmental reporting is essential for corporations, as it is considered to be an indicator for moral consciousness through disclosure on environmental issues. The main driving force behind corporations resorting to such reporting pattern are – improved public image, improved ability to raise funds both domestically and internationally, reduced legal interventions, etc. Environmental Reporting is considered to be a way to measure the environmental performance of the company which will help the relevant parties take more informed decisions.

This domain of Environmental reporting is recent and has gained importance in the last couple of decades. Till then, it used to be studied as a part of social reporting. However, though it is relevant and significant in today's scenario, it has not been developed or structured fully. As a result, there is a wide variation in the manner these environmental disclosures can be made. The information regarding the environmental impacts may be presented as a part of annual reports, an exclusive corporate environmental report may also be formulated, through an environmental statement or some videos on their corporate websites. Since these reporting practices are not yet mandatory in most countries, there is a lot of variation in the extent and direction of these disclosures in terms of economies, regions, industries and corporations.

The purpose of this paper is to review the extant literature available in the domain of environmental reporting. It also aims to develop a synthesis of the

articles considered during the process. The paper follows the following structure. The second section elaborates the objectives and detailed methodology used to frame the paper. The third section discusses the selected research articles in detail and aims to develop a synthesis giving an analysis of the chosen papers. The last section highlights the conclusion of the paper within the domain of environmental reporting and disclosures. It also develops the areas of further research in the area.

## **OBJECTIVES**

This review paper has been developed in order to meet the following objectives:

- To frame an understanding regarding the concept and rationale of Environmental Reporting and Disclosures.
- To summarise the present literature on the basis of extent and scope of Environmental disclosures
- To identify the significant factors influencing the extent of such disclosures.

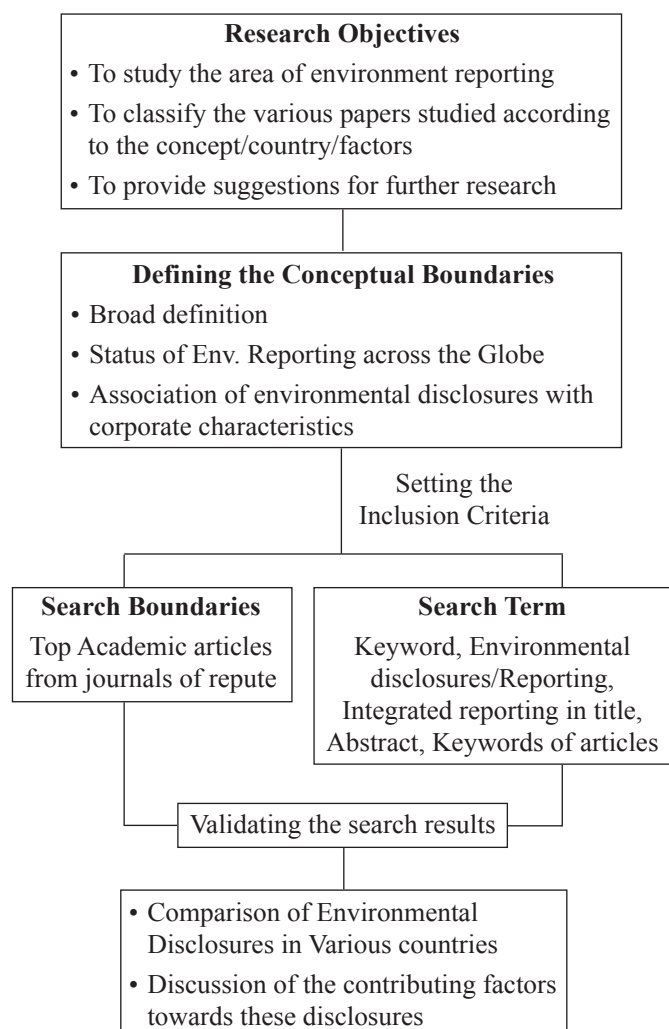
## **METHODOLOGY**

This paper attempts to develop a formal and structured approach to organise the literature studied in the domain of Environmental disclosures and reporting (Figure 1). Sincere attempts have been made to define and elaborate the concept of Environmental Disclosures. After referring to the vast literature in the area, prominent studies were identified which could significantly examine the area of Environmental disclosures and reporting in terms of extent, variation and corporate characteristics responsible for such disclosures. A well thought of inclusion-exclusion criteria has been adopted to choose the relevant articles for the study. In order to choose the articles for the review, studies from top reputed academic journals were considered which are recognised internationally. The journals addressed various interconnected disciplines like accounting, auditing, social responsibility and sustainability. Further, a systematic keyword search was conducted where a search for the term “Environmental/Social Reporting and Disclosures” or “Integrated Reporting” was made in the Title, abstract or keywords of the article.

Grey literature in the form of books, thesis and working papers has been completely excluded.

To record the data regarding the selected papers, a matrix has been devised in MS-Excel. The matrix





**Figure 1:** Overview of Review Paper

summarised all the articles by reporting the Title of the paper, the authors, name of the journal, Objectives of the study, Methodology adopted, the key findings and the significant limitations. In order to organise the review of articles, the paper has made use of tables to present articles concerning theoretical framework, extent of environmental reporting, factors affecting environmental disclosures.

## DISCUSSION

Environmental Disclosures and reporting have continued to catch the interest of academicians and researchers in the past few decades. A lot of research articles and publications can be found in this domain. Some researchers have tried to establish a conceptual framework in the topic taking some important theories as the base. While others have studied the extent of such disclosures made by the corporates in a particular area/country. There are still some more significant

studies which try to associate the various company factors with the level of these disclosures. This section provides the analysis of the research papers studied under the four subheads namely – Studies providing a conceptual framework, papers highlighting the extent of Environmental reporting, research papers focussing on different sectors of Indian economy and articles establishing a relationship between the level of disclosures and company specific factors.

There has been a sea change in the role of business and the expectations of society from it in the last few decades. The society demands business organisations to be socially and environmentally responsible, apart from being financially viable. This shift can be well explained by some prominent theories namely – The stakeholder theory, the legitimacy theory. A number of researchers have talked about all or some of these in order to provide a theoretical framework behind environmental reporting.

The basic driving force for the corporates to take up environmental reporting practices voluntarily has been significantly explained by the legitimacy theory. (Chen and Roberts, 2010; Pedron et al., 2020). As per the legitimacy theory, for getting legitimised, any corporation has to align its value system with the value system of the society (Nurhayati et al., 2015; Velte, 2021). This theory reasonably justifies the decision of the corporates to disclose environmentally sensitive information in the absence of any statutory laws/provisions regarding the same. Deegan (2002) also supports legitimacy theory to answer various research questions like the reporting pattern to be adopted by companies, need for Environmental and Social disclosures.

There is yet another theory which explains the phenomena of environment reporting really well. It is the stakeholder theory. This theory is assumed to be complementary to legitimacy theory in explaining the need for social and Environmental reporting (Velte, 2021). Due to the changing business conditions globally, the business organisations are held accountable not only towards shareholders, but towards the various stakeholders including customers, employees, government, society and the environment. Hence, the information disclosed in Integrated reports should address the diverse expectations of the various stakeholder groups (Velte, 2021).

**Table 1:** Studies Establishing a Theoretical Framework Behind Environmental Reporting

<i>Title of the Paper</i>	<i>Authors</i>	<i>Year of Publication</i>	<i>Journal</i>	<i>Publisher</i>	<i>Supporting Theories</i>	<i>Observations/Key Findings</i>
Accounting for the Environment: Towards a theoretical perspective for environmental accounting and reporting	Michael John Jonas	2010	Accounting Forum	Elsevier	Legitimacy theory, stakeholder theory	This paper has formulated an 8 premises based theoretical model to support environmental accounting and reporting. It tries to provide a theoretical justification for environmental accounting and reporting
Towards a more Coherent Understanding of the Organization-Society Relationship: A Theoretical Consideration for Social and Environmental Accounting Research	Jennifer C Chen and Robin W. Roberts	2010	Journal of Business Ethics	Springer	Legitimacy theory, Institutional theory, Resource Dependence and Stakeholder theory	This study explicitly attempts to associate legitimacy theory with the other three theories. Also, it highlights that from analysing the perspectives of various theories, it is possible to reach compatible interpretations of business social phenomena.
Introduction: The legitimising effect of social and environmental disclosures—a theoretical foundation	Craig Deegan	2002	Accounting, Auditing and Accountability Journal	Emerald	Legitimacy theory	This paper describes the existence of a social contract between business and society. It also attempts to answer recent research questions in the light of the aforesaid theory.
Environmental disclosure effects on returns and market value	Angela Patrícia, Bovolini Pedron, Clea Beatriz Macagnan, Davi Souza Simon and Daniel Francisco Vancin	2020	Environment, development and Sustainability	Springer	Legitimacy and Proprietary costs theory	The legitimacy obtained by the corporates by disclosing environmental information is duly appreciated by the society. On the contrary, preparing and publishing such information involves huge cost. So, the corporates aim to strike a balance between the two.
Integrated Reporting as an Academic Research Concept in the area of Business	Jose Navarrete-Oyarce, Juan Alejandro Gallegos, Hygo Moraga-Flores and Jose Luis Gallizo	2021	Sustainability	MDPI		This study presents a bibliometric analysis of the 268 research articles in the area of Integrated reporting published in Web of science database from 2011-2019.

Jonas (2010) has explained the need for Environmental disclosures by developing an eight-premise model. He has highlighted that Earth is at risk because of environmental degradation and very rationally convinced

that the organisations should take up environmental disclosures because of the stewardship function towards the stakeholders.

On the contrary, Patricia et al (2020) stress that there is an additional cost in preparing and publishing social and environmental information (Proprietary cost theory). Hence, the corporations need to adopt a balanced strategy to avail the maximum benefits.

The area of Environmental reporting has gained popularity in the past few decades. We could find studies related to various parts of the World. Numerous studies have discussed the status, level of disclosures and policies prevailing regarding Environmental reporting in their specific country/area. Gibbon and Joshi (1999) have explained the prevailing situation

in the Bahranian enterprises stating that the extent of environmental disclosures in the sample companies was almost negligible. The reasons responsible for the same were huge size of information, cost of converting into quantitative terms and lack of uniformity. In Rizk et al. (2008), the authors formulated a 34-item index to survey the extent of CSR disclosures in corporate entities covering nine industry segments. It was found that the level of information reflected by the Egyptian entities was quite low, although Industry membership came out to be a significant factor in determining these disclosures. Further, Islam & Dellaportas (2011)

**Table 2:** Studies Discussing the Extent and Level of Environmental Disclosures Across the Globe

<i>Title if the Paper</i>	<i>Name of the Author/Authors</i>	<i>Year of Publication</i>	<i>Publisher</i>	<i>Name of the Journal</i>	<i>Key Findings</i>
A Survey of environmental accounting and reporting in Bahrain	J.Gibbon and Lal Joshi	1999	Emerald	Journal of Applied Accounting Research	Although, the companies in Bahrain are sensitive towards environment, but very few are involved in Environmental reporting for external purposes. The main problems identified were the amount of information, cost and subjectivity involved.
Corporate social and environment reporting: a survey of disclosure practices in Egypt	Riham Rizk, Robert Dixon and Anne Woodhead	2008	Emerald Insight	Social Responsibility Journal	Significant variation was observed in the nine industry segments regarding social disclosures. The industry membership is a significant factor in relation to the type or category of disclosure.
Determinants of environmental accounting and reporting practices in Portuguese local entities	Veronica Paula Ribeiro, Cristina Aibar-Guzmán, Beatriz Aibar-Guzman, & Sonia Maria da Silva Monteiro	2016	Emerald Insight	Corporate Communications: An International Journal	Degree of Environmental accounting and reporting practices is low in Portugese entities. The significant factors which explain these vaiations in EARPs are accounting regulation and degree of development. Both the factors are positively are statistically associated.
Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions?	Denis Cormier , Michel Magnan & Barbara Van Velthoven	2005		European Accounting Review	Corporations in Germany are much more environmentally sensitive as compared to French companies. This is reflected in the increasing disclosures in the annual reports by the German corporations. The unstructured nature of these disclosures fails to make an impact on economic decisions.
Perceptions of corporate social and environmental accounting and reporting practices from accountants in Bangladesh	Muhammad Islam and Steven Dellaportas	2011	Emerald	Social Responsibility Journal	The accountants have positive attitude towards corporate social and environment accounting, although the present extent of disclosures is very less. The study also suggests that institutional influence like ICAB and International Influences are very important.

**Table 3:** Summary of Research Articles in the Indian Scenario Across Industries

<i>Title of Study</i>	<i>Name of Author/Authors</i>	<i>Year</i>	<i>Journal</i>	<i>Publisher</i>	<i>Industry Covered</i>	<i>Key Findings</i>
Environmental Reporting by Indian Corporations	A. Sahay	2004	Corporate Social Responsibility and Environmental Management	Wiley Interscience	Automobiles, Chemicals, Oil and Gas sector, Mining and Metallurgy, power, Pharmasueticals	The extent of environmental disclosures in India is extremely low as compared to other parts of the World. Except for a few big corporations like TISCO, it seems to be an eyewash, The main cause behind this is lack of sensitivity and low stakeholder pressure.
Corporate Social Disclosure Practices of Top Indian Software Firms	V. Murthy and I. Abeysekera	2008	Australasian Accounting Business and Finance Journal Volume 2, Issue 1		Software Industry	The Indian Software firms involve in social and environmental activities to become legitimate in the society. The research demonstrates that Indian Companies support staff training and career development for economic reasons. On the community front, their focus is on community planning,
Corporate Environmental Disclosure Practices in India	Kuhali Mukherjee, Mitali Sen and J.K. Pattanayak	2011	Journal of Applied Accounting Research, Volume 12 Issue 2	Emerald	Oil and Petrochemicals, Mining and Minerals, Steel and Cement	The study found significant variation in the Environmental Disclosures across industries and companies. The maximum disclosure across all industries has been seen in the theme- Conservation of Natural Resources. None of the Companies disclose any negative news.
The current status of environmental reporting by Indian Companies	B. Chatterjee and M.Z. Mir	2008	Managerial Auditing Journal	Emerald Insight	Industrial Sector	Out of 38 firms studied, 15 companies had not disclosed any information. The corporates have given more information on websites as compared to annual reports.
Examination of sustainability reporting practices in Indian banking sector	Kishore Kumar and Ajay Prakash	2019	Asian Journal of Sustainability and Social Responsibility	Springer	Banking Sector	Among the banking sector, Private sector banks have disclosed far less information than the public sector banks. The social aspect is given more importance than the environmental front. Most banks have given some qualitative information like paperless banking, installation of solar panels, etc.
Sustainability performance of the Indian cement industry	Debanjali Dasgupta and Sukanya Das	2021	Clean Technologies and Environmental Policy	Springer	Cement	This paper concludes that the Environmental Management Practices (EMP) of the Indian cement industry companies has improved over a period of 2010 to 2017.

studied the attitude and perception of the accountants in Bangladesh towards social and environmental reporting. A significant level of awareness was observed among the accountants, although the level of disclosures was found to be extremely low. A strong need of intervention by a regulatory body like ICAB was felt in order to bring uniformity in these disclosures. Ribeiro et al. (2016) have surveyed the status of Environmental disclosures in Portuguese enterprises. They have concluded that the extent of these disclosures is quite low. The level of these disclosures varies depending upon the accounting regulations.

The previous researchers have also reflected that there is an absolute dearth of studies on social or environmental reporting in the Indian context (Raman, 2006; Murthy,

2008; Oyarce et al., 2021). A handful of studies were found covering the spread of environmental information across Indian entities (Sahay, 2004). These papers have considered specific industries to study the level of Environmental and social disclosures in India. The most comprehensive analysis has been presented by Sahay (2004). The corporations of industrial sector have reflected very low disclosures with huge variation across companies (Sahay, 2004; Chatterjee and Mir, 2008 and Mukherjee et al., 2011). The majority of studies have used the technique of content analysis to gather data regarding environmental and social disclosures (Guthrie and Abeysekera, 2006). The examination of banking sector reflects that public sector banks disclose more than the private sector banks (Kumar and Prakash,

**Table 4:** Articles Focussing on the Determinants of Environmental Disclosures

<i>Title of Paper</i>	<i>Name of the Author/Authors</i>	<i>Year</i>	<i>Publisher</i>	<i>Name of the Journal</i>	<i>Variables/ Determinants Studies</i>	<i>Results</i>
Relationship between Environmental Disclosure and Corporate Characteristics: a study of large manufacturing companies in India	Shuchi Pahuja	2009	Emerald	Social Responsibility Journal	Sector, control, size, profitability, leverage and export	Variables such as size, profitability and environmental performance were significant in explaining variation in disclosures of the sample companies
A Study of Corporate Environmental Disclosure Practices of Companies Doing Business in India	Barnali Chaklader and Puja Aggarwal Gulati	2015	Sage	Global Business Review	Size, profitability, type of industry, leverage, MNC status and Environmental Certification	size and environment certification are statistically significant and positively associated
Firm Characteristics and Corporate Environmental Disclosure Practices in India	Kuhali Mukherjee, Mitali Sen and J.K. Pattanayak	2010		IUP Journal of Accounting Research and Audit Practices	Size, profitability, Leverage, Liquidity and effective tax rate.	Significant variables identified are effective tax rate, liquidity and leverage
Factors influencing environment disclosure quality and the moderating role of corporate governance	Badingatus Solikhah and Ukhti Maulina	2021	Taylor and Francis	Cogent Business and Management	Media coverage, financial performance and environmental awards. It also studies the moderating role of corporate governance principles in relation to these factors.	Environmental awards and media coverage positively impact the Environmental disclosures with a high correlation if CG principles are effectively implemented.



<i>Title of Paper</i>	<i>Name of the Author/Authors</i>	<i>Year</i>	<i>Publisher</i>	<i>Name of the Journal</i>	<i>Variables/ Determinants Studies</i>	<i>Results</i>
The Associations between Environmental Disclosures with Financial Performance, Environmental Performance, and Firm Value	Refandi Budi Deswanto and Sylvia Veronica Siregar	2018	Emerald Insight	Social Responsibility Journal	Financial Performance, environmental performance	A company with positive environmental performance is quite likely to disclose more environmental information. Whereas financial performance has no significant impact.
Factors determining social and environmental reporting by Indian textile and apparel firms: a test of legitimacy theory	Ratna nurhayati, Grantley Taylor, Rusmin Rusmin, Greg Tower, Bikram Chatterjee	2016	Emerald Insight	Social Responsibility Journal	Size of the firm, Brand Ownership, Board Independence and level of Ownership Concentration	Corporate Size, brand development and Audit Committee Size
Factors affecting corporate environmental disclosure in emerging markets: The role of corporate governance structure	Ali Meftah Gerged	2020	Wiley Online Journal	Business Strategy and the Environment	Board independence, Board size, CEO duality, Managerial ownership and ownership constitution	This study suggests that board size, board independence, CEO duality and foreign ownership have positive associations with CED. In contrast, managerial ownership, institutional ownership and ownership concentration are negatively associated with the disclosed amount of environmental information
Are Environmentally Innovative Companies Inclined towards Integrated Environmental Disclosure Policies?	Isabel-María García-Sánchez, Nicola Raimo, and Filippo Vitolla	2021	MDPI	Administrative Sciences	Environmental innovation	The study infers a positive relation between the environmental disclosures and the company's innovativeness towards environment. Further, Environmental performance acts as a mediator in the above relationship.

2019). Dasgupta and Das (2021) comment that the sustainability reporting pattern has shown considerable improvement over years.

There have been many researchers in the past who have tried to dig into the factors which have been responsible for the variation in these disclosures. The prominent corporate characteristics which have been studied across studies have been- size of the enterprise (Pahuja, 2009; Mukherjee et al., 2010; Chaklader and Gulati, 2015 and Nurhayati et al., 2016), liquidity position, industry affiliation (Pahuja, 2009) and Level of debt (Pahuja, 2009), Profitability (Pahuja, 2009; Mukherjee

et al., 2010; Chaklader and Gulati, 2015 and Solikhah and Maulina, 2021). Most of the studies observed that large sized firms are generally more involved with environmental reporting (Pahuja, 2009; Chaklader and Gulati, 2015 and Nurhayati et al., 2016). Another significant corporate feature which has a significant positive association with the level of environmental disclosures is the profitability of the enterprise (Pahuja, 2009; Mukherjee et al., 2010 and Chaklader & Gulati, 2015). Chaklader and Gulati (2015), Deswanto & Siregar (2018) and Solikhah and Maulina (2021) have established a significant relationship

between environmental reporting and Environmental Performance/certification. Further, there have been studies which associate the level of Environmental disclosures with the characteristics of the company's corporate governance structure like size of the board, composition of the board, Level of independence of the board (Nurhayati et al., 2016 and Gerged, 2020).

## CONCLUSION AND FURTHER SCOPE

The comprehensive analysis of the selected research papers reflects that the area of environmental reporting and disclosures is catching interest among the researchers. The rise in quest towards this domain can be attributed to the factors like growing environmental sensitivity, increasing significance of sustainable development and a move towards Integrated reporting. However, this area is not developed yet. Huge variation has been observed across economies, industries and companies' vis a vis these disclosures. In the absence of the strict regulations, the initiatives by the corporates seem to be limited to big organisations. There are various studies which have traced the prior literature with respect to social or Integrated reporting (Dumay et al., 2016; Oyarce et al., 2021). Most of the studies have pointed that the research is dominated by (more than 75% of the articles selected) the developed countries (Oyarce et al., 2021). However, a handful of studies could also be found in the Indian context across different industries. The primary factors which have a significantly positive relation with environmental reporting are size of the firm, Environmental performance and corporate governance structure of the firm.

However, there are enough unexplored dimensions in the domain of Environmental Reporting. The studies providing a comprehensive analysis of Environmental reporting are scarce. Also, there have been very few longitudinal studies showing the trend of these disclosures in a particular economy/industry. Further, we could hardly find a study providing inter-industry comparison of industries regarding Environmental disclosures. There is a definite need for a study analysing the variation in these disclosures across polluting and non-polluting industries. These areas can be taken up by future researches.

## REFERENCES

- Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: economic incentives, public pressures or

institutional conditions. *European accounting review*, 14(1), 3–39.

- Chaklader, B., & Gulati, P.A. (2015). A study of corporate environmental disclosure practices of companies doing business in India. *Global Business Review*, 16(2), 321–335.
- Chen C.J., & Roberts W.R. (2010). Towards a more Coherent Understanding of the Organization-Society Relationship: A Theoretical Consideration for Social and Environmental Accounting Research. *Journal of Business Ethics*, 97(4), 651–665.
- Chatterjee, B. & Mir, M.Z. (2008), The current status of Environmental Reporting by Indian Companies, *Managerial Auditing Journal*, 23(6), 609–629.
- Dasgupta, D., & Das, S. (2021). Sustainability performance of the Indian cement industry. *Clean Technologies and Environmental Policy*, 23(4), 1375–1383.
- Dumay, J., Christiana, B., & Paola, D. (2016). Integrated Reporting: A Structured Literature Review. *Accounting Forum*, 40(3), 166–185.
- Deswanto, R.B., & Siregar, S.V. (2018). The associations between environmental disclosures with financial performance, environmental performance, and firm value. *Social Responsibility Journal*.
- Deegan, C. (2002). Introduction: The legitimising effect of social and environmental disclosures – A theoretical foundation. *Accounting, auditing & accountability journal*, 15(3), 282–311.
- García-Sánchez, I.M., Raimo, N., & Vitolla, F. (2021). Are environmentally innovative companies inclined towards integrated environmental disclosure policies? *Administrative Sciences*, 11(1), 29.
- Gray, R. (2006). Social, environmental and sustainability reporting and organisational value creation? Whose value? Whose creation? *Accounting, Auditing & Accountability Journal*, 19(6), 793–819.
- Gibbon, J., & Lal Joshi, P. (1999). A survey of environmental accounting and reporting in Bahrain. *Journal of Applied Accounting Research*, 5(1), 4–36.
- Gupta, A.K. (2020). Effect of corporate environmental sustainability on dimensions of firm performance – Towards sustainable development: Evidence from India, *Journal of Cleaner Production*, Volume 253.
- Guthrie, J., & Abeysekera, I. (2006). Content analysis of social, environmental reporting: What is new? *Journal of Human Resource Costing & Accounting*.
- Gerged, A.M. (2021). Factors affecting corporate environmental disclosure in emerging markets: The role of corporate governance structures. *Business Strategy and the Environment*, 30(1), 609–629.

- Ghosh, S. (2019). Integrated reporting in India: Research findings and insights. In S.O. Idowu, & M.D. Baldo (Eds.), *Integrated reporting: Antecedents and perspectives for organizations and stakeholders*, 365–386. Cham: Springer.
- Islam, M., & Dellaportas, S. (2011). Perceptions of corporate social and environmental accounting and reporting practices from accountants in Bangladesh. *Social Responsibility Journal*, 7(4), 649–664.
- Jonas, M.J. (2010, June). Accounting for the environment: Towards a theoretical perspective for environmental accounting and reporting. *Accounting Forum*, 34(2), 123–138.
- Kumar, K., & Prakash, A. (2019). Examination of sustainability reporting practices in Indian banking sector. *Asian Journal of Sustainability and Social Responsibility*, 4(1), 1–16.
- Murthy, V. (2008). Corporate social disclosure practices of top software firms in India. *Australasian Accounting Business and Finance journal*, 2(1), 173–188.
- Mukherjee, K., Sen, M., & Pattanayak, J.K. (2010). Firm Characteristics and Corporate Environmental Disclosure Practices in India. *IUP Journal of Accounting Research & Audit Practices*, 9(4).
- Nurhayati, R., Taylor, G., Rusmin, R., Tower, G., & Chatterjee, B. (2016). Factors determining Social and Environmental reporting by Indian Textile and Apparel firms: A test of Legitimacy theory. *Social Responsibility Journal*, 12(1), 167–189.
- Navarrete-Oyarce, J., Gallegos, J.A., Moraga-Flores, H., & Gallizo, J.L. (2021). Integrated Reporting as an Academic Research Concept in the Area of Business, *Sustainability*, MDPI, 13, 7741.
- Pahuja, S. (2009). Relationship between environmental disclosures and corporate characteristics: a study of large manufacturing companies in India. *Social Responsibility Journal*, 5(2), 227–244.
- Pedron, A.P.B., Macagnan, C.B., Simon, D.S., & Vancin, D.F. (2021). Environmental disclosure effects on returns and market value. *Environment, Development and Sustainability*, 23(3), 4614–4633.
- Pramanik, A.K., Shil, N.C., & Das, B. (2007). Environmental accounting and reporting with special reference to India.
- Qiu, Y., Shaukat, A., & Tharyan, R. (2016). Environmental and social disclosures: Link with corporate financial performance. *The British Accounting Review*, 48(1), 102–116.
- Raman, S.R. (2006). Corporate social reporting in India – A view from the top. *Global Business Review*, 7(2), 313–324.
- Rizk, R., Dixon, R., & Woodhead, A. (2008). Corporate social and environmental reporting: A survey of disclosure practices in Egypt. *Social Responsibility Journal*, 4(3), 306–323.
- Ribeiro, V.P., Aibar-Guzmán, C., Aibar-Guzman, B., & da Silva Monteiro, S.M. (2016). Determinants of environmental accounting and reporting practices in Portuguese local entities. *Corporate Communications: An International Journal*, 21(3), 352–370.
- Rezaee, Z., Alipour, M., Faraji, O., Ghanbari, M., & Jamshidinavid, B. (2020). Environmental disclosure quality and risk: The moderating effect of corporate governance. *Sustainability Accounting, Management and Policy Journal*.
- Sahay, A. (2004). Environmental reporting by Indian corporations. *Corporate Social Responsibility and Environmental Management*, 11(1), 12–22.
- Sen M., Mukherjee, K., & Pattanayak, J.K. (2010). Corporate Environmental Disclosure Practices in India. *Journal of Applied Accounting Research*, 12(2), 139–156.
- Solikhah, B., & Maulina, U. (2021). Factors influencing environment disclosure quality and the moderating role of corporate governance. *Cogent Business & Management*, 8(1), 1876543.
- Velte, P. (2021). Archival research on integrated reporting: a systematic review of main drivers and the impact of integrated reporting on firm value. *Journal of Management and Governance*, 1–65.





# Re-Imagining Sustainable Employer Value Proposition for Fast Food Chains

Dr. Rashmi\*, Dr. Sajni Devi\*\* and Vikas Yadav\*\*\*

## ABSTRACT

*In the current competitive business environment, employers are increasingly concerned about the quality of their workforce, as skill shortages present a significant challenge for organizations aiming to thrive in the market. To tackle this issue, employer branding has emerged as a strategic tool, applying marketing and brand management concepts to human resource practices. However, these concepts require customized approaches in different industries. Therefore, this study focuses on developing the employer value proposition for crafting a sustainable employer brand in the labor-intensive food service industry, which faces challenges such as a shortage of skilled manpower and a high attrition rate of 35-40%, resulting in increased costs associated with managing the workforce. Thus, the present study aimed to address these challenges by investigating the employee value offerings that influence employer branding and evaluate their impact on building a strong employer brand. The study adopts an exploratory and descriptive research design to explore and understand these determinants. Primary data from 862 employees working in fast food chains is collected to analyze the variables related to employer branding. The collected data is then subjected to exploratory factor analysis using principal component analysis and varimax rotation methods. The exploratory factor analysis resulted in the extraction of eight value propositions namely Reputational Value (RV), Developmental Value (DevV), Interest Value (IntV), Diversity Value (DivV), Non-Monetary Benefits (NMB), Technology Driven Value (TDV), Social Value (SV), and Economic Value (EV). Collectively, these factors accounted for 63.496% of the variance in employer branding, signifying their significant contribution to the creation of a strong employer brand. The results of the study emphasize the importance of considering these employee value propositions when designing employer branding strategies to gain a competitive advantage in the human capital market.*

**Keywords:** Employer Brand, Employer Branding, Empbrand, Employee Value Proposition, EVP's, Variables, Fast Food Chain Employers

## INTRODUCTION

In the “war of talent”, businesses employ various strategies to attract talented individuals. The process of creating an employer brand typically begins internally and extends to external branding efforts. In today’s market, customers seek products and services that offer a favorable quality-price ratio, and brand influence plays a significant role in their purchasing decisions. Customers aim to minimize risks by relying on trusted brands. The situation is similar when it comes to employer branding, with the distinction that the target audience consists of both internal and external customers. In the case of

the employer brand, companies strive to differentiate themselves from competitors to become the preferred choice for current and prospective employees.

According to Johnson (2002)<sup>1</sup>, the skill shortage is a critical issue, and organizations that can position themselves as a talent magnet will gain a competitive advantage. A well-planned, differentiated, and effectively executed employer branding strategy can provide synergy to organizations, setting them apart from their competitors. Employer brand represents a combination of multiple qualities, often intangible, that make an organization distinct, promise a particular

\* Assistant Professor, Department of Management, Gurugram University, Gurugram

\*\* Assistant Professor, Department of Psychology, Government College, Dujana, Jhajjar

\*\*\* Assistant Professor, Department of Management, Gurugram University, Gurugram

employment experience, and appeal to those who are the best fit for the organization's culture. It involves positioning the organization as the preferred employer, a place where talented and skilled individuals aspire to work. In order to achieve this, companies focus on their employee value proposition, which encompasses the economic, functional, and psychological benefits they offer to their internal customers. These benefits include factors like physical working conditions, wages, fringe benefits, social opportunities, and prestige. Aligning the employee value proposition with the employee experience strengthens the employer brand. A strong employer brand simplifies the recruitment of suitable and talented employees and fosters employee loyalty. The current study focuses on employees in the Indian Food Services Industry, which is an important sector of the Indian economy. As a labor-intensive industry, it faces challenges such as a shortage of skilled and well-trained manpower, coupled with a high attrition rate of 35-40%. Managing manpower in this industry incurs significant costs. In light of these factors, there is a need for top management to devise turnaround strategies and establish themselves as the employer of choice, creating a strong employer brand. Therefore, this study explores the value proposition for crafting sustainable employer brand in the fast food industry.

## LITERATURE REVIEW

The concept of brand has been defined in various ways from different perspectives over the years. One common definition describes a brand as the means of differentiating a product from its competitors through the use of name, logo, design, and other visual elements (Heding et al., 2009)<sup>2</sup>. The American Marketing Association (2022)<sup>3</sup> defines a brand as a combination of name, term, sign, symbol, design, or a blend of these elements that identifies the products or services of a vendor or group of vendors. The purpose of branding is to distinguish offerings from competitors and create a brand image that resonates with consumers. This is achieved through the creation of a brand identity, which encompasses names, terms, signs, symbols, and designs. When consumers make purchasing decisions, they often rely on shortcuts and pay attention to the brand as a representation of a credible and trustworthy image. However, the term "employer brand" was introduced by Tim Ambler and Simon Barrow<sup>4</sup> in 1990. In their paper published in the "Journal of Brand Management" in December 1996, they aimed to extend marketing and brand management

concepts to human resource management. They defined employer brand as "a package of functional, economic, and psychological benefits offered by the employer," which encompasses the economic aspects such as salary and perks, functional elements like skill development and job-related knowledge, and psychological factors such as recognition and appreciation that employees expect from their employer.

Numerous authors have recognized the interconnection between employer branding and talent management. They argue that employer branding should be utilized as a strategic tool within talent management practices. The scope of employer branding encompasses aspects such as the employer value proposition and the cultural and reputational dimensions of a company. The employer value proposition refers to the unique services an employer offers to both the internal and external markets, which is highly relevant to talent and career management. Given the evolving demands of current and potential employees, employer branding becomes instrumental in attracting new talent by promoting a brand that emphasizes staff development and talent nurturing. The research findings and references to the employer brand definition were organized into five main categories. These categories include the work environment, economic benefits, work-life balance, career development opportunities, and social activities (Ada, N., Korolchuk, M., & Yuryk, I., 2023)<sup>5</sup>. However, Sandeepanie et al. (2022)<sup>6</sup> suggests that further research is needed to explore the relationship between talent management and employer branding. Many existing findings predominantly stem from a global context, and it is essential to acknowledge that the intensity of this relationship may vary across nations and cultures. Talent management strategies are influenced by contextual factors and cultural beliefs, making it crucial to delve deeper into this relationship.

In a study conducted by Kumar (2020)<sup>7</sup> various brand sustainability factors were examined to determine their importance and significance. The findings indicated that economic factors held greater significance compared to environmental, social value, developmental, and reputation factors. The study also reported that environmental factors exhibited the least significance in relation to brand sustainability, relative to the other factors considered. Various studies identified several key components of employer branding. These components included work-life balance, attractive salary and

benefits, job security, a pleasant work atmosphere, career progression opportunities, financial stability, engaging job content, a good reputation, contribution to society, and the utilization of the latest technologies (Randstad 2019; P Bhardwaj and Rashmi 2019)<sup>8,9</sup>. Further, it is also discovered that employees' social, interest, developmental, and economic values have a significant impact on the employer brand, with priority given in that order by (Mukesh Biswas and Damodar Suar, 2013; Rashmi & Rajkumar 2020)<sup>10,11</sup>. Furthermore, Roy (2008)<sup>12</sup> utilized the scale developed by Berthon et al. (2005)<sup>13</sup> to identify eight components of employer brand attractiveness specific to the Indian context. The study revealed that out of these eight dimensions, five were deemed particularly influential in Indian organizations. These dimensions included application value, interest, value, social value, and career opportunities. Further, "internal communication satisfaction" & "employee engagement" helps in determination of employer brand (Špoljarić, A., & Verčič, A.T., 2021)<sup>14</sup>. In the technological era, technological driven processes like use of Artificial Intelligence (AI) in the recruitment enhances the employer brand (Baratelli, G., & Colleoni, E., 2022)<sup>15</sup>.

**Table 1:** Summary of EVP's Mentioned in the Literature Review

<i>EVP's</i>	<i>Authors</i>
Interest Value	Berthon, Ewing and Hah (2005); Schlager et al. (2011); <sup>16</sup> Sivertzen, Nilsen and Olafsen (2013); <sup>17</sup> Rashmi & Rajkumar, 2020
Social Value	Berthon, Ewing and Hah (2005); Schlager et al. (2011); Sivertzen, Nilsen and Olafsen (2013); Kashyap & Verma, 2018; <sup>18</sup> Rashmi & Rajkumar, 2020
Economic Value	Berthon, Ewing and Hah (2005); Schlager et al. (2011); Sivertzen, Nilsen and Olafsen (2013); Özçelik, 2015; Tanwar & Prasad, 2016a; Rashmi & Rajkumar, 2020
Developmental Value	Berthon, Ewing and Hah (2005); Schlager et al. (2011); Maitri (2011); <sup>19</sup> Sivertzen, Nilsen and Olafsen (2013); Schlager et al., 2011; Tanwar & Prasad, 2016a; <sup>20</sup> Kashyap & Verma, 2018; <sup>21</sup> Rashmi & Rajkumar, 2020
Application Value	Berthon, Ewing and Hah (2005); Sivertzen, Nilsen and Olafsen (2013); Rashmi & Rajkumar, 2020

Reputation Value	Barrow (2003); Meyer et al., 2004; <sup>22</sup> Schlager et al. (2011); Maitri (2011); Dögl & Holtbrügge, 2014; <sup>23</sup> Sengupta et al., 2015; <sup>24</sup> Tanwar & Prasad, 2016b; <sup>25</sup> Slavkovic et al., 2018; <sup>26</sup> Rashmi & Rajkumar, 2020
Diversity Value	Saari & Judge, 2004; <sup>27</sup> Bjerke et al., 2007; <sup>28</sup> Schlager et al., 2011;; Tanwar & Prasad, 2016b; Rashmi & Rajkumar, 2020
Technological Value	Vries et al., 2012; <sup>29</sup> Nilsen and Olafsen (2013), Randstad Employer Branding reports for the year 2017, 2018, 2019; Rashmi & Rajkumar, 2020

## METHODOLOGY

This study, which combined exploratory and descriptive approaches, utilized a set of 40 linear variables, to collect responses from 862 employees working in fast food chains. The data was collected through a questionnaire to assess the employees' perspectives. The reliability of the questionnaire was measured using Cronbach's alpha, which indicated high internal consistency and reliability in determining employer branding (refer to the Table 2 for alpha values). A Cronbach's alpha value of 0.7 or above ensures the reliability and internal consistency of the construct (Hair et al., 2010)<sup>30</sup>. The linear variables served as a precursor for conducting an exploratory factor analysis, which aimed to uncover the underlying constructs or factors. Prior to the analysis, the data underwent statistical tests such as the Kaiser-Meyer-Olkin (KMO) and Bartlett's tests to ensure their suitability for factor analysis (please refer to Table 3 for test values). The exploratory factor analysis was conducted using Principal Component Analysis (PCA) and Varimax Rotation (VR) methods. This analysis examined the extent to which individual statements or variables loaded onto distinct factors or constructs based on their high intercorrelations. The main objective of the exploratory factor analysis technique was to discover ways to reduce the number of original variables into factors or composite dimensions without losing relevant information. The identified factors were labeled accordingly, and their composite reliability or construct reliability was measured using the Garver and Mentzer (1999)<sup>31</sup> formula. The results indicated a very high level of individual construct reliability, with a composite reliability value of 0.7 or more serving as indicators of good individual construct reliability (Netemeyer et al., 2003)<sup>32</sup> (refer to Table 1 for construct reliability values).

The aforementioned analyses were performed using the Software Package for Social Sciences (SPSS) version 20 (trial version) and Microsoft Excel (Microsoft Office 2010).

**Table 2:** Reliability and Validity Value

<i>Factor</i>	<i>Construct Items</i>	<i>Cronback's Alpha</i>	<i>Composite Reliability</i>
Reputational Value (RV)	6	0.907	0.930
Development Value (DevV)	7	0.883	0.849
Social Value (SV)	6	0.902	0.924
Non-Monetary Benefits (NMB)	4	0.881	0.908
Interest Value (IntV)	5	0.791	0.854
Diversity Value (DivV)	4	0.798	0.856
Economic Value (EV)	4	0.751	0.839
Technology Driven Value (TDV)	4	0.739	0.831

Source: Survey results

## ANALYSIS AND INTERPRETATION

**Table 3:** KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.753
Bartlett's Test of Sphericity	Approx. Chi-Square	18680.447
	df	780
	Sig.	0.000

Source: Researcher's Analysis

The KMO value displayed in Table 3, titled "KMO and Bartlett's Test", indicates a value of .753, suggesting that

the sample size is sufficient for applying exploratory factor analysis. Bartlett's Test of Sphericity was utilized to test the hypothesis that the variables under consideration are uncorrelated. This test is crucial because exploratory factor analysis requires that the variables exhibit correlations and not be represented by an identity matrix. The study did not accept the hypothesis, as the Chi-Square value for Bartlett's Test of Sphericity was very high, with a corresponding p-value of  $< 0.001$ . Therefore, it is concluded that there is an adequate level of correlation among all the variables for conducting factor analysis, with all 40 probabilities associated with the variables being less than 0.05. The observed significance level of .000 is sufficiently small to reject the hypothesis, indicating a strong relationship among all the variables (sample value  $.753 > 0.5$ ,  $p < .001$ , Edward-Hair, pp. 34–35). Furthermore, principal component factor analysis was applied to summarize the statements representing employer branding in the fast food industry. The aim was to determine the number of factors by considering the total variance and deriving factors that contain a small proportion of unique variables. An orthogonal approach was used to extract variance by considering the best linear contribution of each variable. The second factor is deemed the best linear aggregation of the variables if it is orthogonal to the first factor. This process continues until the total variance is extracted by the remaining factors.

The table labeled as "Total Variance Explained" (TVE), represented as Table 4, provides information on the eigenvalues associated with each linear factor before and after extraction, as well as before and after rotation. The TVE for each factor is indicated by its eigenvalue, which is expected to decrease in magnitude as we move

**Table 4:** Total Variance Explained

<i>Factors</i>	<i>Initial Eigenvalue</i>			<i>Extraction Sums of Squared Loadings</i>			<i>Rotation Sums of Squared Loadings</i>		
	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>
1	5.528	13.819	13.819	5.528	13.819	13.819	4.178	10.445	10.445
2	4.251	10.628	24.447	4.251	10.628	24.447	4.163	10.407	20.851
3.	3.583	8.957	33.404	3.583	8.957	33.404	4.097	10.241	31.092
4.	3.191	7.977	41.381	3.191	7.977	41.381	3.009	7.522	38.614
5.	2.532	6.331	47.712	2.532	6.331	47.712	2.775	6.938	45.552
6.	2.401	6.002	52.714	2.401	6.002	52.714	2.565	6.412	51.964
7.	2.148	5.369	59.083	2.148	5.369	59.083	2.318	5.795	57.759
8.	1.791	4.479	63.562	1.791	4.479	63.562	2.295	5.737	63.496

Source: Researcher's Analysis



from the first factor to the last. In this study, 40 linear variables representing employer branding (EmpBrand) were considered in the dataset for extracting a new set of factors. The selection of the factors to be retained for interpretation was based on their eigenvalues, which are calculated by squaring the loadings of all variables on that factor. Factors with eigenvalues greater than one were retained for exploring the attributes of employer branding.

Table 4 reveals that eight factors were retained for interpretation and variance extraction. The sub-columns in the table show the 40 individual variables present in the dataset before extraction. The “Initial Eigen-Values” column indicates that a few initial factors explain relatively higher variance (identified as factor 1), while the eigenvalues associated with subsequent factors decrease in the order of variance. The sub-column “% of variance” within the “Initial Eigen-Values” column presents the percentage of total variance accounted for by each respective factor. The “Cumulative %” sub-column in the same column represents the cumulative percentage of variance accounted for by the present factor and all preceding factors. The study explored eight factors that accounted for 63.496% of the variance. In other words,

these initial eight factors collectively explain 63.496% of the total variance. Designing and implementing an effective employer branding strategy can be achieved by considering these eight factors. The “Extraction Sums of Squared Loadings” column displays all factors with eigenvalues equal to or greater than one. There are eight factors with eigenvalues equal to or greater than one, and their corresponding eigenvalues are presented in this column. The eigenvalues remain nearly identical to the values before extraction, indicating that the discarded factors’ values have been disregarded. As a result, the table is empty after the eighth factor. The final section of the table, labeled as “Rotation Sums of Squared Loadings,” presents the eigenvalues of the factors after rotation. It demonstrates the distribution of statistical variance after the application of Varimax Rotation, which aims to reduce the number of variables with high loadings on a factor to enhance interpretability. This process redistributes the total amount of variance accounted for by the eight extracted factors.

Table 5, titled as “Classified Rotated Component Matrix”, represents the final outcome of the varimax rotation method. This method aims to maximize the summation of variance in the factor matrix loadings,

**Table 5:** Rotated Component Matrix<sup>a</sup> with EVP Labels

Factor	Variables	Component							
		1	2	3	4	5	6	7	8
RV	Employees convey positive image about the organization	.840							
	Ethics based governance of the organization	.840							
	Organization's country of origin	.836							
	Leading player in the market	.831							
	Well-known for good corporate social responsibility	.808							
	Positive image and reputation of the organization in general public	.753							
DevV	Training opportunities in the organization		.870						
	Opportunities to make use of knowledge, skills and creativity of employees		.801						
	Opportunities of continuous improvement through objective evaluation and constructive feedback about work and behavior		.800						
	Considered good for future employability		.769						
	Development opportunities to accept higher responsibilities/leadership role		.713						
	Autonomy and empowerment in performing assigned task/job		.683						
	Culture of mentor and coach approach for knowledge management		.679						



Factor	Variables	Component							
		1	2	3	4	5	6	7	8
SV	Supportive and encouraging colleagues			.888					
	Flexibility of workplace and in working hours			.855					
	Culture of promoting team spirit among employees			.837					
	Pleasant and friendly atmosphere in the organization			.832					
	Give importance to work-life balance culture			.774				.000	.000
	Offers homely working environment			.721					
NMB	Retirement benefits (gratuity, leave encashment, pension)				.870				
	Good policy on health and safety				.842				
	Takes care of well being and welfare of its employees				.835				
	Provide job security				.825				
IntV	Focus on high quality product and services					.751			
	Organization's presence in international/global market					.745			
	Innovative product and services					.732			
	Ability to differentiate itself from competitors					.727			
	Culture of promoting innovative idea					.715			
DivV	Employees initiatives and idea's are encouraged in the organization						.834		
	Opportunities of performing diversified assignment						.827		
	Culture of ethnic diversity						.717		
	Opportunities of global assignments						.708		
EV	Offers more basic salary than the industry average							.819	
	Social security benefits for its employees during service (PF, ESI, insurance, LTC, etc.)							.739	
	Performance linked financial incentives							.725	
	Offers an attractive overall compensation package							.723	
TDV	Organization's website is informative, attractive and interactive								.828
	Recruiting through social media								.722
	Technology enable recruitment process								.717
	Adopt novel practices for doing its business operation/ process								.702
Initial Eigenvalues		5.5	4.3	3.6	3.2	2.5	2.4	2.1	1.8
% of variance		13.8	10.6	9.0	8.0	6.3	6.0	5.4	4.5
Extraction method: Principal Component Analysis									
a. Rotation converged in 6 iterations.									

ensuring that the factor loadings range between +1 to -1 for easier interpretation of their association. The rotated factor loadings in the table indicate the correlation between variables and factors, with values ranging from -1 to +1.

In this study, eight factors were identified collectively accounting for 63.496% of the total variance using

the varimax rotation method. Factor 1, labeled as "Reputational Value," includes eight variables, with two variables, namely employees conveying a positive image about the organization and ethics-based governance of the organization, having the highest lambda value of .840 each. This factor explains 13.819% of the variance, with an eigenvalue of 5.528. This aligns with

the findings of previous studies such as Schlager et al. (2011) and REBR India (2019).

Factor 2, named “Development Value”, comprises variables related to training opportunities, continuous improvement, future employability, leadership roles, and knowledge management. This factor explains 10.628% of the variance, with an eigenvalue of 4.251. The study highlights the importance of addressing employee developmental needs in achieving the employer branding objective, which is consistent with the research conducted by Schlager et al. (2011), Biswas & Suar (2013), and REBR India (2019).

Factor 3, termed “Social Value”, includes variables related to supportive colleagues, workplace flexibility, team spirit, work-life balance, and a pleasant working atmosphere. These variables collectively communicate about the social welfare-related activities of the employer. This factor explains 8.957% of the variance, with an eigenvalue of 3.583. The study confirms the significance of social value attributes in attracting job applicants and retaining employees, as highlighted in previous research (Berthon et al., 2005; Biswas & Suar, 2013; REBR India, 2019).

Factor 4, labeled as “Non-Monetary Benefits Value”, encompasses variables related to retirement benefits, health and safety policies, employee well-being, and job security. This factor explains 7.977% of the variance, with an eigenvalue of 3.191. The findings support the importance of job security and non-monetary benefits in employee decision-making, as reported in REBR India (2019).

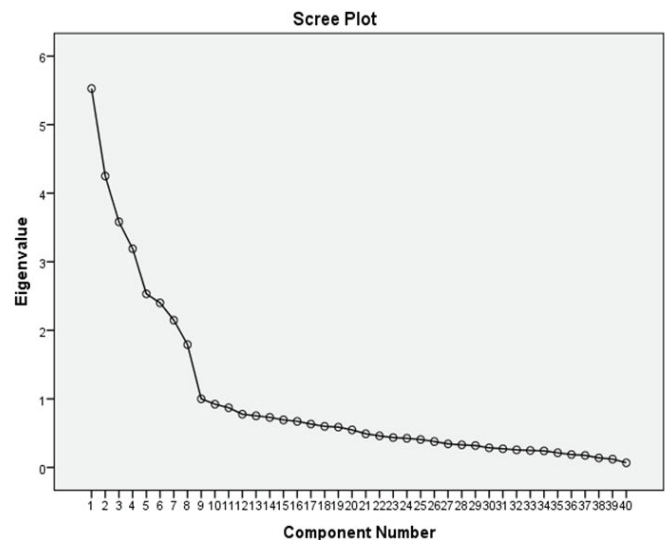
Factor 5, referred to as “Interest Value”, includes variables related to high-quality products, international presence, innovation, differentiation from competitors, and a culture of promoting innovative ideas. This factor explains 6.331% of the variance, with an eigenvalue of 2.532. The study aligns with previous research conducted by Berthon et al. (2005) and Biswas & Suar (2013) in emphasizing the significance of interest-related attributes in employer branding.

Factor 6, named “Diversity Value”, consists of variables related to encouraging employee initiatives, diversified assignments, ethnic diversity, and global assignments. This factor explains 6.002% of the variance, with an eigenvalue of 2.401. The findings support the importance of diversity-related attributes in employer branding, as suggested by Schlager et al. (2011).

Factor 7, denoted as “Economic Value”, encompasses variables related to higher basic salary, social security benefits, performance-linked incentives, and an attractive compensation package. This factor explains 5.369% of the variance, with an eigenvalue of 2.148. The study confirms the importance of offering attractive salary and benefits in employer branding, as highlighted in previous research (Berthon et al., 2005; Sivertzen et al., 2013; REBR India, 2019).

Finally, Factor 8, labeled as “Technology Driven Value”, includes variables related to an informative website, social media recruitment, technology-enabled processes, and innovative practices. This factor explains 4.479% of the variance, with an eigenvalue of 1.791. The findings support the role of technology-related attributes in employer branding, as indicated by REBR India (2019).

Overall, Table 5 provides a comprehensive view of the rotated component matrix, showcasing the correlation between variables and factors. The identified factors play a crucial role in achieving the employer branding objective, with each factor contributing a specific percentage of variance explained. The findings of this study are consistent with previous research conducted by various scholars in the field.



**Graph 1:** Scree Plot of Factors against Eigen Value

Source: Researcher's Analysis

The Scree Plot, represented by Graph 1, displays the relationship between the EmpBrand factors and their corresponding Eigenvalues. The X-axis represents the attributes, while the Y-axis represents the Eigenvalues. This graph serves as experimental evidence for selecting

the factors to be considered in the study. In the graph, eight factors are plotted above the elbow bend, indicating their significance. Thus, the researcher justified the inclusion of these eight factors based on the Scree Plot.

## CONCLUSION

In the current highly competitive market landscape, organizations face the constant need to innovate, grow, and enhance their business. To achieve this, effective management of the employer brand is crucial. A strong employer brand has a significant impact on an organization's ability to attract talented individuals and communicate its unique employee value propositions (EVPs). This study provides valuable insights into the factors contributing to the creation of an "employer of choice" organization within the fast food chain industry. Through empirical evidence, the study identifies eight determinants of employer branding: Reputational Value (RV), Developmental Value (DevV), Interest Value (IntV), Diversity Value (DivV), Non-Monetary Benefits (NMB), Technology Driven Value (TDV), Social Value (SV), and Economic Value (EV). The findings of the study suggest that by focusing on these eight determinants, organizations can establish a strong employer brand. Moreover, the results highlight the importance of incorporating these determinants into employer branding strategies. Therefore, it is recommended that employers design their employer branding strategies based on the determinants explored in this study to gain a competitive edge and achieve success in the market.

## NOTES

1. Johnson, Mike. "The global search for talent gets tougher. (Managing)." *Financial Executive* 18.4 (2002): 42–44.
2. Hedging, Tilde, Charlotte F. Knudtzen, and Mogens Bjerre. *Brand management: Mastering research, theory and practice*. Routledge, 2020.
3. American Marketing Association (2022). Branding. <https://www.ama.org/topics/branding>
4. Ambler, Tim, and Simon Barrow. "The employer brand." *Journal of brand management* 4 (1996): 185–206.
5. Ada, Nesrin, Mykola Korolchuk, and Ivan Yunyk. "The Role of Employer Branding Practices on Management of Employee Attraction and Retention." *Economics. Ecology. Socium* 7.1 (2023): 46–60.
6. Sandeepanie, Madduma Hewage Ruchira, et al. "The role of talent management and employee psychological contract on employer branding: A pragmatic conceptual model." *Management Research Review* 46.2 (2023): 196–222.
7. Kumar, P. Analytical Study of Factors Contributing in Sustainable Brand Growth with Respect to IT Industry. *Purakala* 31(21) (2020): 243–251.
8. Randstad employer brand research 2019 country report India. Accessed from <https://www.randstad.in/employer-brand-research/>
9. P. Bhardwaj; Rashmi; Employer branding attribute preferences and their contribution in attraction and retention of employees in fast food chains, *International Journal of 360° Management Review*, 7(1), 1-12 (2019).
10. Biswas, M., Suar D. Which Employees' Values Matter Most in the Creation of Employer Branding? *Journal of Marketing Development and Competitiveness* 7(1) (2013): 93–102.
11. Rashmi and Rajkumar. On Use of Stepwise Multiple Regression for Employer Brand Building of Fast Food Chains. *International Journal of Statistics and Reliability Engineering*, Vol. 7(2) (2020): 258–268.
12. Roy, S.K. Identifying the dimensions of attractiveness of an employer brand in the Indian context. *South Asian Journal of Management*, 15(4) (2008): 110–130.
13. Berthon, P., Ewing, M., & Hah, L.L. Captivating company: dimensions of attractiveness in employer branding. *International Journal of Advertising*, 24(2) (2005): 151–172.
14. Špoljarić, Anja, and Ana Tkalac Verčič. "Internal communication satisfaction and employee engagement as determinants of the employer brand." *Journal of Communication Management* 26.1 (2022): 130–148.
15. Baratelli, Giulia, and Elanor Colleoni. "Does Artificial Intelligence (AI) Enabled Recruitment Improve Employer Branding?" *International Journal of Business and Management* 17.2 (2022).
16. Schlager, Tobias, et al. "The influence of the employer brand on employee attitudes relevant for service branding: an empirical investigation." *Journal of Services Marketing* 25.7 (2011): 497–508.
17. Sivertzen, Anne-Mette, Etty Ragnhild Nilsen, and Anja H. Olafsen. "Employer branding: employer attractiveness and the use of social media." *Journal of Product & Brand Management* 22.7 (2013): 473–483.
18. Kashyap, Vaneet, and Neha Verma. "Linking dimensions of employer branding and turnover intentions." *International Journal of Organizational Analysis* 26.2 (2018): 282–295.
19. Shah, Maitri. "Talent Retention through Employer Branding." *Journal of Marketing & Communication* 6.3 (2011).
20. Tanwar, Karnica, and Asha Prasad. "Exploring the relationship between employer branding and employee

- retention.” *Global business review* 17.3, suppl (2016): 186S–206S.
21. Kashyap, Vaneet, and Neha Verma. “Linking dimensions of employer branding and turnover intentions.” *International Journal of Organizational Analysis* 26.2 (2018): 282–295.
22. Meyer, John P., and Natalie J. Allen. “TCM employee commitment survey academic users guide 2004.” London, Ontario, Canada: The University of Western Ontario, Department of Psychology (2004): 143–159.
23. Dögl, Corinna, and Dirk Holtbrügge. “Corporate environmental responsibility, employer reputation and employee commitment: An empirical study in developed and emerging economies.” *The International Journal of Human Resource Management* 25.12 (2014): 1739–1762.
24. Sengupta, Atri, Umesh Bamel, and Pankaj Singh. “Value proposition framework: Implications for employer branding.” *Decision* 42.3 (2015): 307–323.
25. Tanwar, Karnica, and Asha Prasad. “The effect of employer brand dimensions on job satisfaction: gender as a moderator.” *Management Decision* 54.4 (2016): 854–886.
26. Slavković, Marko, Goran Pavlović, and Marijana Simić. “Employee recruitment and its relationship with employee satisfaction: Verifying the mediating role of the employer brand.” *Ekonomski horizonti* 20.2 (2018): 127–139.
27. Saari, Lise M., and Timothy A. Judge. “Employee attitudes and job satisfaction.” *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management* 43.4 (2004): 395–407.
28. Ind, Nicholas, and Rune Bjerke. *Branding governance: A participatory approach to the brand building process.* John Wiley & Sons, 2007.
29. De Vries, Lisette, Sonja Gensler, and Peter SH Leeflang. “Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing.” *Journal of interactive marketing* 26.2 (2012): 83–91.
30. Hair, Joseph & Black, William & Babin, Barry & Anderson, Rolph, *Multivariate Data Analysis: A Global Perspective* (2010).
31. Garver, Michael S., and John T. Mentzer. “Logistics research methods: Employing structural equation modeling to test for construct validity.” *Journal of business logistics* 20.1 (1999): 33.
32. Netemeyer, Richard G., William O. Bearden, and Subhash Sharma. *Scaling procedures: Issues and applications.* Sage Publications, 2003.



# Exploring the Potential of Augmented Reality and Virtual Reality on Indian Tourism Industry

Sarthak Chourasia\*, Dr. Lokeshver Singh Jodhana\*\*, Dr. B.L. Verma\*\*\* and Avishi Shrivastava\*

---

## ABSTRACT

**Overview:** The study investigates the potential and effectiveness of Augmented Reality (AR) and Virtual Reality (VR) technologies in promoting tourism in India. With the rapid advancements in technology, AR and VR have emerged as promising tools to enhance tourist experiences and engagement. This research delves into the purpose of integrating AR and VR in the Indian tourism industry, the implications it carries, and the key findings obtained through a comprehensive analysis.

**Purpose:** The primary purpose of this study is to assess how AR and VR can be harnessed to transform the conventional tourism landscape in India. By creating immersive and interactive experiences, these technologies can captivate and allure tourists, leading to increased visitor satisfaction and prolonged stays. The study aims to shed light on the potential of AR and VR in offering virtual tours of historical sites, cultural landmarks, and natural wonders, thus facilitating access to remote locations and enhancing tourism inclusivity.

**Research Implications:** The implications of adopting AR and VR in the Indian tourism sector are multi-faceted. Firstly, this research highlights the impact of technological innovation on the competitiveness of the Indian tourism industry in the global market. The integration of AR and VR can elevate India's image as a technologically advanced and tourist-friendly destination, attracting tech-savvy travelers. Secondly, the study explores the economic implications of these technologies, including revenue generation through augmented experiences, increased tourist spending, and the creation of new job opportunities in the AR/VR sector.

**Findings and Conclusions:** To obtain valuable insights, the study incorporates both quantitative and qualitative research methods. Data is gathered through surveys, interviews, and on-site observations, focusing on tourist perceptions and behavior before and after exposure to AR and VR-based experiences. The findings reveal that the integration of AR and VR significantly enhances tourist engagement, knowledge acquisition, and overall satisfaction with their travel experiences in India. Additionally, the research identifies specific factors influencing the adoption of these technologies, such as age, familiarity with AR/VR, and cultural preferences.

**Keywords:** Artificial Intelligence, AR, VR, Tourism, Technology

---

## INTRODUCTION TO TOURISM

Tourism is a dynamic and multifaceted industry that plays a pivotal role in the economic, social, and cultural development of countries worldwide. It involves the movement of people from one place to another for various purposes, including leisure, recreation, business, education, and cultural exploration. Tourism has evolved over the years to become one of the largest and fastest-growing sectors, with a significant impact on global economies and societies.

The concept of tourism dates back to ancient times when travelers embarked on long journeys for trade, religious pilgrimages, or exploration. However, it was in the 19th century, with the advent of mass transportation and technological advancements like the steam engine and railway networks, that modern tourism began to take shape. The increased ease of travel and the desire for leisure experiences led to the emergence of a structured tourism industry.

---

\* Assistant Professor, Index Institute of Management, Arts & Science, Malwanchal University, Indore (MP)

\*\* Dean, Index Institute of Management, Arts & Science, Malwanchal University, Indore (MP)

\*\*\* Professor, UCCMS, Mohanlal Sukhadia University, Udaipur (Rajasathan)



In contemporary times, tourism has become a major global phenomenon, shaped by factors such as globalization, digitalization, improved transport infrastructure, and changing consumer preferences. Countries around the world actively promote and invest in tourism as a means to boost economic growth, create employment opportunities, and improve the standard of living for their citizens.

### IMPORTANCE OF TOURISM

Tourism brings numerous benefits to both host countries and tourists themselves. Some of the key aspects highlighting the importance of tourism are:

**Economic Impact:** Tourism is a significant contributor to a country's gross domestic product (GDP) and employment. It creates jobs in various sectors, including hospitality, transportation, retail, and entertainment. Tourism fosters cultural understanding and appreciation as travelers interact with people from diverse backgrounds, traditions, and customs. To accommodate tourists' needs, host countries often invest in infrastructure development, including airports, roads, hotels, and recreational facilities, which can improve the overall quality of life for locals as well. Tourism generates foreign exchange earnings through spending by international visitors on accommodation,

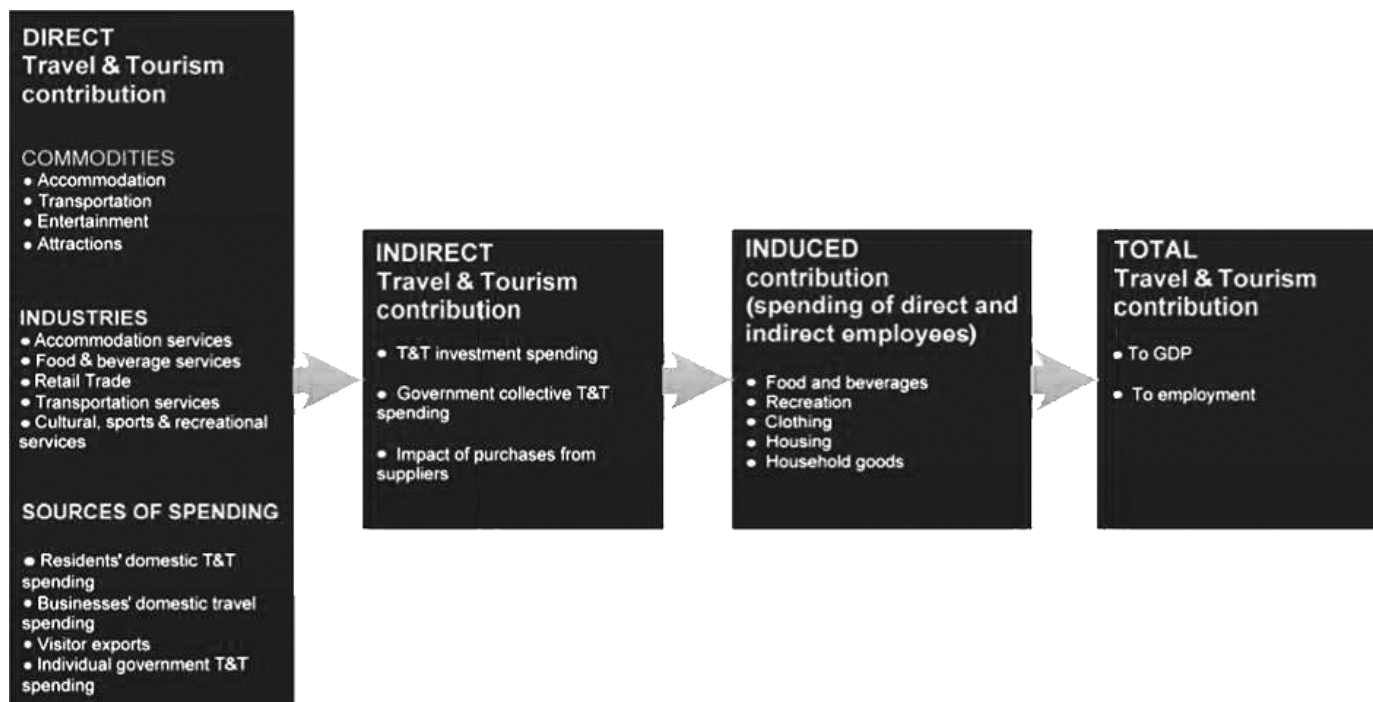
food, shopping, and other activities. Sustainable tourism practices promote the conservation of natural resources and ecosystems, encouraging travelers to respect the environment and support conservation efforts.

### THE INDIAN TOURISM INDUSTRY

The Indian tourism industry is a vibrant and diverse sector that encompasses a wide range of cultural, historical, natural, and modern attractions. As one of the fastest-growing economies in the world, India has emerged as a popular tourist destination, attracting millions of domestic and international travelers each year. The country's rich heritage, diverse landscapes, traditional hospitality, and vibrant cultural tapestry make it an enticing place to explore.

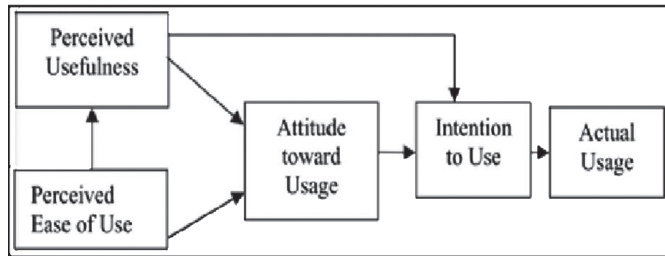
### TECHNOLOGY ACCEPTANCE MODEL FOR THE TOURISM INDUSTRY

The Technology Acceptance Model (TAM) is a widely recognized and influential theoretical framework used to understand and predict user acceptance and adoption of new technologies in various industries, including the tourism sector. Developed by Fred Davis in 1986, TAM posits that users' behavioral intentions toward adopting technology are influenced by their perceptions of its usefulness and ease of use. In the context of the tourism



**Figure 1:** Direct and Indirect Contribution of Travel and Tourism Industry

Source: [www.wttc.org](http://www.wttc.org)



**Figure 2:** Technology Acceptance; Model by Davis–1986

industry, TAM helps researchers and practitioners understand tourists' attitudes and behaviors toward technology adoption. Here's how TAM can be applied to the tourism industry:

- **Perceived Usefulness:** This factor refers to the extent to which tourists believe that a particular technology would enhance their travel experience and provide tangible benefits. In the tourism industry, perceived usefulness can be evaluated by understanding how technology can improve trip planning, access to information, convenience, cost savings, or overall satisfaction during the journey.

*Example:* Tourists may perceive mobile travel apps as useful due to their ability to provide real-time information about tourist attractions, nearby restaurants, and navigation assistance, enhancing the overall travel experience.

- **Perceived Ease of Use:** This factor pertains to tourists' beliefs about the ease of using technology. If technology is perceived as user-friendly and easy to navigate, it is more likely to be adopted.

*Example:* Tourists may be more inclined to use self-check-in kiosks at hotels or attractions if the process is straightforward and requires minimal effort.

- **Behavioral Intention to Use:** Behavioral intention represents a person's willingness to use technology. It is a strong predictor of actual technology adoption. A positive attitude towards usefulness and ease of use leads to a higher intention to use the technology.

*Example:* If tourists perceive virtual reality headsets as useful for experiencing virtual tours of destinations before traveling, and if they find the technology easy to operate, they are more likely to have a higher intention to use it.

- **Actual Use:** Actual use is the realization of behavioral intention, where tourists engage with the technology during their travel journey.

*Example:* Tourists who have a positive attitude towards a mobile app for language translation are

more likely to use it while communicating with locals during their trip.

- **External Factors:** External factors can influence tourists' acceptance of technology, such as social influence, system compatibility, trust in technology, and support from the tourism industry.

*Example:* If influential travel bloggers or social media influencers recommend using a specific travel app, it may positively impact tourists' intention to use the app.

By applying the Technology Acceptance Model, researchers and businesses in the tourism industry can gain insights into tourists' attitudes and motivations toward adopting various technologies. This understanding can help design and implement technology-based solutions that cater to tourists' preferences, enhance their travel experiences, and ultimately contribute to the growth and competitiveness of the tourism sector.

## ROLE AND APPLICATION OF TECHNOLOGY IN THE TOURISM INDUSTRY

Technology has revolutionized the tourism industry, transforming the way travelers plan, experience, and share their trips. From the initial stages of trip planning to the on-site experiences and post-travel sharing, technology plays a crucial role in enhancing efficiency, personalization, and overall satisfaction for both tourists and tourism providers. The advent of online booking platforms has made it convenient for travelers to research, compare prices, and book flights, accommodation, tours, and other travel-related services. This has streamlined the booking process, providing instant access to a vast array of options. Travel-specific mobile apps have become essential tools for travelers. They offer features like real-time flight updates, interactive maps, language translation, restaurant recommendations, and navigation assistance, enhancing the overall travel experience.

Virtual and augmented reality technologies have enriched the pre-travel phase by offering virtual tours of destinations and attractions. Travelers can explore places they intend to visit, helping them make more informed decisions about their itineraries. Machine learning and artificial intelligence algorithms are used to analyze traveler preferences and behaviors, enabling travel companies to provide personalized recommendations for accommodations, activities, and dining options. IoT devices are being integrated into hotels and tourist attractions to enhance guest

experiences. Smart hotel rooms with IoT-controlled devices allow guests to customize their environment for comfort and convenience. With the growing popularity of mobile payment solutions and contactless cards, travelers can make secure transactions in foreign countries without the need for cash exchange. Technology is utilized to promote sustainable tourism practices, such as monitoring and reducing carbon footprints, waste management, and supporting eco-friendly accommodations and activities. Tourists can provide feedback and reviews in real-time through various platforms, allowing businesses to address issues promptly and make improvements. Virtual conferences and events have gained prominence, allowing people from around the world to participate without the need for physical travel.

The integration of technology in the tourism industry has led to improved efficiency, personalized experiences, and greater accessibility, thereby shaping the future of travel dynamically and innovatively. However, it is essential to strike a balance between leveraging technology and maintaining the human touch, ensuring that the travel experience remains meaningful and memorable for travelers.

A prominent business analytics and research company predicts that the global virtual tourism market will achieve a value of USD 12.3 billion by the year 2023. Furthermore, the same report suggests that in the long run, by 2033, the virtual tourism market is expected to expand to approximately USD 26 billion. (Outbound, 2022)

The advent of advanced technology has enabled this unique experience of exploring destinations, travel venues, and attraction sites without physically being present at these locations. Virtual tours have introduced a novel form of marketing that allows tourists to experience tours in a visually immersive environment. The study highlights the significant impact of virtual tours in boosting the tourism sector, particularly with the growing usage of smartphones and other technological advancements related to tours. Moreover, the utilization of Augmented Reality (AR) is opening up new opportunities for growth within the virtual tourism industry. Thanks to the prevalence of modern smartphones, virtual tours are expected to expand both in terms of their scope and appeal to a broader audience.

As per the most recent data analytics, the virtual tourism market is projected to reach a value of USD 26 billion by the year 2033. This growth is expected to be fueled by a Compound Annual Growth Rate (CAGR) of 7.8% from 2023 to 2033. During the Covid-19 pandemic, virtual travel gained popularity as it provided a means to escape isolation and monotony. As online bandwidth increased, the virtual tourism experience was further enriched with more elements added to enhance the overall tour experience. Contemporary digital methods have greatly benefited the virtual tourism industry, but a notable advancement has been seen with the use of 360° videos and virtual reality.

Initially, virtual tours were created primarily as a technological demonstration, but they soon demonstrated additional advantages. Virtual Reality (VR) in virtual tourism allows for interactive navigation of places, introducing new possibilities and transforming the consumer experience on a budget. The impact of the Covid-19 pandemic in 2020 also played a significant role in boosting virtual tourism, as people's curiosity to explore and experience new places remained strong despite travel restrictions. As a result, the virtual tourism sector has witnessed a substantial increase in immersive experiences, making it a rapidly growing market with promising prospects for the future.

#### **INTER-MINISTERIAL TASK FORCE FOR NATIONAL DIGITAL TOURISM MISSION**

Consequently, on July 23, 2021, a task force known as the National Digital Tourism Mission (NDTM) Inter-Ministerial Task Force was established. Its primary purpose was to engage in discussions with the tourism industry and subject matter experts. The task force aimed to establish the framework, mission, vision, objectives, and overall scope of the National Digital Tourism Mission. It also sought to identify the relevant stakeholders, domains, and technology principles involved. Additionally, the task force conducted a study on the existing standards and regulations governing travel, as well as the current status of digitization within the tourism sector. Furthermore, the team worked on identifying the essential building blocks of the mission's architecture and developed a strategy, governance structure, and implementation plan for the envisioned National Digital Tourism Mission.



## APPLICATION OF ADVANCED TECHNICAL METHODS IN THE INDIAN TOURISM INDUSTRY

The Indian tourism industry has been significantly impacted by technology, transforming the way tourists plan, experience, and share their journeys. With the rise of digitalization and the widespread adoption of smartphones, the use of technology in the Indian tourism sector has grown exponentially in recent years. Here are some key ways technology has influenced the Indian tourism industry:

- **Online Booking and Reservations:** Technology has made it convenient for both domestic and international tourists to book flights, hotels, and tour packages online. Online travel agencies and booking platforms have simplified the process, providing travelers with a wide range of options and competitive prices.
- **Mobile Apps:** The proliferation of mobile apps has enabled tourists to access a wealth of information and services at their fingertips. From travel planning to real-time navigation, language translation, and local recommendations, mobile apps have become indispensable travel companions.
- **Virtual Tours and Augmented Reality:** Indian tourist destinations are utilizing virtual reality (VR) and augmented reality (AR) technologies to offer immersive virtual tours of historical sites, cultural landmarks, and scenic locations. This enhances pre-travel experiences and sparks interest among potential visitors.
- **E-payment and Digital Transactions:** With the government's push for a digital economy, the adoption of digital payment methods has gained momentum. Tourists can now make cashless transactions for various services, including accommodations, transportation, and shopping.
- **Social Media and User-Generated Content:** Social media platforms play a crucial role in promoting Indian tourism. Travelers share their experiences through photos, videos, and reviews, influencing others' travel decisions. Tourism businesses also leverage social media for marketing and customer engagement.
- **AI and Personalization:** Indian travel companies are leveraging artificial intelligence (AI) algorithms to offer personalized travel recommendations and experiences based on user preferences and behavior.

- **Smart Tourism Infrastructure:** Some Indian cities have implemented smart tourism infrastructure, such as smart bus stops, Wi-Fi hotspots, and interactive kiosks, to enhance tourists' experiences and provide them with essential information.
- **Sustainable Tourism Initiatives:** Technology is being used to promote sustainable tourism practices in India, such as eco-friendly accommodations, waste management, and conservation efforts.
- **Online Reviews and Feedback:** Travelers can provide real-time feedback and reviews of their experiences, which helps tourism businesses in India improve their services and address customer concerns promptly.
- **Virtual Events and Conferences:** The use of technology for virtual conferences and events has become more prevalent, allowing participants from around the world to attend without the need for physical travel.

Overall, technology has played a vital role in shaping the Indian tourism industry, improving efficiency, personalization, and accessibility for both tourists and businesses. As technology continues to advance, its integration will further enhance the tourism sector's competitiveness and contribute to India's position as a diverse and attractive travel destination. However, the industry needs to embrace sustainable and responsible technology practices to ensure that tourism development is inclusive and beneficial for local communities and the environment.

## DEKHO APNA DESH SCHEME

The "Dekho Apna Desh" scheme is an initiative launched by the Indian government to promote domestic tourism and encourage Indians to explore the diverse cultural, historical, and natural attractions within the country. The scheme was announced by the Ministry of Tourism in January 2020 to boost domestic tourism and create awareness about India's rich heritage and tourist destinations among its citizens.

### Key Features of the Dekho Apna Desh Scheme

The primary objective of the scheme is to encourage Indians to travel and explore various tourist destinations within the country. It aims to increase domestic tourist footfall, thereby boosting local economies and supporting tourism-related businesses. As part of the initiative, the Ministry of Tourism conducts

theme-based webinars, virtual tours, and other digital campaigns to showcase the diverse attractions of India. These campaigns provide insights into the cultural, historical, and natural heritage of different regions. To incentivize domestic travelers, various discounts, offers, and concessions are provided to encourage more people to travel and explore the different states and union territories of India. The scheme also focuses on promoting lesser-known and offbeat destinations that may not receive as much attention as popular tourist spots. This aims to distribute tourist traffic more evenly across the country and create opportunities for local communities. The Ministry of Tourism collaborates with state governments, tourism boards, tour operators, travel agencies, and other stakeholders to effectively implement the DekhoApna Desh scheme and ensure its success. Various awareness campaigns and promotional activities are conducted through social media, print media, television, and other platforms to create interest and enthusiasm among the public for domestic travel.

### **Impact and Significance of the Scheme**

The DekhoApna Desh scheme has played a crucial role in boosting domestic tourism in India. It has encouraged people to explore their own country, appreciate its diverse heritage, and experience the beauty of its various landscapes. The scheme's focus on lesser-known destinations has contributed to the development of these regions and created opportunities for local communities through tourism-related activities. The initiative has also had a positive economic impact by generating revenue for tourism-related businesses, hotels, restaurants, transport operators, and local artisans. It has helped in job creation and overall economic growth in the tourism sector.

Additionally, the scheme has raised awareness about responsible and sustainable tourism practices among domestic travelers, promoting respect for local cultures, traditions, and the environment. Overall, the Dekho Apna Desh scheme has been instrumental in promoting domestic tourism in India and fostering a sense of pride and appreciation for the country's rich heritage and diverse attractions among its citizens. By encouraging more Indians to travel within the country, the scheme has contributed to the growth and development of the Indian tourism industry.

### **STATUS OF DIGITALIZATION IN THE TOURISM SECTOR**

The extensive integration of technology in the travel and tourism industry has had a profound impact. Technological advancements are driving innovation, growth, and globalization in the sector, completely reshaping the concept of travel. Digital disruptors, including social media, mobile devices, and easily accessible information, have empowered destination marketers to connect with consumers and stakeholders on an unprecedented scale.

The development of travel portals and platforms has been fueled by leveraging technology such as high-speed internet connectivity, search and geolocation technologies, mobile payments, and social platforms. This has resulted in an explosion of the sharing economy, with large digital platforms emerging in the private sector to cater to various needs, including transportation, accommodation, tour package bookings, and even food ordering and delivery (National E-Governance Division (NeGD), 2022).

Hyper-personalization is another significant trend enabled by the collection of personal data from customers and an understanding of their behavioral patterns. Companies are increasingly optimizing services throughout the customer journey, offering tourists worldwide a plethora of localized and personalized options for accommodations, activities, and transportation.

### **EFFORTS OF THE MINISTRY OF TOURISM**

The Ministry of Tourism has undertaken various Information and Communication Technology (ICT) initiatives to digitize the tourism sector, and two of these noteworthy initiatives are the 'Incredible India' Website and Mobile App. The multi-lingual 'Incredible India' website and app serve as valuable tools for both international and domestic tourists, offering easy access to information about various tourism destinations and attractions throughout the country.

Additionally, the Ministry of Tourism has established the National Integrated Database of Hospitality Industry (NIDHI) platform. This platform facilitates the registration and classification of tourism service providers, including Tour Operators, Hotels, and other Tourism Service Providers. Furthermore, it enables the



classification and approval of hotels and other tourism-related services.

State governments have also contributed to the digitalization efforts by creating their tourism portals and mobile apps. These state-specific platforms showcase tourist attractions, provide tourist guides, feature information about hotels, and promote various adventure activities.

Furthermore, the Archaeological Survey of India (ASI) is actively involved in the development of an India heritage app prototype. This app aims to geo-map heritage monuments and enhance the overall experience for tourists visiting these historical sites.

## CURRENT SCENARIO OF VIRTUAL TOURISM IN INDIA

### AR and VR: The Future of Travel

Virtual tourism has been a growing trend in India since the 1990s, providing an appealing alternative to pandemic-related challenges. By engaging in virtual tours, users

can fulfill their desire to explore places they've always dreamt of, all while staying in one location. The vast and diverse expanse of India allows for a wide range of virtual tourism experiences. To embark on these virtual journeys, users simply need to don VR goggles and use a remote control to navigate through their chosen destinations (*Outlook*, 2022).

Tamil Nadu Tourism is keeping up with emerging technologies by incorporating Artificial Intelligence and Virtual Reality into its offerings. It introduces VR-based booklets to enhance the tourist experience, and the state is also in the process of providing laser light and sound shows at popular destinations. By embracing these innovative technologies, Tamil Nadu aims to enrich the tourism experience for visitors.

### History and Modernity

In 2016, Gujarat Tourism took a tech-savvy approach by creating 360-degree immersive live-action VR videos of the mesmerizing ancient sites of the Indus Valley, including Lothal, Dholavira, and Rani-ki-vav. Following



**Figure 3:** The City of Dholavira in Gujarat offered 360-degree Immersive Live-action VR Videos

Source: [www.shutterstock.com](http://www.shutterstock.com)

suit, in 2021, Kerala Tourism embraced technology and introduced an augmented reality (AR) app for launching a virtual tour guide. This app showcases both well-known tourist hotspots and lesser-known places of interest in the state. Functioning as a real-time audio-video guide, it provides users with information about five attractions located near their current location.

The travel and tourism industry has undergone significant organization for consumers due to the proliferation of apps that bring all amenities to their fingertips. An example of this is Delhi Tourism's 'Dekho Mere Dilli' app, which empowers tourists to plan their entire trip on a single platform, including ticket bookings. Additionally, the app offers quick information about various food joints, historic places, and other tourist spots. Furthermore, several renowned heritage monuments like India Gate, Mughal Gardens, Red Fort, Akshardham Temple, and Humayun's Tomb provide virtual walk-throughs through their websites, enhancing the overall travel experience.

### **Art On Your Fingertips**

The pandemic also prompted Indian museums, including the National Museum in New Delhi, Salar Jung Museum in Hyderabad, and Victoria Memorial in Kolkata, to adapt to the online world by hosting virtual exhibitions. Many museums are dedicated to staying connected with their visitors even beyond physical structures, and part of this effort involves making their collections accessible online to remain relevant.

Nisha Shroff (2020) emphasizes that virtual reality technology has brought noteworthy transformations and innovations to the global travel and tourism industry, and India is no exception. To promote the "Incredible India" campaign and attract visitors worldwide, the Indian Government has partnered with Outside VR. This collaboration allows tourists to virtually explore popular sites such as City Palace in Rajasthan, Key Monastery in Himachal Pradesh, and Kannur Light House in Kerala through their experimental platform.

The Ministry of Tourism India recognizes the potential of virtual reality travel as the new normal during the Covid-19 pandemic. Google Arts and Culture platform has contributed to this endeavor by launching 360-degree and Street View-like images of the Taj Mahal, offering viewers a mesmerizing top-down view of the iconic monument.

India is currently home to over 100 VR development companies and start-ups specializing in creating virtual reality experiences. "Soul Travel India", with the motto "Get under the skin of India", has introduced virtual tours to ten popular destinations, including the Taj Mahal, Delhi, Mumbai, Golden Temple Amritsar, Bangalore, Ahmedabad, Hampi, Jaipur, Varanasi, and Goa. The objective is to showcase India's finest sights and cultural landmarks on the global stage through these virtual tours.

Amid the pandemic, various tourist attractions, art galleries, monuments, and museums have embraced virtual tours, providing 360-degree panoramic videos and guided information sessions. This approach has been well-received by wanderlust travelers who can now enjoy the beauty of these destinations from the comfort of their homes.

The virtual travel enterprise, QuaQua, views virtual tourism as a mature and responsible way of exploring the world, enabling people to overcome travel constraints and satisfy their desire to experience different cultures globally. In response to the increasing interest in technology, the Ministry of Tourism has organized webinars across the country under the banner of "DekhoApna Desh," showcasing beautiful tourist attractions representing India's rich history and culture.

While India already offers a good number of virtual tours covering several popular destinations, there is significant potential for developing more destinations using virtual reality technology. However, the success of these endeavors will depend on customer acceptance and the affordability of professional VR services.

### **Future of Virtual Reality-Based Tourism**

As per an article authored by Ami Winderi in September 2020, Virtual Tourism has emerged as a much-needed source of novelty and fascination during the pandemic, providing people with the opportunity to experience new surroundings and explore different destinations and cultures right from the comfort of their sofas. Not only does it serve as a delightful escape from mundane routines, but it also enriches people's knowledge about places they might not have considered visiting otherwise. The significance of Virtual Reality in the tourism industry has been recognized by several reputable companies, and they are embracing its potential with optimism. According to the Skyscanner report "The Future of Travel 2024," Virtual Reality is



predicted to become the new standard for showcasing accommodations and destinations, influencing consumer buying decisions through a “Try-before-You-Buy” approach. Additionally, VR allows customers to relive past experiences, taking them on nostalgic journeys.

Goldman Sachs conducted an analysis and projected that the VR industry would reach a value of 80 billion US dollars by 2025, with the potential for further growth to 182 billion dollars through accelerated investment. Piper Jaffray’s analysis report also estimates that the global market share of VR could reach 70 billion dollars.

Iberdrola highlights on its website that Virtual Reality is a cutting-edge and highly promising technology with immense growth potential. According to IDC Research’s forecast for 2018, VR is expected to experience a 21-fold investment increase over the next four years, reaching 15.5 billion euros. Overall, these analyses underscore the remarkable growth prospects for the entire Virtual Reality market.

### Government Initiatives and Challenges

The Indian government recognizes the importance of tourism as a significant contributor to the economy and employment generation. Various initiatives, such as “Incredible India”, “Swadesh Darshan”, and “PRASAD” (Pilgrimage Rejuvenation and Spiritual Augmentation Drive), have been launched to promote and develop tourism in India.

However, the industry also faces some challenges, including infrastructure development, ensuring safety and security for tourists, managing environmental impacts, and providing quality services to enhance the overall tourist experience.

Despite challenges, the Indian tourism industry continues to flourish, with ongoing efforts to tap into its immense potential and showcase the country’s cultural richness, natural beauty, and warm hospitality to the world. As the industry embraces technology and sustainable practices, India is poised to become an even more attractive and sought-after destination for travelers globally.

### CONCLUSION

Tourism is a powerful force that influences economies, societies, and individual lives in numerous ways. As the world becomes increasingly interconnected, the tourism industry is expected to continue its growth, providing opportunities for cultural exchange, economic

development, and mutual understanding between nations and peoples. However, it is essential to embrace sustainable practices to ensure that tourism remains a positive and responsible force for the betterment of destinations and the global community. Present study endeavors to coalesce and analyze literature related to virtual tourism and strive to elevate its perception from a technologically disruptive intervention to a transformative conceptualization. This study emerges as vital owing to changing tourism needs instead of exposure and access to technology. COVID-19 has exacerbated the need to solve human problems through technology, and tourism is no exception. Systematic and scientific review protocols discern the past, present, and future of virtual tourism. Overall, the study contributes to the growing body of knowledge on the implementation of AR and VR in the tourism industry. The findings serve as a basis for tourism stakeholders, policymakers, and businesses to make informed decisions regarding investments in technology-driven initiatives. By leveraging AR and VR technologies effectively, India can unlock its vast tourism potential, enrich tourist experiences, and foster sustainable growth in the tourism sector.

### REFERENCES

- ‘Imaging the Past’ – Electronic Imaging and Computer Graphics in Museums and Archaeology, ISBN 0-86159-114-3.
- Ami Winderi (Sept. 2020). Virtual Tourism is the Future of Real-World Travel—Here’s What You Need to Know, According to Experts – Martha Stewart.
- Buhalis, D., & Sinarta, Y. (2019). Real-time co-creation and oneness service: Lessons from tourism and hospitality. *Journal of Travel & Tourism Marketing*, 36(5), 563–582.
- Daassi, M., & Debbabi, S. (2021). Intention to reuse AR-based apps: The combined role of the sense of immersion, product presence, and perceived realism. *Information & Management*, 58(4), Article 103453.
- Govers, R., Go, F.M., & Kumar, K. (2007). Virtual destination image a new measurement approach. *Annals of Tourism Research*, 34(4), 977–997.
- Grace Cyril (22nd April 2020). Could virtual travel be a solution for our wanderlust during the coronavirus pandemic? *Hindustan Times*, New Delhi.
- Huang, Yu-Chih et al. “Exploring user acceptance of 3D virtual worlds in travel and tourism marketing.” *Tourism Management* 36 (2013): 490–501.

- Jingyuan Zhao, Patrica Pablo, Robert Tenysson (2011). Virtual Tourism Functions, Profit modes and Practices in China-Digital Culture and E-tourism Technologies, *Applications, and Management Approaches – IGI Global*, ISBN: 9781615208685, 1615208682, pp. 204–230.
- Karthika, P., Murugeswari, R., Manoranjithem, R. (2029). Sentiment analysis of social media network using random forest algorithm. In *Proceedings of the 2019 IEEE International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS)*, Tamilnadu, India, 11–13 April 2019; IEEE: Piscataway, NJ, USA, pp. 1–5.
- National E-Governance Division (NeGD), M.O. (2022). National Digital Tourism Mission. New Delhi: Government of India.
- Nisha Shroff (6th Aug 2020). India's tourism ministry partners with Outsight VR for virtual travel experiences, *Business Traveller Magazine*.
- Outbound, I. (2022, December 20). Customized holidays market to grow 13 pc CAGR in 2022–2032, says Future Market Insights. Retrieved from India Outbound: <https://indiaoutbound.info/market-analysis/customised-holidays-market-to-grow-13-pc-cagr-in-2022-2032-says-future-market-insights/>
- Outlook, T. (2022, MAY 11). The Rise of Travel Tech in India. Retrieved from outlookindia.com: <https://www.outlookindia.com/travel/the-rise-of-travel-tech-in-india-news-196054>
- Pedrana, M. Location-based services, and tourism: Possible implications for the destination. *Curr. Issues Tour.* 2014, 17, 753–762.
- Sahoo, P.R., Pradhan, B.B., Lenka, S.K., & Patra, S.K. (2017). Review research on the application of information and communication technology in the tourism and hospitality industry. *International Journal of Applied Business and Economic Research*, 15(11), 311–334.
- Sigala, M. (2018). New technologies in tourism: From multi-disciplinary to antidisciplinary advances and trajectories. *Tourism Management Perspectives*, 25, 151–155.
- Talwar, S., Kaur, P., Nunkoo, R., & Dhir, A. (2022). Digitalization and sustainability: Virtual reality tourism in a post-pandemic world. *Journal of Sustainable Tourism*.
- Talwar, S., Kaur, P., Nunkoo, R., Dhir, A. (2022). Digitalization and sustainability: Virtual reality tourism in a post-pandemic world. *J. Sustain. Tour.*, 1–28.
- UNESCO. United Nations Educational, Scientific and Cultural Organization, World Heritage Convention; UNESCO World Heritage Centre: Paris, France, 2022.



# Green Finance for Sustainable Green Economic Growth in India

## *The Initiatives by Indian Financial System*

Dr. Kalpana Hooda\* and Ambika Sangwan\*\*

---

### ABSTRACT

*Green finance is a broad term that can refer to financial investments flowing into sustainable development projects and initiatives, environmental products, and policies that encourage the development of a more sustainable economy. Green finance is a core part of low carbon green growth because it connects the financial industry, environmental improvement and economic growth and all these are essential for country like India to sustain in long run. Green investing recognizes the value of the environment and its natural capital and also seeks to improve the human well-being and social equity while reducing environmental risks and improving the ecological integrity. Concept of green finance can be regarded as innovative in the field of finance; as the term describes a broad range of funding for environment oriented technologies, projects, industries or businesses. The topic has been studied through macro-level approach; and for the purpose exploratory method has been used. The principal objective of this paper is to study what green finance is all about and would verify if this concept is viable in India for balancing the ecological depreciation due to assimilation of carbon gases in atmosphere. The paper also discusses the recent trends and the future opportunities and challenges in green finance in the emerging India.*

**Keyword:** Green Finance, Financial Industry, Environmental Improvement, Economic Growth

---

### INTRODUCTION

High economic growth rate reduces poverty, generates employment which in turn leads to high standard of living. But traditional method of achieving significant growth rate exploits the natural environment and brings climate changes which deplete the ability of meeting the future generation needs. So growth with sustainability has become essential. Huge amount of funds are required to finance the adaptation and mitigation policies of climate change. India has adopted the 17 sustainable development goals and submitted the Intended Nationally Determined contribution (INDC) in Paris agreement, and to achieve those goals and targets huge amount of investment is required. At least USD 2.5 trillion (at 2014–15 prices) will be required for meeting India's climate change actions by 2030. Public finance is not sufficient for this amount of investment. Private finance is needed to achieve targets of Paris agreement and 17 SDG. Green finance is recent phenomena in the field of Finance which align the financial sector

with sustainability. It includes both public and private finance. It means investment in those projects and business which are environment friendly. People bank of china in his report "Establishing the China Green Financial System" published by the research bureau of Peoples Bank Of China and UNEP Inquiry in to the Design of Sustainable Financial System said that 85–90% financing is required from private sector for green investment. So, green finance has become prominent in recent years.

The objectives of this paper are:

- To study the constraint in the path of green finance.
- To know the steps taken by the Indian Financial System and Government of India for green financing and environment protection.

### MEANING OF GREEN FINANCE

There is refusal universal definition of green finance. Green Finance means finance only those projects

---

\* Assistant Professor, Government College Barwala, Panchkula, Haryana, India. E-mail: kalpanahooda@gmail.com

\*\* Assistant Professor, Department of Commerce, Government College for Girls, Sector 14, Gurugram, Haryana, India.  
E-mail: ambikasangwan@gmail.com



and businesses which protect or less deteriorates the environment. It considers the negative and positive environmental effects while financing the projects and business investment in renewable energy, resource efficiency/energy efficiency, clean energy, control of pollution, waste management, water sanitation, mitigation and adoption strategies of climate change, bio-diversity protection and development of green products for end user like cloth-cotton bag, etc. Green finance refers to financial maintain intended for sustainable development. It includes both public and private finance.

## RESEARCH METHODOLOGY

The research learning is based on secondary data. The data has been together through various research articles, research papers, reports and various websites.

## SOURCES OF FUNDS FOR INVESTMENT

- Domestic public finance refers to the direct investment by using a government
- International public finance refers back to the investment from international / global businesses and multilateral improvement banks
- Private quarter finance consists of both residence and universal speculation resources

## WHY GREEN FINANCE?

India in its “Intended Nationally Determined Contribution” for the time period 2021–2030 has set the following targets:

- To reduce the emissions intensity of its GDP by 33 to 35 percent by 2030 from 2005 level.
- To reap approximately forty percent cumulative electric electricity established capability from non-fossil gas primarily based energy assets by means of 2030 with the assist of transfer of era and coffee fee global finance consisting of from Green Climate Fund (GCF).
- To create an additional carbon sink of 2.5 to 3 billion tonnes of CO<sub>2</sub> equivalent through additional forest and tree cover by 2030.
- Preliminary estimates indicate that India would need around USD 206 billion (at 2014-15 prices) between 2015 and 2030 for implementing adaptation actions in agriculture, forestry, fisheries infrastructure, water resources and ecosystems.

- Asian Development Bank Study on assessing the costs of climate change adaptation in South Asia indicates that approximate adaptation cost for India in energy sector alone would roughly be about USD 7.7 billion in 2030.
- Estimates by National Institution for Transforming India (NITI) Aayog indicate that the mitigation activities for moderate low carbon development would cost around USD 834 billion till 2030 at 2011 prices.

## CONSTRAINTS/CHALLENGES FOR GREEN FINANCING

- Stable Policy and Regulatory Framework: Private sector does not want to invest when there is instability regarding policies of Government. An unpredictable policy creates uncertainties about risk and returns of the projects. There should be a stable policy environment which provides guidance, assurance and encourages the investors for long term green investment.
- An Environmental Performance Disclosure: Disclosure and reporting about the environmental performance of the firms is essential for green financing. Socially responsible investors want to invest in green firms but lack of information about environmental performance of the companies makes green finance difficult.
- Low Profitability of Green Industries: Private sector is more inclined to make investment in polluting industries because of low cost and high return in it than green industries. Moreover, green investments are long term in nature which makes them less attractive for investment.
- Mechanism for measuring the Viability of Green Industries: Investors want to invest in those projects which are commercially viable. There is no proper mechanism to choose commercially viable green projects. Conventional projects look more viable than green projects because of less incorporation of positive and negative externalities in measuring the viability of the projects.
- Less Awareness among Consumers for Green Products: Private sector will produce green products only when there is sufficient market for that. Because of high cost and lack of awareness about the importance for green products people hardly buy green products.

- Less Awareness among Investors about Green Finance: Besides low profitability, low awareness among investors about the importance of green finance is also a major constraint. Also investment in energy efficiency technology and solar energy etc. are considered as cost, not investment.
- Less availability of green financial products: Limited number of green financial products is also a major obstacle for the development of green finance.

## STEPS TAKEN BY THE INDIAN FINANCIAL SYSTEM

### 1. ESG Index in India

- (a) S & P ESG India Index – It were launched in 2008. It is comprised of 50 companies which incorporate the ESG criteria for investment and these companies are taken from the largest 500 companies listed on NSE from side to side a two stage showing process
- (b) MSCI India ESG Index – released in July, 2013 it is a capitalization-weighted index that lists organizations with desirable ESG overall performance relative to quarter friends. It includes huge in addition to mid-cap Indian agencies.
- (c) S&P BSE CORBONEX – It tracks the performance of the companies within the S&P BSE 100 index based on their commitment to mitigate risks arising from climate change.
- (d) S&P BSE GREENEX – It is designed to measure the performance of the pinnacle 25 “Green” corporations in phrases of greenhouse fuel (GHG) emissions, market cap and liquidity.

### 2. Green Bond Market in India

- (a) Proceeds of the green relationship are used for finance the green project typically for generation of renewable energy and emission reduction as well.
- (b) IREDA has launched loans and raised \$91 million for renewable energy using bond issue in 2013
- (c) IREDA has launched India’s first green bond to support renewable energy. Rated AAA, interest 8.16% for 10 years and 8.55% for 10 years and 15 years.
- (d) Exim Bank of India has issued a five-year US\$500 million green bond in 2015 YES Bank

has issue the first INR-denominated green bond in 2015.

- (e) In January 2016, IREDA has issued a tax-free Rs 10 billion (\$150 million) green bond. SEBI has proposed new norms for the issuance and listing of green bonds in 2016.

### 3. Other Initiatives by Government of India for Sustainability

- (a) The Indian authorities has expanded its coal cess from INR50 constant with ton to INR100 in 2014, INR200 in 2015, finally INR 400 with regards to ton in 2016. The returns from the cess are utilized to fund easy exceptional ventures, and are required to make commitments INR13,000 to the NCEF every a 12 months.
- (b) The Companies Act of 2013 mandates 2% of earnings toward CSR in 2014- All organizations, private restricted or public constrained, with a net really worth of INR5 billion, a turnover of INR10 billion or a net income of INR50 million, need to spend at least consistent with cent in their common net earnings of the on the spot preceding three economic years on CSR activities. Notably, sustainability-linked funding is an alternative to be had to the groups.
- (c) Inclusion of renewable power below Priority Sector Lending in 2015 – Bank mortgage up to INR a hundred and fifty tens of millions to agencies and as much as INR 1 million to person are approved underneath Priority lending Scheme for set up of renewable strength.

### 4. Other initiatives by government of India for Environmental protection Policies in India

- (a) National Environment Policy (NEP) 2006
- (b) National Action Plan on Climate Change (NAPCC)
- (c) State Action Plan on Climate Change (SAPCC)
- (d) Energy Conservation Act
- (e) National Electricity Policy (NEP)
- (f) Integrated Energy Policy (IEP)

## CONCLUSION

Although Government of India has taken various steps for sustainable development but the private sector participation for sustainability is in the nascent stage. Because of the limited public finance, private finance has immense importance in the sustainable

development. So, the development of green finance is essential. However, there are various constraints in the growth path of green finance, but the removal of these will definitely lead to the development of green finance. Below are some suggestions for the same.

## SUGGESTIONS

- Government should bring stable policy framework for green finance which encourages private sector to finance sustainable development programme. For this, India has launched its National voluntary guidelines for responsible financing which mainly focus on disclosure of information.
- Environmental performance of the companies can be shown through index. Although India has 4 ESG index, there should be more ESG index in India to show the environmental performance of the companies. There should be green rating agencies also in the country.
- Government should intervene to increase the profitability of green projects. It can be increased by giving the tax exemption, subsidies and concessional loans to green projects which reduce the cost of green projects. It can also be done by charging high tax and by reducing the subsidies of polluting industries that means increasing the cost of polluting industry.
- There should be a mechanism to evaluate the projects and business etc., in terms of environmental, social and governance (ESG) risk. Objective should be to give more emphasis on environmental risk.
- 45% of the production comes from medium, small and micro enterprises. So, MSME has great scope to use energy efficient technology which reduce green house gas emission and generate
- renewable energy sources. Although, in India SIDBI and SBI provide the financial support to small scale industries for using the energy efficient technology, but more funds should be provided for the same.
- Awareness among Investors and consumers about the green finance is essential for the sustainability of the economy. Conferences, newspaper report, seminar can be useful tools for imparting the knowledge about the necessities of green products, technologies for energy efficiency for the sake of the future generation because a socially responsible consumer creates the market for green products.

- More numbers of green financial products should be available to investors so that they can make investment easily. For examples green loans, green equity, green bonds, green credit card etc.

## REFERENCES

- B.S, K. (2013). A Study of Emerging Green finance in India: Its Challenges and Opportunities. *International Journal of Management and Social Science Research*, 2 (2), 49–53.
- Jayasubramanian, P., & shanthi, M. (2014). Green Finance. *Indian Journal of Applied Research*, 4(8), 610–612.
- Nagarjuna, L. (2015). Green Financial Management Practices in Public and Private Sector Banks-Acase Study of SBI and ICICI. *International Multidisciplinary E-Journal*, 4 (8), 295–306.
- UNEP Inquiry (2016). Establishing China's Green Financial System, <http://unepinquiry.org/publication/establishing-chinas-green-financial-system/>
- UNEP Inquiry (2016). Green Finance for Developing Countries: Needs, Concerns and Innovations. [http://unepinquiry.org/wpcontent/uploads/2016/08/Green\\_Finance\\_for\\_Developing\\_Countries.pdf](http://unepinquiry.org/wpcontent/uploads/2016/08/Green_Finance_for_Developing_Countries.pdf)
- Indian Renewable Energy Development Agency, <http://mnre.gov.in/mission-and-vision-2/achievements/>
- Group of Twenty (2016). G20 Green Finance Synthesis Report. [http://unepinquiry.org/wp-content/uploads/2016/09/Synthesis\\_Report\\_Full\\_EN.pdf](http://unepinquiry.org/wp-content/uploads/2016/09/Synthesis_Report_Full_EN.pdf)
- Asia Pacific Economy Cooperation (2010). Green Finance for green Growth. [http://mddb.apec.org/documents/2010/MM/FMM/10\\_fmm\\_006.pdf](http://mddb.apec.org/documents/2010/MM/FMM/10_fmm_006.pdf)
- India's Intended Nationally Determined Contribution. BIAC (2016). Green Finance: Key Business Consideration for Financing a Sustainable and Low Carbon economy. <http://biac.org/wp-content/uploads/2016/06/16-06-Final-BIAC-Paper-on-Green-Finance3.pdf>
- GIZ (2011). Green Finance.
- NRDC (2016). Greening the India's financial Markets: How Green Bond can drive Clean Energy Development. <https://www.nrdc.org/sites/default/files/india-financial-market-green-bonds-report.pdf>
- UNEP Inquiry (2016). Delivering a Sustainable Financial System in India. [http://unepinquiry.org/wpcontent/uploads/2016/04/Delivering\\_a\\_Sustainable\\_Financial\\_System\\_in\\_India.pdf](http://unepinquiry.org/wpcontent/uploads/2016/04/Delivering_a_Sustainable_Financial_System_in_India.pdf)
- <http://www.asiaindex.co.in/indices/equity/sp-bse-greenex>



# Study the Effectiveness of Performance Management System in Context of Higher Educational Institution's Faculty

Jyoti\* and Dr. Farhat Mohsin\*\*

---

## ABSTRACT

*The paper focus on studying the main factors that determine the effectivity of performance management system on the academicians in higher education institutions. The Performance Management System (PMS) is a prime feature of any organisation for measuring performance of the employees along with achieving developmental goals, vision, mission of an organisation. PMS is not exclusively restricted to performance appraisal system rather it also comprises of requirement of training, communication enhancement, development and learning, and plays the role of traverse between employer and employee. Performance management system has acquired strength in the current years and can be considered as one of the utmost significant and effective development. Therefore, by introducing and implementing it in the organization's, it can enhance and improve their competitiveness. Private and Public organizations are moderately working in the direction of acquiring Performance Management System as it imparts coherent and integrated domain of Human Resource procedures which can be helpful in terms of providing support for the improvement in the individual as well as the organizational performance.*

*The study focused on the literature review taken from the various studies already been done through research papers, articles, books, journals, etc.*

*Few factors are accountable for the effectivity of the performance management system which are precariously concluded in this study. The study reveals that factors such as Weightage on research, Accessibility to work performance equipment's, Institution's directness to impart scope for employee's skill and knowledge enhancement, Support from Top Management, Culture, Reward Management, Educational Quality influence the effectiveness of a Performance Management System adoption in organisation.*

**Keywords:** Performance Management System, Factors, Higher Educational Institution, Performance Appraisal, Training, Effectiveness

---

## INTRODUCTION

At present, the world economy is globalizing at an unparalleled cost. As per Arup (2008), this unfailingly escorts to the formation of multinational organisation. By means of these progress the human resource systems are entrusted with distinctive confronts, particularly as enterprises succeed in implanting and transferring technical and financial systems to latest positions. Sequentially, it's imperative to develop vigorous performance management system by the human resource department in an effort to encourage the productivity and efficiency of the employees in an organisation.

The prosperity of an enterprise based on the success of local customer's professionally and personally such as employees and aiming to their persistent improvement in the performance as whole. Simultaneously, enterprises focus on improving employee's performance by providing training and development programs in order to enhance performance of the enterprise. Basically performance management is the whirring word and there is a saying as you Perish or Perform. Performance management concerns with the issue enterprises face in measuring, defining and instigating performance of the

---

\* Scholar FMS, MRIIRS. E-mail: jyotisuri134@gmail.com

\*\* Supervisor, MRIIRS. E-mail: farhat.fms@mriu.edu.in



employees with the objective of enhancing enterprises performance.

As per Peter F. Drucker, prominent management mentor prospect that an enterprises employee required to check the interconnection between how do they perform and results of the efforts being made. The PMS regimen of HR discipline is built to be linking the connection to such a degree that an employee's performance becomes aligned for attaining organizational objectives. From the time of former performance appraisal system if the organisation does not have adequate PMS in their container than an organisation cannot be prosperous.

Previously, universities had the advantage of autonomy, however lately opposed with influences like universal competition, accountability and fragile environment and overblown by contemporary movements such as changing responsibilities of governments and marketization (Johnes & Taylor, 1990; Decramer, 2007; Deshmukh, 2010). Institutions plays an important role in creating human capital in the development and economic advancement (Jalaliyoon & Taherdoost, 2012). Hence, higher education is playing a crucial contribution in their role of the global economy and for the future of nations.

Every single enterprise is acclaimed with some set of objective and goals. Among those, educational institution is one of them. The objectives of the educational institution could be preparing trained workforce, lofty pass out rate, empirical education for the current market generating adequate image with eminent journey etc. the procurement of the objectives based on the performance of every single stakeholder entangled with an institution like students, management committee, parents, government and teachers. The accomplishment of a specific person or an individual might not be adequate for attaining certain goal, i.e. each student, administrative and academic staff shared attempts can assist for the attainment of academic objectives. Therefore, it is essential for the coordinator, vice principal and principal to understand performance level expectations of students and academic staff. Such a procedure of developing, searching and measuring the performance of teams and individuals as well as governing their performance with regards to organisations objective is performance management system (Dessler, 2011).

The notion of Performance Management System (PMS) comprises of positive and important evolution that has

procured impetus in the province of Human Resource Management (HRM) (Ratnawat and Jha, 2013; Armstrong, 1994). The origin of PMS can be discovered around 221–265 AD and it is worthwhile to specify that not a thing is latest in the theory of PMS (Chamberlin, 2011). The numerous structure under which PMS has endured were Merit Rating (MR), Management by Objective (MBO) and Performance Appraisal System (PAS) (Armstrong and Baron, 1998; McGregor, 1957; Fowler, 1990; Drucker, 1964; Brown and Reilly, 2011; Armstrong, 1999). This idea has bestowed for the development of performance at the individual as well as organisational levels. Many researchers have published that these approaches have been disgraced in the private and public sectors all over the globe, therefore much attention and emphasis is being administered in relation to PMS (Akhtar and Mittal, 2015; Drucker, 1964; Upadhaya, Munir and Blount, 2014; Levinson, 1970; Armstrong and Baron, 1998; Mc Gregor, 1957; Baird, Schoch and Chen, 2012; Boyatzis, 1982; Ramguttu-Wong, 2014; Fowler, 1990)

Several efforts have been made by the publishers to access factors contributing for the effective PMS.

The necessity to enhance the performance of employees is specifically the crucial challenges faced by numerous countries. Hence, to redress and address the concerns enterprises undergo with respect to performance, the performance management system shows up as a management reform (Sharif, 2002). Many reforms have been implemented in the education sector that concerns on the employee's performance (Gleeson & Husbands, 2001; Chadbourne, & Hogan, 2000; Downs). Gentle (2001) guides that performance management must be recognised as a procedure and not an occasion that must pervade the higher education institutions culture periodically and must not be taken on annual basis and pursued for obtaining immediate award.

PMS is invariably of imperious affair for any institution/organization in the duration of supervising its workforce. Though, higher education institutions based on non-teaching as well as teaching staff operating, still mass liability come across teaching staff who are the origin of development and learning, students skills. Hence, this necessity of academicians performance insists a genuine, effective, motivating, systematic, smart and fair performance management system. Consequently, performance management grows into essential tool



practised by policymakers to develop the education methodology.

## OBJECTIVES OF THE STUDY

- To identify the factors influencing PMS in Higher education system.
- To explore the relationship between employee's performance and PMS in higher education system.

## LITERATURE REVIEW

M. Boipono, T. Goitseone & R. Mogadim(2014), stated that the informants requires a method like PMS which can be used to assess their performance. There should be redesigning of the PMS that suits the demands of the school and the current does not fit the environment. For better monitoring and implementation, providing communication and feedback effectively is an essential favourable factor which helps teachers to be formative and continuously grow for achieving defined goals. There should be an improved working conditions in order to bring more productive in their work. A reward system as a motivational strategy can be implemented, supporting documents can be documented for transparency, unbiasedness, improvement in formative assessment, improvement in teaching assessment can be implemented in the PMS.

N. Mansor, A. Chakraborty, T. Yin, Z. Mahitapoglu(2012) concluded that there are three factors which influence the execution of PMS. There is an important effectiveness on the factors of PMS which is executed very positively and strongly which in turn bring out high performance. Although, as a significant factor, management commitment is quite insufficient. Also, to bring more effectivity in PMS, this factor need to be considered strictly and carefully. Inclusively, the study has accomplished the goals and motivation planned. Organisational factors plays an important role in PMS which is imperative in expanding performance of any organisation, exclusively in higher educational institutions.

Esther M. Maimela and Michael O. Samuel (2016), displayed the experience and perception of faculty members in regards to application of PMS in an open distance learning HEIs. Although PMS was directed as an instrument with which productiveness of faculty members can be managed and determined, the assessment practice used in the PMS unavailing to appropriately acquire all the work accomplished by faculties. Due to

which there is an increment in the affairs of validity and its integrity of PMS. Although it is important to accept a participative method for its administration, design of the system must be translucent.

Bhawna Chahar and Vinod Hatwal 2018, stated that PMS need to be implemented and redefined as per the standards and requirement of institutions as its imperative in the educational institution which is relevant in the sector of Higher Education Institution. In order to improve the performance of the academicians relating to institution along with individual objectives and goals to enhance the overall execution of the institution for attaining the standards, the institution must implement Performance Management System. The Performance Management intent for commitment, motivation and employee satisfaction and assist the institutions to figure work performance by rewards, measures and recognition with constructive and accurate feedback.

Srikant M. (2012) concluded that due to the change in the circumstances all the issues which the higher educational institutions are facing requires a fresh look and a prudent paradigm move is necessary for dealing today's higher education. Various quality standards are required to be applicable for meeting the diverse needs of individual stakeholders in the higher education. The following points have been suggested for the benefit of the education system:

- Enhancing the levels of education and interrelationship for keeping it as long-term plans.
- Requirement of transparency at all levels.
- Due importance to be given to the student's welfare for the stipends, scholarships, etc., at the Universities.
- Designing of the courses in collaboration with the industries must be updated on the regular basis in the Universities.
- Upgradation in the knowledge and skills of the faculties must be encouraged by motivating them to participate in the conferences, conventions, seminars, workshops in their own disciplines.

Pankaj K. (2019) examined the relationship between organisational effectiveness and the performance management system. The study finds that there is a connection of performance management factors which leads in improving the effectivity of the organisation. The review carries considerable importance for academicians as well as HR exponent as exponent can propose to

create preferable PMS design which helps to upgrade the performance of the organisation. It also examined the connection between organisational effectiveness and management practices as such practices helps the enterprises to attain sustainable growth. In this study, it is founded that objective setting mission, measure and vision have considerable connection with organisational effectiveness.

Nada A. & Turkey A. (2021), this study focus on filling the gaps in respect to performance management system to grow performance of teachers in particular and educational system of Saudi in general under Saudi Ministry of Education. In addition, it seeks to assess the actual performance of the teachers through the present performance management system for which they concluded that the present performance management system is unsatisfactory for determining their performance and for assembling their growth requirements. Further, there is a need to re-evaluate the numerous challenges, issues and present performance management system. The researcher has developed new policies and understood the effect of these policies on the on-going process. It is important for the policy maker, training provider to find out the impacts of the teacher's performance when planning their development programs, setting their individual and organisational objectives.

Waleed A. (2023), the study focuses on examining the effect of performance management on the performance of the employees wherein, it concludes that there is a constructive significant effect on the employee's performance of the PMS. The research sympathise that the PMS means for verifying and measuring performance in opposition to objectives, and must include: implementation, employee motivation and design. Also, the factors of organisation that influence the employee's performance along with PMS are promotion, wages and working conditions. As per literature, performance design has a feeble effect on the performance of the employees, so performance evaluation is performed alongside performance monitoring by management.

## RESEARCH METHODOLOGY

The research is descriptive and the document entrusted is entrenched on secondary data. Numerous documents have been studied from the secondary sources such as reports, newspaper, newsletters, internet,

magazines, journals and research papers to recognize and categories the factors influencing the PMS of the HEIs.

## FACTORS INFLUENCING PMS IN HIGHER EDUCATION SYSTEM IN INDIA

- **Weightage on research:** Srikant Mishra (2012), the present university system intensifies more on the administrative aspect as prime concern, generally 80% of the overheads based on administrative tasks. Most Private supports of HEIs does not contribute any monetary benefit for publishing the teachers research work for the editorial boards of the journals or on a foreign journal which is appraised as self-development approach. Research is observed as a vital and a primary role of a university.
- **Accessibility to work performance equipment's:** In order to generate effective work environment for the academicians to enhance the performance of the individuals, the institutions can shift their traditional teaching method to modern technologies which have been instrumental at complex data management and analysis to form lengthy commitments (Abid Haleema, Mohd Javaida, Mohd Asim Qadri, Rajiv Suman, 2022). With the digital technology, institutions can improve the effectivity and efficiency of the teacher's duty which they undertake by reducing the number of time-consuming and repetitive tasks. A lot of energy and time may get saved by partially automating or automating daily operations such as performance monitoring and attendance tracking through the applications of educational technology.

Technological factors can influence the performance of the teachers in both ways positive as well as negative by technological infrastructure assistance, computerisation, mobile phones, electricity backups, techniques for higher education information system (HEIS) growth, individual's affinity with technologies, media and cinema involvement, resistance or acceptance to developing technologies, etc. (Srikant Mishra, 2012).

## INSTITUTION'S DIRECTNESS TO IMPART SCOPE FOR EMPLOYEE'S SKILL AND KNOWLEDGE ENHANCEMENT

To enhance the knowledge and skill of the employees based upon the reviewed performance, the training is one of the form of developing the required skills

from the 1990's (Armstrong, 1994). The foundation of aforementioned sort of training is that it creates offerings for the improvement of aptitudes and abilities which come across immediate effect on team and individual performance.

As per Dermol (2013), it's important to consider that researchers as Vyas (2010), Heathfield (2009), Lyles and Salk (2007), Campbell (2006), Minbaeva (2005), Conner (2002), Salk and Lyles (2001), Gupta and Govindarajan (2000) mostly enacted their observation on inspecting the contemporary sequel of training at the organisational as well as individual level. Although studies have disclosed that the effects of training can enhance employee productivity and flexibility. Though beneficial fact is that there is a positive relationship between PMS effectiveness and training (Chan, 2004; Emerson, 2009).

Also, Baird, 2012, pointed out that PMS associated training, reinforce managers and employees to recognise PM, objectives, procedures and operationalisation of PMS. It can take place only if there is clear communication being provided for the performance measures, declared as trustworthy and pertinent in the recommendation process.

### **Support from Top Management**

Commitment raise readiness and attachment to settle ample attempts on behalf of the enterprises as per Salancik and Pfeffer (1977) and Porter, Steers, Mowday and Boulian (1974). Due to commitment there is an improvement in the performance of the employees of the organisations who decides to move from conventional control oriented method to manpower management (Walton, 1985). Whereas, Cheng(2007) have emphasised that prosperous application of PMS procedure, organisations must have effectual superior management participation, support and leadership.

Employees might provide no priority or less importance in the implementation of the PMS when there is desertion from the top management leadership and commitment (Krumwiede, 1998). The poor management support will lead to the major challenge in the implantation process of the PMS in any organisation Pace (2011). Hence, for an effective PMS the managers must own it, drive it and deliver it (Armstrong and Baron, 2005; Nel, Van, Haasbrack, Schultz, Sono and Werner 2004; Rao, 2007).

### **Culture**

There is unified consent between practitioners and academics who contemplate that institutions performance relies on the range to which culture ethics are widely shared (Ouchi, 1981). The success of an organisation depends upon the organisational culture being followed and it has been given much attention in the past twenty years (Johari and Sanbasivan, 2003). The interest and widespread popularity in the culture arise from the ordinary faith that commercial culture generate monetary performance. Outcome orientation, innovation and teamwork are the three factors which have been suggested by Baird(2012) during the study associated with the influence of culture on performance. Also innovation is inspiring the process in which things are being implemented in an organisation. As per the researchers the organisations who are accepting innovation and bringing changes in their work performance are heading towards accepting the emergent external environment issues more efficiently than those of traditional ones (Naveh and Erez, 2004).

Du and Farley, 2001; Roper and Love, 2002; Naveh and Erez, 2004; Garcia-Morales, Moreno, Llorens-Montes, 2006 suggested that there is a positive relationship between organizational culture and innovation.

Teamwork has obtained acceptance in current changing business environments. It is the amalgamation of individual's distinctive skills in order to expand performance among several job duties that cannot be accomplished by an individual operating outside a team or an individual operating on his own (Katzenbach and Smith, 1993).

### **Reward Management**

Reward is one of the vital key of the PMS, which is linked to the performance, expected behaviour and motivation of the workforce in pursuit of putting extra efforts to the responsibilities and duties assigned (Njanja, Maina, Kibet and Njagi, 2013). Mandal and Dalal, 2006 states that in the previous year's reward has acquired ample admiration not only from researchers but from managers also. There are many facts on which the employees feel satisfied but reward is the most effective factor due to which the performance of the employees impacted a lot as per many researchers (Quereshi, Hijazi, Ramey and Mohammad, 2007; Pratheepkanth, 2011). Chaudhari and Purkayastha (2011) concluded that even if the firm is dealing with the turbulent environment in the financial



assistance still they can make their employees satisfied by implanting effective reward and PM system. Also, they must give a thought on devising most effective reward system for the requirement of the workforce, the congruence between the strategic goals and employees interests and the precision of the organisation. The potential reward system must be well marketed and communicated to all the stakeholders and employees regardless of their position, receive commitment and support from top management and be managed, driven and owned by the superiors (Armstrong 2011; Mehmood, Ramzan and Akbar, 2013; Yamoah, 2014).

### Educational Quality

In the era of evolution, there is an increase in the number of Institution/Universities growing due to which some are ignoring or overlooking the quality of education being provided to the students in view of accessibility and expansions of education.

### CONCLUSION

It has been concluded from the study that PMS plays an important role in the HEIs and there are few factors that can influence the effectiveness of PMS on the employees. A prudent ideal shift is required for the implementation of the PMS as most of the academicians does not have the clear understanding, role and clarity about the system in order to meet the goals and objectives of the institution as well as the individual. A well established, clear knowledge and proper guidance to be provided for getting effective and efficient performance PMS can impact their performance level, quality of work, motivation level, more weightage to be given on the research. To enhance the skill and knowledge, development and training program run by the institution assist the employees to grow their prospective skills to acquire their provided work efficiently and effectively.

### REFERENCES

- Ahmed, N.S. (2016). *Performance Appraisal in Higher Education Institutions in the Kurdistan Region: The Case of the University of Sulaimani By*.
- Asad, M., & Mahfod, J. (2015). Performance Management System in Action, Survey and Questionnaire Finding in Higher Education in Bahrain. *International Journal of Business and Management*, 10(8), 96–114. <https://doi.org/10.5539/ijbm.v10n8p96>
- Cosenz F. & Bianchi C. (2013), Designing Performance Management Systems in Academic Institutions: A Dynamic Performance Management View. Paper presented at the ASPA Conference New Orleans.
- Chandra G.R. & Saraswathi B.A. (2018), A Study on the Concept of Performance Management System in IT Industry – Literature Review, *IJMET International Journal of Mechanical Engineering and Technology*, (ISSN Print: 0976-6340), 9(1), 511–520.
- Chahar B. & Hatwal V. (2018). A Study of Performance Management System in Higher Education Institution with Special Reference to Academicians, *JETIR Journal of Emerging Technologies and Innovative Research*, (ISSN-2349-5162), 5(6), [www.jetir.org](http://www.jetir.org)
- Dorsey D. & Mueller R. Performance Management That Makes A Difference: An Evidence-Based Approach (n.d.) (SHRM report). Retrieved from <https://www.shrm.org/hrtoday/trends-and-forecasting/special-reports-and-expertviews/documents/performance%20management.pdf>
- Decramer A., Christiaens J., Vanderstraeten A. (2008), Implementation Dynamics of Performance Management in Higher Education, 528, <https://ideas.repec.org/p/rug/rugwps/08-528.html>
- Flaniken, F. W. (2009). Performance Appraisal Systems in Higher Education: An Exploration of Christian Institutions. University of Central Florida, Orlando. Florida, 2009, 196.
- Ghosh, S., & Das, N. (2013). New Model of Performance Management and Measurement in Higher Education Sector Sayantani Ghosh Niladri Das Management. *International Journal of Scientific Research*, 2(6), 267–274.
- Gudla, S. (2012). The Study of Performance Management System in IT Organizations. *IOSR Journal of Business and Management*, 6(3), 37–52. <https://doi.org/10.9790/487x-0633752>
- Hatwal, V. (2020). A Study of Performance Management System in Higher Education Institution with Special Reference to Academicians, June 2018, 3–7.
- Jalaliyoon N. & Taherdoost H. (2012), Performance evaluation of higher education: A necessity, *Procedia – Social and Behavioral Sciences*, 26, 5682–5686. <https://doi.org/10.1016/j.sbspro.2012.06.497>
- Malik, G. (2017). Governance and Management of Higher Education Institutions in India. *Centre for Policy Research in Higher Education*, 5, 1–43.
- Mangipudi, M.R., Prasad, K., & Vaidya, R. (2019). Employee Performance as Function of Performance Management System: An Empirical Study Information Technology Enabled Services Companies around Hyderabad. *European Journal of Business and Management Research*, 4(4). <https://doi.org/10.24018/ejbmr.2019.4.4.87>



- Mapesala E.L.M. & Strydom F., Performance Management of Academic Staff in South African: A Developmental Research Project. Paper presented at the *Conference on Trends in the Management of Human Resources in Higher Education*.
- Noronha F.S., Aquinas G. & Manazes D.A. (2016). Implementing Employee Performance Management System: A Scoping Review. *International Journal of Management and Applied Science* (ISSN: 2394-7926), 2(5). [http://www.ijar.in/journal/journal\\_file/journal\\_pdf/14-256-146502076485-89.pdf](http://www.ijar.in/journal/journal_file/journal_pdf/14-256-146502076485-89.pdf)
- Neelaveni, C., & Manimaran, S. (2014). *A statistical study on higher educational institutions in India*, 6(9), 190–195. <https://doi.org/10.5897/IJEAPS2014.0378>
- Okeke, M.N., Onyekwelu, N.P., Akpua, J., & Dunkwu, C. (2019). Performance management and employee productivity in selected large organizations in South-East, Nigeria. *Journal of Business Management*, 3, 57–69.
- Panda S. (2011). *Performance Management System: Issues and Challenges: Management and Labour Studies*, 36(3). <https://journals.sagepub.com/doi/abs/10.1177/0258042X1103600304>
- Ricci, L. (2016). The Impact of Performance Management System Characteristics on Perceived Effectiveness of the System and Engagement. San Jose State University, 1–87.
- Shaguri O.R (2013). Higher Education in India. Retrieved from <http://www.eanedu.org/assets/highereducationindia/shaguri.pdf>
- Shilongo N.L. (2018), Challenges in the Implementation of the Performance Management System in the Ministry of Urban and Rural Development in Namibia.
- Sherwani H.K. (2014), Development of Performance Management Concept in Higher Education Context, *International journal of Social Sciences & Educational Studies* (ISSN 2409-1294) I(2). <https://ijsses.tiu.edu.iq/index.php/volume-1-issue-2-article-4/>
- Suryadi K. (2007), Framework of Measuring Key Performance Indicators for Decision Support in Higher Education Institution, *Journal of Applied Sciences Research*, 3(12), 1689–1695.
- Shrivastava, P. (2018). Impact of effectiveness of performance management system on employee satisfaction and commitment. *International Journal of Management Research & Review*, 8(4), 1–8.
- Sisa, E. (2014). Implementation of the Performance Management System in the Ministry of Foreign Affairs and International Co-operation of the Botswana Public Service. July, 1–60.
- Srimathi, H., & Krishnamoorthy, A. (2019). Higher education system in India: Challenges and opportunities. *International Journal of Scientific and Technology Research*, 8(12), 2213–2217.
- Sujith A.S. (2017), Emerging Trends In Performance Management – A Review, *IJNRD International Journal of Novel Research and Development* (ISSN: 2456-4184), 2(6). <http://www.ijnrd.org/viewpaperforall.php?paper=IJNRD1706009>
- Suryadi K. (2007), Framework of Measuring Key Performance Indicators for Decision Support in Higher Education Institution, *Journal of Applied Sciences Research*, 3(12), 1689–1695
- Sulkowski, Ł., Przytuła, S., Borg, C., & Kulikowski, K. (2020). Performance appraisal in universities – Assessing the tension in public service motivation (PSM). *Education Sciences*, 10(7), 1–19. <https://doi.org/10.3390/educsci10070174>
- Tanveer, M. & Karim M.A. (2018), Higher Education Institutions and the Performance Management. *Library Philosophy and Practice (e-journal)*. 2183. <https://digitalcommons.unl.edu/libphilprac/2183>.
- Teir Abu R. A.S. Abu & Zhang R. (2016). The Current Practices of Human Resource Management in Higher Education Institutions in Palestine, *JHRMLS Journal of Human Resources Management and Labor Studies*, 4(1), 65-83. <https://doi.org/10.15640/jhrmls.v4n1a3>
- Türk K. & Roolaht T. (2007). Appraisal And Compensation of the Academic Staff in Estonian Public And Private Universities: A Comparative Analysis. *TRAMES*, 11(61/56), 2, 206–222.
- Ying, Z.Y. (2012). The Impact of Performance Management System on Employee performance, 57.



## Green Finance

### *A Pillar of Sustainability in Indian Economy*

Dr. Narpal Yadav\*, Dr. Joginder Singh\*\* and Dr. Ramniwas Sangwan\*\*\*

---

#### ABSTRACT

*In the present era, the necessity of protecting the natural resources and environment in the global economy. Green financing is to increase level of financial flows (from banking, micro-credit, insurance and investment) from the public, private and not-for-profit sectors to sustainable development priorities. This paper examines to give new innovation about Green finance as an effective index of sustainability. Green finance programs justify to increase funding for climate solutions in the hopes that its market will create “green jobs”. Co-operations across the governments at different stages are most significant. The government can support the cities by increasing the funding which suites the energy saving and also locally administrated. Global economy has to adopt Green finance for sustainability. Green finance is a component that change the behaviour from traditional form of financing to more environments friendly financing. India has to have a green finance strategy to achieve its ambitious sustainable development goals.*

**Keywords:** Green Finance, Sustainable Development, Green Investment Product, Awareness

---

#### INTRODUCTION

Population wise India stands on 1st rank and density of India in 2022 was 431.11 people per square kilometer, a 0.68% increase from 2021. The population density of India in 2021 was 428.19 people per square kilometer, a 0.8% increase from 2020 in the world in population. Traditionally Indians have been hugely dependant on its natural resources. The growth of population, industry, business and economy as a whole has seriously impacted on the green environment. Climate change is no longer something which we can ignore. It has in fact become the most formidable challenge for GDP growth across the world and to accelerate the implementation of India's commitment to Paris agreement and to achieve sustainable development goal finance will play a huge role. India will be requiring about five trillion dollars to meet its climate action changes. The contribution only from government or the public sectors will not be enough. Private participation or the private-public collaboration has become important to achieve sustainable growth. Green finance has certainly become the channel for adopting sustainability.

#### REVIEW OF LITERATURE

Literature Review being the major aspect of the research work helps in understanding the past research work carried out regarding the topic and will give the base for formulation and analysis of research problem.

Kumar & Prakash (2020) observed to enable the public sector banks to adopt best sustainable practices, adequate code of conduct at the global level needs to be drawn into the Indian banking industry.

Jeffrey D. Saches et al. (2019) found in the study that the investment in renewable energy efficiency has been declining which would threaten the expansion of green energy.

Sharif Mohd et al. (2018) discussed the various Green financial instruments available and the sustainability initiatives in India and opined that India has a great potential to create a green infrastructure needed for green finance.

Parvadavardini Soundarrajan et al. (2016) reported Green finance as the core part of low carbon growth

---

\* Associate Professor of Commerce, Ahir (P.G.) College, Rewari

\*\* Assistant Professor of Commerce, Govt. College, Bawal District, Rewari

\*\*\* Assistant Professor of Commerce, Government College, Kharkhara, Rewari

connecting, financial industry, environmental improvement, and economic growth.

Dipika (2015) concluded that green banking helps in improving economic growth and protects the environment. Thus, green lending should be given priority as part of sustainable development.

Keerthi B.S. (2013) analysed the recent trends, challenges, and opportunities of green finance in India. Further, concluded that promoting sustainable equitable agriculture and rural prosperity is needed and this can be achieved through the innovative initiatives.

## RESEARCH OBJECTIVES

- To identify the types of green financing products.
- To judge the benefits of Green Financing.
- To assess the limitations of green financing in India.

## RESEARCH METHODOLOGY

Present paper is descriptive in nature. The information is collected from secondary sources through published sources such as reports, journals, research articles, and websites.

## ANALYSIS AND DISCUSSION

### Green Finance Products

Climate change has become the defining political and economic issue and is likely to remain so for many years. Globally, governments, investors, corporations, and private citizens are starting to take actions to respond to the climate crisis with a particular focus on decarbonization strategies. Moving to a decarbonized economy is going to require an unprecedented level of new capital investment, particularly in the form of green finance.

While the estimates of the funding requirements differ. The G-20 estimates that global investment of US \$90 trillion would be required over the next 15 years to achieve global sustainable development and climate objectives. According to the International Energy Agency, cumulative investment of US \$53 trillion is required by 2035 in the energy sector alone. Also, it is now accepted that to enable a transition to a zero-carbon future, a mix of public and private sector capital will be required, and that public sector money alone cannot cover this cost.

Therefore, there is an urgent need to enhance the ability of the financial system to mobilize private capital for green and sustainable investment. In turn, this requires the development of new financing tools in order to match potential investors with the green financing requirements and to help mobilize capital in the scale required. Below are some of the most important existing and emerging products:

### Existing Green Products

1. **Green bonds:** Green bonds have become the investment vehicle of choice for the private and public sectors to finance projects with environmental benefits. In particular low carbon transport, clean power and energy efficient buildings have availed of this type of financing. While there is much debate around issues such as greenwashing whether green bonds are better than conventional bonds.
2. **Green equity funds:** A green equity fund is a structured investment vehicle that selects investments based on a commitment to a green investment strategy. This structure enables different investors to pool their capital with qualified investment managers to pursue an agreed investment strategy.

This type of investment structure has been used extensively to support investment in renewable energy over the past 15 years and is now a well-accepted investment tool.

### Emerging Green Products

As with any sophisticated capital market, it is critical that a more diverse range of financial products will be required. Here, some emerging green financial products are briefly mentioned:

1. **Green securitization:** The bundling of green loans into securities can unlock additional capital to finance the transition to a decarbonized and climate-resilient economy. Securitization enables the aggregation of multiple small-scale loans and helps to attract a different investor base. Importantly, securitizing existing loans also gives banks and other primary lenders an opportunity to refinance existing loan portfolios and recycle capital to create fresh portfolios of green loans. Different structures such as collateralized loan obligation and asset-backed securities transactions can be utilized.

2. **Green leasing/renting:** Leasing is one of oldest and most popular financing structures available to finance the acquisition of planted equipment; however, it is still only at a nascent stage when considering the potential for funding green assets. Emerging areas where green leasing has been used include:
  - (a) Green property leases
  - (b) Green car leasing
  - (c) Energy efficiency
  - (d) Green mortgages.
3. **Other solutions**
  - (a) *Public/private partnerships:* These have been used extensively to support infrastructure projects and represent a viable financing tool for climate finance, particularly given the necessity of involving both the public and private sectors on climate mitigation.
  - (b) *Climate insurance:* Insurance represents a very important but much underutilized approach in helping to structure climate-related financial solutions and which can be included in a wider financing approach to help make it bankable. This includes sovereign risk insurance and technology insurance products.
  - (c) *Transition and sustainability bonds:* These are used by companies in carbon- intensive sectors such as oil and gas or heavy industry, where green bonds may not be accessible due to the specific criteria.
  - (d) *Islamic finance:* Climate mitigation strategies are consistent with the principles of Islamic (or Sharia) finance. Islamic finance offers a broad range of instruments that can be used for climate mitigation and importantly draws on a completely different universe of investors.
  - (e) *Green loans:* Green loans are loans aimed at advancing environmental sustainability and are similar in nature to green bonds. Separate green loan principles have now been developed.

Therefore, we are likely to see some or all of these products being increasingly utilized to attract investment capital for the fight against climate change. We expect that over time more sophisticated variations of these products will ultimately emerge.

## Benefits of Green Finance

Not only the environment but also the economy will get benefits from Green finance. It helps in bringing harmony between the monetary aspect and nature. The various benefits offered are:

1. **Efficient energy management:** Various incentives are provided for installing and using renewable energy resources and funding is provided for projects aimed at reducing wastage of energy under Green financing. Thus efficient energy management can be achieved.
2. **Environmental protection:** As the major aspect of green financing is the funding of the projects aimed at sustainable development, environmental protection is an integral part of the funding. Thus this concept will help in reducing pollution levels, adapting to climate changes, mitigating depletion of the ozone layer, preserving biodiversity, etc., which are very much needed for the survival of living organisms.
3. **Enhances reputation:** Since the increasing number of stakeholders wants to contribute to society through their investments and thus to perform their social responsibility work they will be giving priority to the companies that work towards benefiting the environment. Even the government provides incentives for eco-friendly projects. Hence green financing will help the organizations to build and enhance their reputation in the long run.
4. **Helps in attracting FDI:** Concerns about the protection of the environment are rising across the globe. As a result foreign investors while investing in domestic companies will evaluate the projects taking into consideration the social cost and the benefits. Thus issuing green investment products will attract foreign direct investment to our country.

## Limitations of Green Finance

1. **Ambiguity regarding definition:** There is no standard uniform definition for green finance. It will become difficult for investors to choose the right green projects as there is no clarity regarding the definition, which will lead to confusion, and thus it works as a barrier for investment in green projects.



2. **No proper regulatory framework:** There are no specific laws, rules, and regulations related to the evaluation of green projects and there exist no particular policy actions regarding green investment. This regulatory gap acts as a hurdle for the growth and development the green investment.
3. **Lack of awareness:** Though certain groups of people are opening up to eco-friendly investments, there exist a large number of stakeholders who are not aware of the concept of green finance itself. The lack of information and awareness will result in less capital accumulation in green investment products than required. This will lead to an imbalance in terms of demand and supply of funds.
4. **Give rise to the unhealthy competition:** The market participants will take unfair advantage of the growing demand for green investment products and try to maximize their market share by using the name of green projects. This will lead to unhealthy competition and ultimately ignores the concept of sustainable development, for the sake of short-term economic profit.

## CONCLUSION

On the basis of above discussion, it can be inferred that moving to a decarbonized economy required an unprecedented level of new capital investment, particularly in the form of green finance. To support investment in renewable energy over the past 15 years the existing green products namely green bond and green equity funds are now a well-accepted investment tool. But huge requirement of capital some emerging green products should be launched like green securitization, Green leasing/renting, Transition and sustainability bonds, Islamic finance and Green loans, etc.

Green finance is not beneficial only to the environment but also the economy will get benefits from it. It helps in bringing harmony between the monetary aspect and nature. The benefits of green finance to environment as well as economy are efficient energy management, environmental protection, enhances reputation, helps in attracting FDI, etc.

Although green finance is not free from limitations. Main limitations of green finance are related to its proper definition, its regulatory framework, lack of awareness in public, rising unhealthy competition, etc.

## REFERENCES

- Berensmann, K & Lindenberg, N. (2019). Green Finance: Actors, Challenges and Policy Recommendations. *Briefing paper*.
- Chowdhary, T. U., Datta, R., & Mohajan, H. K. (2013). Green Finance is Essential for Economic Development and Sustainability. *International Journal of Research in Commerce, Economics & Management*, 3(10), 104–108.
- Dikau, S., & U. Volz. (2018). Central Banking, Climate Change and Green Finance. *ADB Working Paper 867*. Tokyo: Asian Development Bank Institute.
- Dipika (2015). Green Banking in India: A Study of Various Strategies Adopted by Banks for Sustainable Development. *International Journal of Engineering Research & Technology (IJERT)*
- Jha, B., & Bakhshi, P. (2019). Green Finance: Fostering Sustainable Development in India. *International Journal of Recent Technology and Engineering*, 8(4), 3798–3801.
- Keerthi, B.S. (2013). A Study on Emerging Green Finance in India: Its challenges and Opportunities. *International Journal of Management and Social Sciences Research (IJMSSR)*, 2(2), 49–53
- Kumar, K., & Prakash, A. (2020). Managing sustainability in banking: extent of sustainable banking adaptations of banking sector in India. *Environment, Development and Sustainability*, 22(6), 5199–5217.
- Labanya Prakash Jena, D.P. (2020). Accelerating Green Finance in India: Definitions and Beyond. *Climate Policy Initiative*, June.
- MoEF (2015). State of Environment Report India 2015.
- Mohd, S., & V K, K. (2018). Green Finance: A Step towards Sustainable Development. *Journal Press of India*, 5(1), 59–74.
- PTI (n.d.). India needs \$2.5 trillion to meet its 2030 climate change targets: Centre | *Business Standard News*. Retrieved October 19, 2021, from [https://www.business-standard.com/article/pti-stories/india-needs-usd-2-5-trillion-to-meet-its-2030-climate-change-targets-govt-118031601090\\_1.html](https://www.business-standard.com/article/pti-stories/india-needs-usd-2-5-trillion-to-meet-its-2030-climate-change-targets-govt-118031601090_1.html)
- RBI (2018). Report on Trend and Progress of Banking in India 2018-19.
- RBI (2021). Green Finance in India: Progress and Challenges. *RBI Bulletin*, January, 62–72.
- Sachs, J.D., Woo, N., Yoshino, N., & Hesary, T. Hesary (2019). Why is Green Finance Important? *ADB working paper 917*. <https://www.adb.org/publications/why-green-finance-important>
- Sinha, J., Jain, S., Padmanabhi, R., & Acharya, M. (2020). *Landscape of Green Finance in India*. September.

- 
- Sharma, M., & Choubey, A. (2021). Green banking initiatives: a qualitative study on Indian banking sector. *Environment, Development and Sustainability*,
  - Soundarrajan, P., & Vivek, N. (2016). Green finance for sustainable green economic growth in India. *Agric. Econ.*, 62(1), 35–44.
  - Times, E. (n.d.). Census of India Website: Office of the Registrar General & Census Commissioner, India. Retrieved October 17, 2021, from <https://censusindia.gov.in/2011-common/censusdata2011.html>
  - UNEP (n.d.). Green Financing | UNEP–UN Environment Programme. Retrieved October 18, 2021, from <https://www.unep.org/regions/asia-and-pacific/regional->
  - Wang, K., Tsai, S.B., Du, X., & Bi, D. (2019). Internet Finance, Green Finance, and Sustainability. *Sustainability*, 11(14), 3856. <https://doi.org/10.3390/su11143856>



# Gaining Popularity of the Ayurvedic Cuisine

## Challenges, Solutions and Emerging Trends

Rekha Sharma\*, Debpriya De\*\* and Apurva Kapur\*\*\*

### ABSTRACT

*Ayurveda is a treasure trove for wellness and promotes a harmonious balance between one's physical, mental, emotional, and spiritual well-being. The Indian subcontinent served as the origin of Ayurveda, and its influences can be traced back more than 5000 years. Ayurveda first focused on surgery and medicine for the advancement of humanity as a whole. The word "Ayurveda" means "Science of Life" in Sanskrit. It offers us with the ideal way to live. During the span of nature's evolution, humans have changed significantly over time. They must, however, live according to the laws of nature. We are conscious that technology has greatly altered our way of life, but we can't help but follow the trends of the day in life. Our modern way of life is in striking comparison to that of our ancestors. We have come to understand this transition from the natural way of living to the modern way of existence. It necessitates returning to our conventional approaches in order to live a healthy lifestyle. According to the ancient texts, the human body is viewed as a food storage facility or a product produced of food; it follows that "We become what we Consume." Therefore, in order to change our health, we must change our dietary habits. A regular diet is essential for our health; therefore we should eat them consciously and with thankfulness. By engaging in this practise, we can treat and ward off a wide range of illnesses; excellent health reveals a harmonious balance of the doshas.*

*The objective of this research is to comprehend the significance of Ayurvedic cuisine as well as the historical significance of Ayurveda as a healing diet and its benefits for health post Covid 19. Despite the growing popularity of Ayurvedic cuisine, many people find it difficult to adjust.*

**Design/methodology/approach:** *The planned study mainly is descriptive in nature. It is earnestly based on primary and secondary data. The primary data is collected by using close-ended multiple-choice & dichotomous questions to get insights into the perception of the respondents of various universities and industry professions who are working at the level of managing F&B operations. The secondary data is collected from the concerned sources as per the need of the research. The relevant books, documents of various departments and organizations, articles, papers and websites are used in this study.*

**Research limitations:** *The reliance on the sources available online and their credibility are always the biggest challenge, however, by increasing the sample size and of more contribution from different sources and government officials would have made the study more constructive.*

**Originality/value:** *The research adds value to the Food industry, Hotel industry, culinary institutions, and hotel management students at large.*

**Keywords:** Globalization, Cuisine, Local, Sustainable, Organic, Ayurvedic Cooking Styles

**Paper type:** Research paper

### INTRODUCTION

Since ancient times, traditional Indian cuisine has been prepared and exposed to various changes.

The nation has a longstanding reputation for having a diverse regional traditional culture and a rich culinary legacy. India has developed a wide knowledge and

\* Associate Professor, School of Hospitality and Tourism Management, Vedatya Institute, Gurugram. E-mail: rekha.sharma@vedatya.ac.in

\*\* Associate Professor, School of Hospitality and Tourism Management, Vedatya Institute, Gurugram. E-mail: debpriya.de@vedatya.ac.in

\*\*\* Assistant Professor, Vedatya Institute, Gurugram. E-mail: apurva.kapur@vedatya.ac.in

understanding of food preparation, preservation, and its therapeutic benefits for the body and mind. Through the dietary components, the food system can deliver various biological functions in one's body. Indian traditional food has been regarded as a rich source of body-healing compounds, antioxidants, dietary fibres, and probiotics due to the inclusion of functional components.

Food in the Indian context has always been considered to have a healing effect on one's body, which excludes foods that are otherwise forbidden. Indian physicians not only discouraged vegetarianism among their patients, but they also suggested eating meat, garlic, mushrooms, and even alcohol to treat their ailments. The suggestions of medicine, according to a physician who lived in the eleventh century, are not meant to assist someone in developing virtue (dharma). They are used for promoting health. There will be different food requirements as per the stages of life. Our ancestors emphasized that food should be nutritionally balanced and healthy. Manusmriti, Ramayana, and the Bhagavad-Gita are three ancient writings that claim that the Indian people had distinct dietary preferences. The Aryan's ideology that food is God's gift that nourishes both body and soul had a significant impact on the cultures and society. It is still true now, 2000 years later that the opinions of the intellectuals themselves towards food were anything but consistent. Ayurveda emphasises digestion and assimilation of nutrients from food and blends the science of nutrition and digestion into the science of cookery. A lot of attention is also placed on choosing the right food along with specific food timings and using the right cooking techniques. Ayurveda encourages eating food that is in season and preferably local to the region in addition to cooking techniques. In this way, consuming fresh food boosts health, gets rid of toxins, and restores harmony if there is any imbalance.

Numerous descriptions of food's components and their impact on health are included in the Ayurvedic writings. Due to word disappearance from contemporary Indian languages or the same animal having twelve or more names, some objects are challenging to identify. According to the author of the Susruta Samhita, an intelligent physician decides what food his patient should eat after considering a number of factors, including the patient's natural cravings for a particular food when his doshas are out of balance, the cause and nature of the disease, the season of the year, and the attributes of

the ingredients, including the properties they acquire through flavouring and combination.

Each human body is fairly distinct from the others in terms of composition, and each stage of life will have diverse requirements to sustain a healthy life. Our ancestors always chose food that was in season, local, nutritious, and healthful, because of the different stages of life.

The popularisation of Ayurvedic cuisine is the subject of this study. Some of the key questions that need to be addressed in this context are:

- What role does Ayurveda play in your every day's diet?
- How much were you aware of Ayurveda before Covid-19?
- How much money do you spend on your well-being?
- What kind of meals do you often order when you go out?
- Do you choose sustainable foods when you cook every day?
- What are the challenges in making a total transition to Ayurvedic food?
- Do you have access to Ayurvedic food products at your neighbourhood markets?
- What else has to be done to ensure the effective adoption of Ayurvedic cuisine throughout India?

## LITERATURE REVIEW

### Anecdote

Many of the toxins that have been ingested into the body from dirty water, air, or even noise can be removed by eating vegetarian meals prepared with healing herbs and invigorating spices. Moreover, toxins can enter our bodies through radiation or chemicals that are liberally applied to fruits, vegetables, and other edible things and are meant to stop food from going bad. Spices, concentrated "chemicals" that our electrochemical system transforms into purifying and patented material vitalizing frequencies, protect our body from a chemical imbalance.

As a result, cooking is both an art and a science. When a cook is inspired and totally absorbed when creating a new dish or flavour that is when cooking becomes an art. When a chef enhances a dish with herbs and spices, much like a medicine man. Cooking is a science because



of its nutritional importance. Yet, when a cook possesses both the art and the science of cooking, cooking becomes alchemy and food becomes Tantra. Every single cell in the body is revitalised by the love of the cook, and food takes on the qualities of an elixir, tonic, vitalizer, and medicine. A good cook is aware that taste is a way to understand the chemical makeup of food and that flavour may be used to influence the body's chemical environment.

A cook who is familiar with Ayurvedic principles of taste could know, for instance, that the earthy and watery flavours of sweetness balance Vata. In order to restore the chemical balance, Vata (Wind), Pitta (Bile) and promotes Kapha (Mucus) can play with these tastes and calm the agitated humour. Cooking is a compassionate activity that provides utter satisfaction.

Ayurveda is the source of Indian cooks' knowledge of herbs and spices, vegetables, legumes, and other foods, and it aids in the maintenance of their physical, mental, social, and spiritual well-being.

An excellent cook should keep in mind that having alkaline body chemistry is essential for maintaining good health and long life. All nutrients ought to be balanced in a way that the body's chemistry is mostly alkaline. Age makes the body's chemistry more acidic and the wear-and-tear mechanism stronger. Elderly people can maintain their health if they include alkaline foods or foods whose post-digestive activity is alkaline in their diets.

## History

After researching various articles and books, it's astonishing to learn that Ayurvedic cuisine has much more significance and history than expected. The cuisine is more than 2000 years old which makes it enormously experienced and sustainable. The early physicians as quoted by Collen Taylor Sen in the book 'Feast and Fasts' were dependent on food for curing most diseases and that's why when we address Ayurveda as the Life Science, its most important aspect is food. But Ayurveda is much more than a few dishes that have medicinal properties; it is an entire array of food combinations that create the difference, only when it is incorporated as a part of our lifestyle. Before discussing these three doshas, let's first understand the origination and history to get the relevance of the various elements. Kerala and Bengal were the two most prominent states of modern India which have had an early impact and

association with Ayurveda, the physicians treating people were known as *Vaidya*, they collectively formed a recognizably different caste which was also transferred on to generations. So it became hereditary to that being passed on as a legacy. When all of these doshas are in balance, it creates harmony in the human system and aids in self-healing, giving us tremendous vitality and optimism.

According to some sources, the majority of illnesses and diseases have a root cause in poor eating habits and following an unhealthy lifestyle, or more specifically, an improper diet that upsets the equilibrium of these doshas. It's a well-known axiom that "We are what we eat". In order to comprehend Ayurvedic cuisine, it's even more crucial to have a thorough understanding of these three doshas because of their close connections to the human body's system and the influence they ultimately have on everyone's general wellbeing.

Categorically explaining Ayurveda would be incomplete without the concept of 'doshas', which means 'faults' in Sanskrit, these three doshas flow with each and every human body. The doshas established by Ayurveda are namely 'Vata' which is considered to be a combination of air and ether, Pitta – fire along with water and Kapha – which concentrates on water and earth.



- Vata Dosha – responsible for all the movements in the Body,
- Pitta Dosha – responsible for Metabolism in the Body,
- Kapha Dosha – responsible for all Structure & lubrication in the Body

## The Six Tastes

The three main dietary groups in Ayurveda are Satvic, Rajasic, and Tamasic. They determine the kind of food a person should eat to maintain their health. According to historical texts, Ayurveda is founded on an elemental system in which the characteristics of the elements and tastes are blended into three doshas, or constitutions, through careful study to inform how we view ourselves, food, and those around us by focusing on viewing within self.

A well-known Ayurvedic text states:

*‘Poorve madhuramshniyat nadye amla lavano rasa  
Ante sheshan rasan vaidyo bhoineshva char yet’*

During a meal, sweet tastes should be taken at the beginning, sour-tasting and salty foods should be eaten in the middle, and all the other foods with pungent, bitter, and astringent tastes should be taken at the end. This is the correct order for eating foods with different tastes.

(Charaka Samhita, Chapter 26, v. 43–44)

All food we eat is chemical in nature. These meals produce only six distinct tastes: sweet, sour, salty, bitter, pungent, and astringent, despite the fact that they contain a variety of different compounds. Prithvi, Jal, Agni, Vayu and Akash are the five components that make up each of these flavours.

According to Harish Johari, each nutrient’s Rasa (taste), Virya (power), and Vipaka (karma), the Ayurveda takes into account the subtle phenomena that underlie them (post-digestive action).

(Johari, 2000)

Let us understand this in detail – One of two Virya is felt once the food enters the stomach, in addition to the six flavours, which describe how a portion of food affects the body before digestion. Ushna (hot) or Shita (cold) refers to the experience in question. Ushna Virya has the powers of combustion, digesting, vomiting, and purging. Ushna Virya has the abilities of combustion, digestion, vomiting, and purging. It also eliminates semen and gives the body a sense of lightness. Vata (wind), Kapha (mucus), and Pitta (bile) are subdued and increased by Ushna Virya.

Shita Virya promotes nourishment and steadiness, gives power, makes you feel heavier, and helps your body retain fluids. It calms Pitta (bile) and elevates Vata (wind), Kapha, and (mucus).

There are certain exceptions to the rule that hot meals have a hot Virya. For instance, the Virya of honey is hot, whereas the Virya of most sweet foods is cold, and the Virya of a lemon is cold, whereas the Virya of most sour dishes is hot.

Moreover, foods are classed as either Dry (shushk) or Unctuous (isnigh), and Light (laghu) or Heavy (isnigh). Most dry foods are hot (Ushna Virya), which elevates Pitta (bile). Most sweet foods are cold (Shita Virya), increase Vata (wind), and enhance Kapha (mucus).

Yet, some dry foods can be served cold and some moist foods can be served hot. Light foods produce gas, weaken Kapha, and create constipation (mucus). Heavy foods help the body eliminate pee and faeces because they calm Vata (wind), Pitta (bile), and Kapha (mucus). Foods with sour, bitter, or pungent flavours are Light; those with salty, sweet, or astringent flavours are heavy. When foods are used correctly, one can feel the impact on their own body.

#### 1. **Sweet: Thick, Unctuous, and Sweet**

Because water and soil are together, the flavour is pleasant. Satvik in nature, this flavour is nourishing, calming, and pleasant. The sweet flavour adds calories, eases anxiety brought on by low blood sugar, neutralises acidity, and gives skin a healthy, radiant glow. The greatest foods to describe this flavour are honey and raw sugar. Sweet-tasting foods are not good for the teeth if taken in excess.

#### 2. **Sour: Unctuous, Hot, and Light**

The fusion of earth and fire produces a sour flavour. Its flavour is rajsik in nature; it stimulates the mind, boosts appetite, causes salivation (even when merely recalling a sour cuisine), and aids in digestion. The two foods that best represent this taste are lemon and yoghurt.

#### 3. **Salty: Heavy, Hot, and Moist**

A digesting, salty flavour diffuses food particles, liquefies food, and calms Vata (wind). It treats stiffness, unblocks bodily fluids, and stops poisons from building up. It promotes saliva production, liquefies mucus secretions, clears the digestive tract, and softens all of the body’s limbs. It has the power to suffuse all other flavours.

#### 4. **Pungent: Light, Hot, and Dry**

Spicy foods cause one to perspire and enhance circulation. They eliminate worms in the upper and lower digestive tracts and heal wounds. The best sources of this flavour include black peppercorns, ginger, and red chilies.

The strong flavour stimulates the stomach fire, cleans the mouth, speeds up food desiccation, and sharpens the senses. It enhances the flavour of food, clears digestive blockages, aids with excretion, and calms Kapha (mucus).

#### 5. **Bitter: Light, Cold, and Dry**

Despite not being a pleasant flavour, the bitterness acts in an enticing manner. It treats burning, itching,

dermatosis, and thirst while acting as an antidote to poison and vermicide. It gives the skin and body rigidity. It is a digestive aid, a stimulant, and it helps the mother's breast milk become cleaner.

#### 6. **Astringent: Heavy, Cold, and Dry**

Air and soil are combined to create the astringent flavour. The vascular system is stimulated by the rajasic character of this flavour. It helps the skin, aids with digestion, and promotes the assimilation of fats and oils. It also purifies the blood. Its flavour can be best described as tasting like alum, unripe bananas, or pomegranates. The astringent flavour calms the blood, reduces Pitta (bile) and Kapha (mucus), and encourages fluid consumption.

### ANALYSIS

Above discussion highlights the need for research on ways and means & subsequent shift to 'Ayurvedic Cuisine'. As researchers have clearly highlighted, hotel management colleges must take action to mentor students because doing so directly affects the business environment and the economy. Ayurvedic cuisine helps in improving health in a variety of ways and lowers functional costs by utilising seasonal ingredients.

This planned study is exploratory in nature. A small, focussed, structured questionnaire for the stakeholders, i.e. Departmental heads (Executive Chefs), Supervisors, students, etc., was prepared where the objective was to assess the extent to which people have transitioned to 'Ayurvedic cuisine, the initiatives are undertaken, challenges faced & the need to go further, to ensure this initiative is not only cost-effective and human-friendly but also truly 'Sustainable'. The questionnaire was validated before being circulated amongst the stakeholders. The questions asked were the most important in the literature and study of Mbasera et.al. (2016), Mensah (2006) & Bruns-Smith et al. (2015). Based on the data and information collected from interviews with executive chefs & managers, relevant books, articles, and papers on this subject, inferences, and recommendations are deduced.

#### **RQ1. What role does Ayurveda play in your every day's diet?**

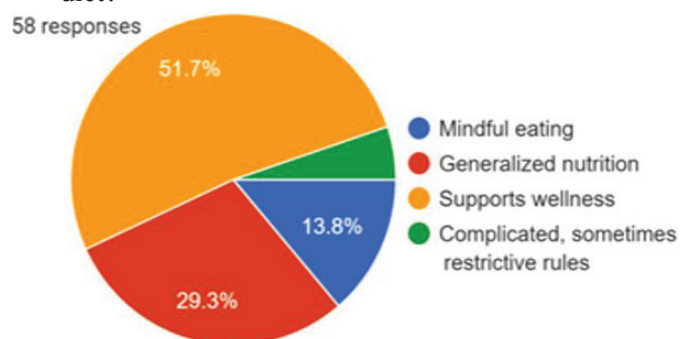
Based on our dosha, or body type, the Ayurveda diet is a form of eating regimen that specifies when, how, and what foods you should eat. It assists in choosing the dosha that most closely resembles us; the following

are some of its primary characteristics: This diet states that the things you should eat to encourage inner harmony depend on your dosha. For instance, the pitta dosha restricts spices, nuts, and seeds and prioritises cooling, energising foods. Although avoiding dried fruits, pungent herbs, and raw vegetables, the vata dosha prefers warm, moist, and grounding foods. Last but not least, the kapha dosha discourages the consumption of heavy foods like nuts, seeds, and oils in favour of fruits, vegetables, and legumes. For all three doshas, it is forbidden to consume red meat, artificial sweeteners, and processed foods. The Ayurveda diet, on the other hand, promotes consuming wholesome, healthful foods.

From the survey, the key reasons cited by the chefs for the implementation of 'Ayurvedic Cuisine' in the first place are varied but supports wellness topped the list followed by Generalized Nutrition.

Two reasons which garnered almost equal importance were Mindful Eating and Complicated and sometimes Restrictive Rules. Surprisingly, most chefs were still worried about coping with the immediate requirement of seasonal & sustainable produce rather than looking forward to the possibility of increased revenue in the long run. It promotes balance in our body by adhering to recommendations for our particular dosha, or body type.

#### 1. What role does Ayurveda play in your every day's diet?



#### **RQ2. How much were you aware about Ayurveda before Covid 19?**

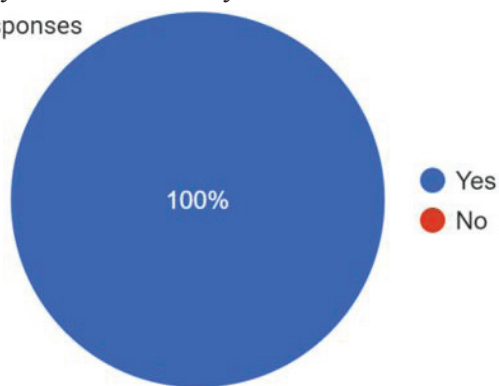
According to Ayurveda, Covid-19 is a janapadodhwamsa vikara (epidemic disease). The concept of an epidemic is described in the Charaka Samhita: Vimana Sthana, (Ch. 3) despite differences in physical make-up among people, there are still certain factors that are common to all people, and vitiation of these factors results in the simultaneous manifestation of diseases with the same set of symptoms, which causes the destruction of



nations. Air, water, location, and seasons are elements that affect all people of a nation equally (Vimana Sthana, 5, 3/6). In a scenario known as janapadodhwamsa, the environment—including the air, water, land, and seasons—becomes tainted, resulting in an illness that simultaneously manifests in huge populations (an epidemic) and destroys human habitations. According to the research, all the respondents are aware of Ayurvedic cooking and always use herbs and spices in their everyday meals to maintain their health and immunity without being affected by the changing seasons. During Covid-19 those who were unfamiliar with Ayurveda cuisine also obtained information from other sources. The beauty of the Indian cuisine is that it is based on herbs and spices since the dawn of civilisation, and as a result, the standard of living there is consistently higher than that of any other country on the planet.

2. Were you aware about Ayurveda before Covid?

58 responses



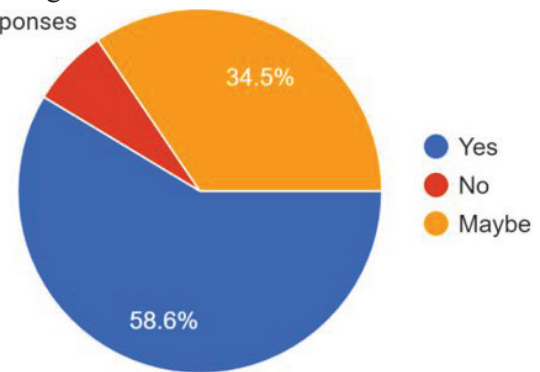
**RQ3. Do you have access to Ayurvedic food products at your neighbourhood markets?**

From the survey, we can see that a majority, i.e. 58.6% of the respondents mentioned that Ayurvedic food is a holistic food that aims to restore health by understanding the underlying causes of diseases. It strives to attack the root causes and detoxifies, cleansing, strengthening body tissues (dhatus) and balancing bodily doshas, ensuring complete cure. And 34.5% of respondents are still unsure about the availability of Ayurvedic food products; this could be due to a lack of knowledge or unavailability of the products. Even so, the government conducts numerous initiatives to raise community awareness. Considering 2023 is regarded as “Millet Year”, many promotion initiatives are supported at different levels. Government and the private sector need to take more initiative so that consumers can easily access Ayurvedic food products. To ensure that farmers

appreciate the value of organic and seasonally grown food, they must be well-guided.

3. Do you have access to Ayurvedic food products at your neighbourhood markets?

58 responses

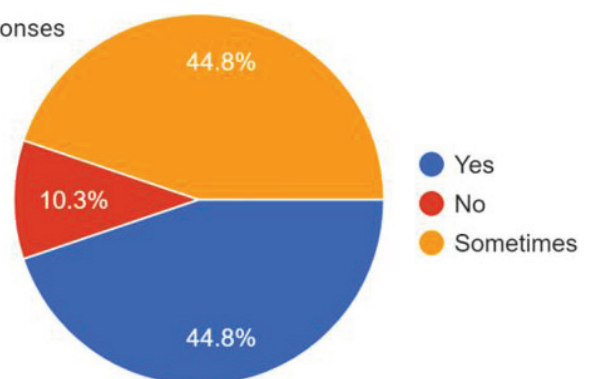


**RQ4. Do you choose seasonal food when you cook every day?**

From the survey, it has become quite clear that half of the respondents are totally using seasonal produce as far as daily cooking is concerned. According to an old proverb, “as you eat, so will your mind,” food plays a significant role in our daily lives. And because we didn’t have this system of cold storage, India is one of the countries where we place a lot of focus on seasonal crops. Whatever is generated must therefore be consumed quickly in order to gain its maximum benefit. Because of this, culinary techniques, recipes, and ingredients are valued as jewels and are passed down from one generation to another.

4. Do you choose seasonal food when you cook every day?

58 responses



**RQ5. What are the difficulties in making a transition to Ayurvedic food?**

From the survey, we can see that 44.8% of the respondents mentioned that they find difficulties in getting Ayurvedic food. Ayurveda offers a large business opportunity

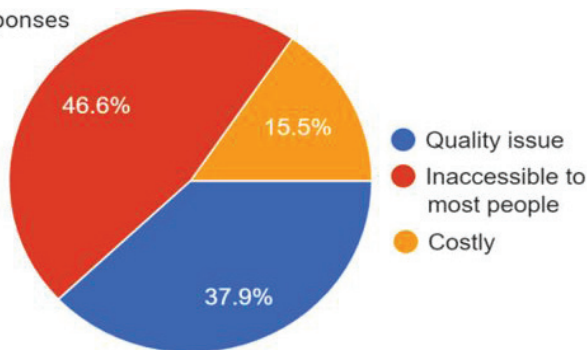


worldwide, although it has not yet been fully realised. The rate of increase of the demand for services and that rate appear to be out of sync. Ayurveda's expansion prospects are hampered by a lack of basic infrastructure and the accessibility of high-quality medications. Effective Ayurvedic product marketing is absolutely necessary. Also, Ayurvedic goods and services need to be made more widely known. Government must work to raise public knowledge of the distinctions between Ayurveda, organic, and natural goods and products. And rest 44.8% of respondents mentioned that they face difficulties sometimes in the procurement of raw material.

It is imperative to enhance the development and procurement of raw materials while maintaining the integrity of Ayurveda's core principles. With an increase in the use of pesticides, herbicides, and insecticides that are frequently considered as remedies to protect and boost yield, farming practises today have dramatically diverged from age-old traditional approaches. The rest 10.3% of respondents revealed that they don't find any challenges in finding Ayurvedic food because the modern Ayurveda practise is heavily reliant on technology, which is opening up numerous opportunities for preventing "overtreatment" and playing a vital part in this development. It has sped up the diagnosis process and improved efficient treatment plans. The absence of or sluggish adoption of technology may be a problem for Ayurveda, but this might also be a strength since technology could make goods and services more widely and easily accessible.

5. What are the difficulties in making a transition to Ayurvedic food?

58 responses



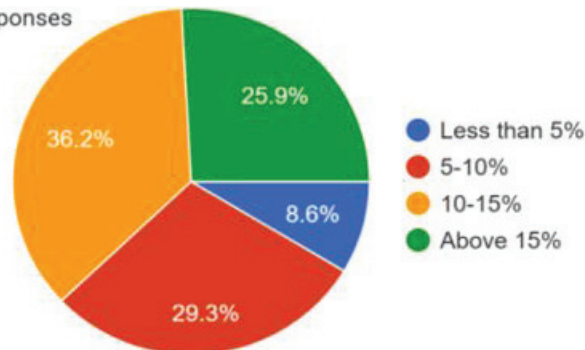
**RQ6. How much money do you spend on your well-being?**

According to the study's findings, 36.2% of respondents said they spend 10–15% of their income on their health.

They incorporate seasonal ingredients into their daily meal plans and place an emphasis on cooking methods that are closely related to the cuisines. Using the proper cooking tool is also important for better results. People today are increasingly concerned with their health and well-being. And in order to stay healthy, they believe that the best way to nourish the body as a whole is through eating the correct food. And the remaining 29.5% of respondents said they spent between 5% and 10% of their money on their well-being. And they cited lower earnings as the cause, while others claimed they couldn't get high-quality ingredients on the market. Others have cited the ingredients' overcharged as an explanation. Due to their overall discontent, consumers spent less money on their well-being. Around 29.5% of respondents in one additional category spent more than 15% of their total income, which is incredibly inspiring and visible. This outcome demonstrates that people care about their health. They scheduled their meals with respect to nourishing foods to meet their daily nutritional needs.

6. How much money do you spend on your well-being?

58 responses



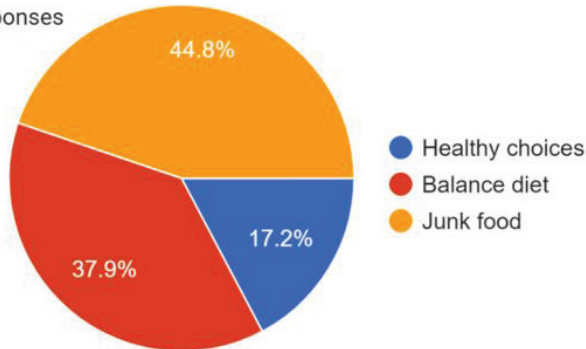
**RQ7. What kind of meals do you often order when you go out?**

In the study, 44.8% of respondents said to prefer fast food when eating out. The cause, as stated by them, is that sometimes there aren't as many healthy options available. And a few of the respondents indicated that they become tired of the regional options, so when they go out, they seek something different. Healthy options are barely taken into account at that time. In this result, it was noted that 37.9% of respondents sought a balanced diet. Some cited family eating customs from their childhood as the cause, and some mentioned knowledge and awareness of balanced diet. Rest 17.2% responders indicated that they always look for the healthiest

options in all circumstances when eating outside at the marketplace. If we analyse the data, we will be able to identify the segment's age group. It indicates that the majority of persons are over 30 years old and may have some dietary restrictions because of poor health. This age group does not favour fast food; therefore it goes without saying that they ought to select a healthy diet.

7. What kind of meals do you often order when you go out?

58 responses



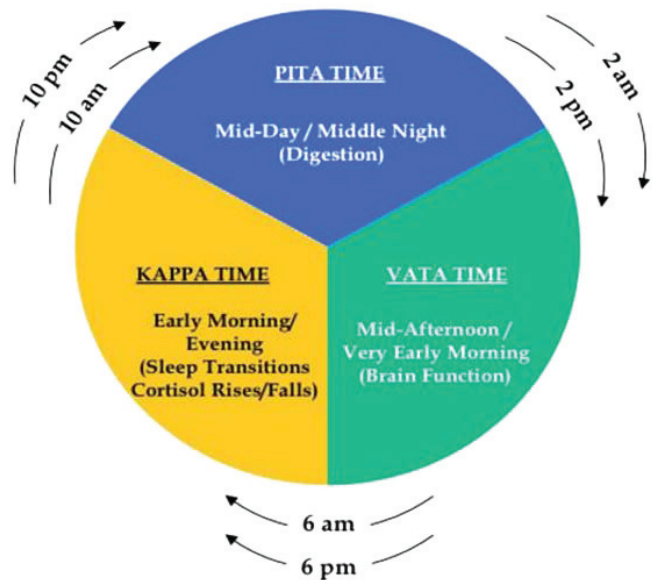
#### RQ8. What can be done to ensure the effective adoption of Ayurvedic cuisine throughout India?

Some of the respondents mentioned that make it known to everyone, at least in the Indian subcontinent, and then try to spread it throughout the world so that more and more people can learn about it. As a result, more and more people will try it, and hopefully, they will like it. Then, we can slightly change the medicinal part into the food culture part to make more and more people aware of it. If this process is successful, then we can adopt the Ayurvedic cuisine throughout India effectively. A few of the respondent said that It may be beneficial to create awareness and launch campaigns. Around the country, a number of 5 star and 4 star hotel chains as well as restaurant chains can host and organise promotional festivals and food festivals. To generate interest in the market and among competitors—and to persuade more people to adopt and move towards Ayurveda cuisine—greater emphasis should be placed on regional and organic products and flavours. Also, it needs to be more visible in the market to have a significant impact. Second, adequate knowledge must be spread because people still lack an understanding of Ayurvedic cuisine and believe it to be bland and unpleasant. Our bodies get benefit from Ayurvedic food. When we are ill, it acts as a medicine and serves as an immunity booster. People should be taught how to prepare and incorporate Ayurvedic cuisine into their daily lives. It is important to present Ayurvedic food in a way that allows for easy

adaptation and avoids giving the impression that it is a strict diet.

#### CONCLUSION AND SUGGESTIVE RECOMMENDATIONS

##### Ayurvedic Model: 24 Hour Cycle of Energy



Source: [piousayurveda.com/chapter-3](http://piousayurveda.com/chapter-3)

The objective of the 5000-year-old science of Ayurveda is to aid a person in understanding what is best for them as an individual. It's a kind voyage of self-discovery that equips you with the skills you need to be your own doctor. Ayurveda's primary goals are to preserve health in healthy people and to treat sickness. Ayurveda focuses mostly on numerous lifestyle norms and regulations in order to achieve this. One of them is dietetic regulation. The dietetic rule can help to improve health and lengthen life if it is correctly applied.

Ayurveda focuses a lot of emphasis on diet and food, and it holds that a balanced diet nourishes the body, mind, and soul. Ayurveda does not categorise food as good or bad; rather, it places emphasis on a number of factors that affect it, including its biological characteristics, place of origin, environmental factors, seasons, preparation, and freshness. It also offers a logical justification for how to balance food in accordance with a person's doshas and physical requirements. Water taken in modest amounts during the meal stimulates digestion, but when

consumed after the meal, it results in sthaulya (obesity). Excessive water consumption hinders digestion and dilutes nutrients. Thus it is advised to drink water frequently in little amounts. Similarly taking account of this research for edibles, foods that aggravate dosha and are hazardous in terms of season, place, time, and combination should be avoided. In terms of time and season, foods like cold and abrasive meals in the winter are antagonistic. Milk and melons are not a good meal combination, while honey and ghee in equal amounts have an antagonistic effect on the body. The digestive tract is not favoured by drinking too hot or too cold, and consuming too many nuts in the heat aggravates pitta. Today's lifestyle calls for improving the eco system and general well-being is now being emphasized through different associations. Even globally, this has been in trend from the past few years, hence promoting

Ayurveda would have a holistic effect on the entire eco system thus improving human lifestyles.

## REFERENCES

- Johari, H. (2000a). *Ayurvedic healing cuisine: 200 vegetarian recipes for Health, balance, and longevity*. Healing Arts Press.
- *About ayurveda*. Pious Ayurveda – Buy Ayurvedic Products Online (n.d.). <http://www.piousayurveda.com/chapter-3>
- Taylor, C Sen. (1956). *Feast and fast*. Arthur James Ltd.
- Agniveśa, Caraka, Dṛḍhabala, Śāstrī, R. D., Pāṇḍeya, K. N., & Caturvedī, G. N. (1962). *The Charaka saṃhita of agniveśa*. Chowkhamba Vidya Bhawan.
- Lal, B.K.K. (1963). *Sushruta Samhita*. Chowkhamba Sanskrit Series Office.



# Business Responsibility and Sustainability Reporting and Its Relationship with Companies Performance

## *A Conceptual Framework and Review*

Dr. Garima Dadhich\* and Priyanka Yadav\*\*

---

### ABSTRACT

*The most important problem that organizations confront today is sustainability, which has the power to affect an organization's overall performance and profitability. The external business environment has changed significantly and becomes more complex, but traditional corporate financial reporting is unable to keep up with these changes because of its many limitations and flaws, including its short-termism, lack of coherence, complexity, and absence of nonfinancial information (such as social, health, carbon emissions, and labor rights). Sustainability was defined by GRI (2006) as "meeting present needs without compromising the ability of future generations to meet their needs." The difficulties of sustainable development are numerous, and it is commonly acknowledged that organizations have both a duty and a considerable capacity to influence the state of the global economy and social and environmental factors. Through a review of the existing literature, this study seeks to determine how sustainability reporting affects business performance. The findings are conflicting, inconsistent, and mixed; they range from a statistically significant association to a negative relationship. This paper makes an effort to evaluate existing research critically to identify areas that could benefit from additional study and yield more accurate and reliable findings. Shortly, it is also planned to make Business sustainability reporting mandatory and subject to stricter laws, regulations, and standards. To prevent future regulatory measures, businesses should embrace new sustainability reporting as soon as possible, i.e. BRSR. Businesses cannot function without the credibility and trust that stakeholders have in them.*

**Keywords:** Business Sustainability, BRSR, Stakeholders, Environmental Factors, Sustainability Reporting, GRI

---

### INTRODUCTION

According to the World Business Council for Sustainable Development, corporate sustainability is "the commitment of business to contribute to sustainable economic development and to work with employees, their families, the local community, and society at large to improve their quality of life." Companies today need to be accountable for the effects of their operations on society at large and the environment in which they operate. As a result, the idea of sustainability reporting has become increasingly important. Companies have recently been asked to meet the interests of a variety of stakeholders that care about their value. They want to know how a company manages sustainability from an economic, environmental, and social perspective. They also want to know whether managing sustainability

has the potential to create value. A corporation must publish nonfinancial information in addition to financial information for shareholders. Social responsibility reporting is the dissemination of information about a company's commitment to the social and environmental facets of its surroundings. This shows that businesses have a responsibility to stakeholders to report on their social and environmental performance on an annual basis, just as they do with shareholders. GRI (2011) defines "Sustainability Reporting" as – "The practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development. 95 percent of the 250 biggest corporations in the world report on their social responsibility, according to KPMG's 2011 International Survey on Corporate Responsibility

---

\* Associate Professor in IICA

\*\* Research Scholar, Gurugram University, Gurugram



Reporting. In Asia Pacific, 50% of businesses report on their corporate responsibilities. The top companies are those from Europe. White (2012) claimed that the JSE was the first exchange to require integrated reporting in a single report for listed businesses as of March 2010. By the end of 2013, the Integrated Reporting Framework, the first of its kind in the world, is expected to be released. The National Voluntary Guidelines (NVG) on Social, Environmental, and Economic Responsibilities of Business were published by the Ministry of Corporate Affairs (MCA) in India in July 2011. These rules provide the structure and guiding concepts for corporate responsibility reporting for all Indian businesses, including MNCs and SMEs. In a Circular on Business Responsibility Reports, dated August 13, 2012, the Securities and Exchange Board of India (SEBI) mandated that listed companies practise NVG and uniformly disclose their responsibility efforts in Business Responsibility Reports (BRRs), which are a component of Annual Reports. In order to finalise business responsibility reporting formats for listed and unlisted firms based on the NGRBC framework, the MCA established a Committee on Business Responsibility Reporting (the Committee) in November 2018. The Committee recommended that BRR be renamed to BRSR in its "Report of the Committee on Business Responsibility Reporting" (the Committee Report), where disclosures are based on ESG parameters, compelling organisations to engage stakeholders holistically and go beyond regulatory compliances in terms of business measures and their reporting. There is a common belief that sustainability reporting establishes a foundation for protecting and enhancing the value of a company through a variety of strategic benefits, including: better stakeholder engagement or relations, better customer access, customer loyalty, new products, new markets, good brand image, improved employee morale, retention and loyalty, risk avoidance, easier access to capital, strengthened license to operate, cost savings, etc. (Warren 2012). Over the past two decades, a lot of research studies have been undertaken in relation to sustainability reporting and its effect on company's performance.

## LITERATURE REVIEW

Burhan et al. (2012) in a research paper found that sustainability reporting impacts the performance of companies. Further they stated that social performance is significantly influence by the reporting and

disclosure of the company. A company must focus on their sustainability reporting to enhance their overall performance.

Venanzi (2012) in a research paper, the results show no association or a weak relationship between corporate social ratings (connected to 8 different stakeholder groups) and financial performance. The study found that this relationship is firm-specific and that businesses prioritise investing in their most important and influential stakeholders rather than being equally socially responsible to all stakeholders.

Humphrey et al. (2012) in a study stated that the financial performance (monthly portfolio returns) of companies with high or low ESG rankings (as per the SAM database) did not differ. According to the study high rated businesses are, however, typically bigger in size. As a result, equities with high ESG ratings are likely to be bigger, more liquid, and simpler to trade, making them more appealing to investors.

Antonia et al. (2016) in a study found that there is no reason to anticipate savings in this area because the total number of assured reports is rising, there was no discernible effect of the changes in assurance strategy. The findings demonstrate that the crisis considerably raised the number of CSR reports.

Whetman et al. (2017) in research paper findings imply that for this fraction of businesses, investing corporate resources in sustainability reporting might be profitable. Furthermore, it has been demonstrated that corporate sustainability reporting can effectively take the place of institutional investors' monitoring.

Loza Adauí et al. (2020) discussed in a research paper based on sustainability reporting quality of Peruvian listed companies. The results demonstrate that SRQ is always improving despite the addition of additional regulatory criteria. Additionally, fewer businesses provide third-party independent assurance of the information in their sustainability disclosure documents after new sustainability reporting requirements come into effect. This suggests that in the case of Peru, regulatory requirements tend to discourage businesses from investing in the credibility of their sustainability disclosure documents and favour a symbolic application of sustainability disclosure standards.

## OBJECTIVES OF THE STUDY

This paper aims to achieve the following objectives:

- To provide an overview and understanding the BRSR concept.
- To provide a comparative understanding of BRR and BRSR framework.
- To define the positive and negative relationship of sustainability reporting on the performance of company.

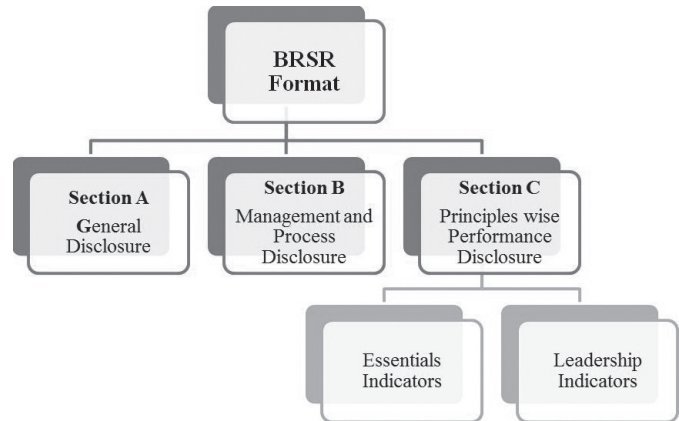
## RESEARCH METHODOLOGY

In this review work, qualitative and descriptive research methods were used. This paper is based on secondary data. Regarding our research goals, we surveyed, studied, analysed, and summarised the conclusions and restrictions of numerous significant research papers, studies, articles, and other sources.

## BUSINESS RESPONSIBILITY AND SUSTAINABILITY (BRSR) – AN OVERVIEW

Business Responsibility and Sustainability Reporting (BRSR) is a framework and process through which companies disclose their efforts and performance in the areas of corporate responsibility, sustainability and environmental social and governance practices. It involves the systematic reporting and communication of a company's social, environmental and economic impacts, risks, and opportunities.

BRSR enables companies to transparently share information about their commitment to responsible business practices and sustainability initiatives. It goes beyond traditional financial reporting by considering the broader impacts of business operations on various stakeholders, including employees, customers, communities, and the environment. The purpose of BRSR is to provide stakeholders, such as investors, customers, employees, regulators, and the general public, with reliable and comparable information to assess a company's sustainability performance. It helps stakeholders make informed decisions, evaluate a company's long-term viability, and hold businesses accountable for their social and environmental impacts. BRSR typically covers a wide range of topics, including environmental conservation, climate change mitigation, human rights, labor practices, diversity and inclusion, product safety, supply chain management, community



**Figure 1:** Structure of BRSR

Source: <https://www.sebi.gov.in>

engagement, and governance structures. Companies may adopt recognized frameworks or standards, such as the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB), to guide their reporting efforts and ensure consistency and comparability. By implementing BRSR, companies demonstrate their commitment to sustainability, responsible business practices, and meeting the expectations of various stakeholders. It also enables organizations to identify areas for improvement, set goals, and track progress towards achieving their sustainability objectives. Overall, BRSR plays a crucial role in promoting transparency, accountability and sustainable development in the business sector.

From FY2022–23, the top 1,000 listed companies (by market capitalization) must report, whereas FY2021–22 sees voluntary disclosure. In order to be better prepared to utilise this framework starting in the following FY, the Committee submit invites enterprises to submit their performance for FY2021–2022.

## DIFFERENCE BETWEEN BRR AND BRSR

In India, SEBI enacted the mandate for ESG reporting in 2012. The top 100 listed firms in India by market capitalization were required to submit a Business Responsibility Report (BRR), which was their version of ESG reporting. This requirement was imposed by SEBI. BRR will have developed into BRSR by 2021, providing it a comprehensive ESG reporting framework. Additionally, it has successfully closed the gaps in reporting's accuracy and breadth.

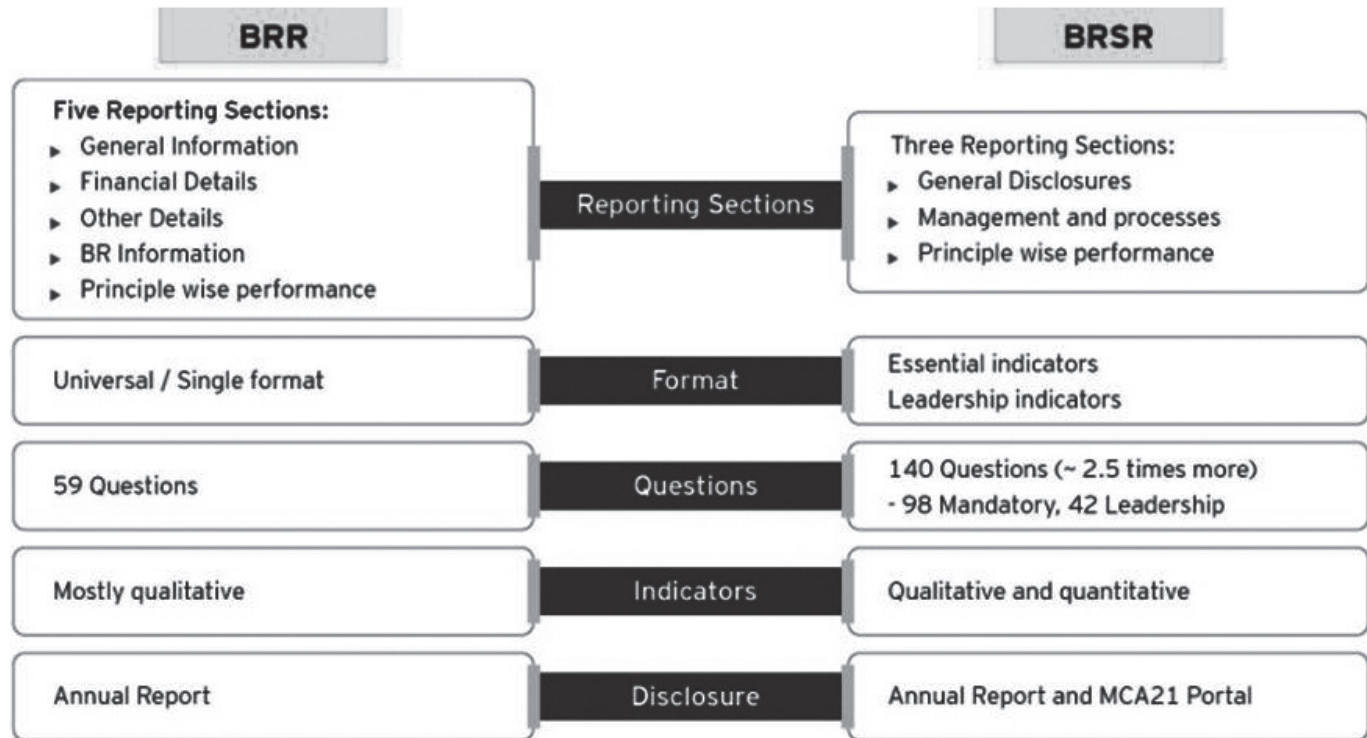


Figure 2: BRR vs. BRSR

Source: [https://www.ey.com/en\\_in](https://www.ey.com/en_in)

Table 1: Positive Relationship of Sustainability Reporting and Performance of Company

Sr. No.	Name of Author (Year)	Components of Sustainability Reporting	Tools Used and Description	Conclusion and Findings	Remarks (if any)
1.	Guindry & Patten (2010)	Quality Content Analysis, CA score based on 55 performance indicators, Scored scale 0-3	Sample: 37 publicly traded companies with US headquarters that released a standalone sustainability report for the first time between 2001 and 2008. Lexis-Nexis database was used	The report found no notable market response to the announcement. However, in cross-sectional examinations, businesses that issued reports of the greatest calibre showed noticeably more favourable market responses than businesses that issued reports of lower calibre.	Sample size is too small and based only on US based firms.
2.	Ameer and Othman (2012)	Scores on four sustainability indices, including ethical standards (13), diversity (21), community (12), and environment (22), score based on 0-4 range	Sample: 100 sustainable International companies Period of the study 2006-2010 and content analysis was used for analysis the data	Over the test period from 2006 to 2010, they discovered that companies with better sustainability disclosure scores had considerably higher mean sales revenue growth, ROA, PBT, and CFO.	Researchers took only 100 global companies of developed countries. Developing countries are completely neglected here.
3.	Bayoud et al. (2012)	CSR Disclosures has been used based on community, consumers, environment etc.	Test period-2007-09 Sample: 110 annual reports of companies and structured questionnaire used	The findings support the belief that a high degree of CSR disclosure is substantially correlated with stakeholder group perceptions of a company.	This paper used only annual reports and other means has ignored.

Sr. No.	Name of Author (Year)	Components of Sustainability Reporting	Tools Used and Description	Conclusion and Findings	Remarks (if any)
4.	Aisyah & Basuki (2016)	Reports based on GRI G4 of the period of 2013-14	Sample: 44 companies listed on Indonesia Stock Exchange, Tobin's Q tool has been used, purposive sampling technique	The paper found that it will improve the company's reputation with the general public, boosting the market performance of the business.	-

**Table 2:** Negative Relationship of Sustainability Reporting and Performance of Company

Sr. No.	Name of Author (Year)	Components of Sustainability Reporting	Tools Used and Description	Conclusion and Findings	Remarks (if any)
1.	Lopez et al. (2007)	Dummy variable has taken 0 & 1 for DJGI & DJSI	Sample: 55 European companies Period of the study: 1998-2004	After adjusting for size, industry, and risk, a study reveals that sustainable practises have an adverse short-term impact on performance. The differences between the two groups were not significant, and neither were the control variables.	Longer period needed to check the performance of companies
2.	Detre et al. (2011)	Dow Jones Sustainability Indices used	Sample: 36 US based public companies Test period: 199-2008 Event study analysis has been used	The paper found that the reporting has been negatively impacted on the performance of selected sample companies.	More sample companies can be used

## CONCLUSION

Over the past ten years, there has been a considerable growth in the number of businesses publishing sustainability reports. Over the past ten years, numerous studies have been done to investigate the relationship between business financial success and sustainability reporting. Most studies indicate that reporting on sustainability improves corporate reputation and financial performance since it produces several synergies and benefits for the reporting company. Compared to BRR, BRSR provides a more robust structure for disclosure.

Companies need to get ready for the shift now because compliance will be required starting in the fiscal year 2022–2023. It is clear that the Indian reporting environment is quickly changing to conform to international standards and laws, where corporations are required to conduct their operations ethically and uphold openness and responsibility in their reporting. It is anticipated that India will use BRSR as its sole source for information on sustainability.

It would also act as a foundational document for different stakeholders, particularly investors, to enable company comparison.

BRSR is the next phase of mandated ESG reporting in India and a useful compliance and communication tool for a company's non-financial disclosures.

## REFERENCES

- Adams, M., Thornton, B., & Sepehri, M. (2012, April). The impact of the pursuit of sustainability on the financial performance of the firm. *Journal of Sustainability and Green Business*, 1.
- Aggarwal, P. (2013). Sustainability reporting and its impact on corporate financial performance: A literature review. *Indian Journal of Commerce and Management Studies*, 4(3), 51–59.
- Ameer, R., & Othman, R. (2012, June). Sustainability Practices and Corporate Financial Performance: A Study Based on the Top Global Corporations. *Journal of Business Ethics*, 108(1), 61–79.
- Antonia Garcia-Benau, M., Sierra-Garcia, L., & Zorio, A. (2013). Financial crisis impact on sustainability reporting. *Management decision*, 51(7), 1528–1542.



- Bassen, A., Meyer, K., & Schlange, J. (2006). The influence of corporate responsibility on the cost of capital. Available at SSRN 984406.
- Baumunk, J. (2009). Sustainability reporting and XBRL. Available at SSRN 1620567
- Bayoud, N.S., Kavanagh, M., & Slaughter, G. (2012a, April). Corporate Social Responsibility Disclosure and Corporate Reputation in Developing Countries: The Case of Libya. *Journal of Business and Policy Research*, 7(1), 131–60.
- Bayoud, N.S., Kavanagh, M., & Slaughter, G. (2012b). An Empirical Examination of the Relationship between Corporate Social Responsibility Disclosure and Organisational Performance. Retrieved from <http://www.docstoc.com/docs/125956673/An-Empirical-Study-of-the-Relationship-between-Corporate-Social>
- Brammer, S., Brooks, C., & Pavelin, S. (2006). Corporate Social Performance and Stock Returns: UK Evidence from Disaggregate Measures. *Financial Management*, 35(3).
- Buys, P., Oberholzer, M., & Andrikopoulos, P. (2011). An investigation of the economic performance of sustainability reporting companies versus non-reporting companies: A South African perspective. *Journal of Social Sciences*, 29(2), 151–158.
- Burhan, A.H.N., & Rahmanti, W. (2012). The impact of sustainability reporting on company performance. *Journal of Economics, Business, & Accountancy Ventura*, 15(2), 257–272.
- Dhaliwal, D.S., Li, O.Z., Tsang, A., & Yang, Y.G. (2011). Voluntary non-financial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review*, 86(1), 59–100.
- Detre, J.D., & Gunderson, M.A. (2011). The Triple Bottom Line: What is the Impact on the Returns to Agribusiness? *International Food and Agribusiness Management Review*, 14(4), 165–178.
- Eccles, R.G., Ioannou, I., & Serafeim, G. (2012). The impact of a corporate culture of sustainability on corporate behavior and performance (No. w17950). National Bureau of Economic Research.
- Caesaria, A.F., & Basuki, B. (2017). The study of sustainability report disclosure aspects and their impact on the companies' performance. In *SHS Web of Conferences* (Vol. 34, p. 08001). EDP Sciences.
- Hamad, S., Draz, M.U., & Lai, F.W. (2020). The impact of corporate governance and sustainability reporting on integrated reporting: A conceptual framework. *Sage Open*, 10(2), 2158244020927431.
- Lopez, M.V., Garcia, A., & Rodriguez, L. (2007). Sustainable development and corporate performance: A study based on the Dow Jones Sustainability Index. *Journal of Business Ethics*, 75(3), 285–300.
- Loza Adauí, C.R. (2020). Sustainability reporting quality of peruvian listed companies and the impact of regulatory requirements of sustainability disclosures. *Sustainability*, 12(3), 1135.
- Motwani, S.S., & Pandya, H.B. (2016). Evaluating the impact of sustainability reporting on financial performance of selected Indian companies. *International Journal of Research in IT and management*, 6(2), 14–23.
- Whetman, L.L. (2018). The impact of sustainability reporting on firm profitability. *Undergraduate Economic Review*, 14(1), 4.
- Venanzi, D. (2012). Social Ratings and Financial Performance: An Instrumental Approach. Available at SSRN 2188859.

### Weblinks

- <https://www.pwc.in/assets/pdfs/consulting/esg/business-responsibility-and-sustainability-report.pdf>
- [https://www.ey.com/en\\_in/climate-change-sustainability-services/brsr-reporting-and-the-evolving-esg-landscape-in-india](https://www.ey.com/en_in/climate-change-sustainability-services/brsr-reporting-and-the-evolving-esg-landscape-in-india)
- <https://taxguru.in/sebi/business-responsibility-sustainability-report-brsr.html>
- <https://sustainlab.co/blog/8-benefits-of-sustainability-reporting>
- <https://digitalcommons.iwu.edu/cgi/viewcontent.cgi?article=1416&context=uer>
- <https://digitalcommons.iwu.edu/uer/vol14/iss1/4/>
- [https://www.sebi.gov.in/sebi\\_data/commndocs/may-2021/Business%20responsibility%20and%20sustainability%20reporting%20by%20listed%20entitiesAnnexure1\\_p.PDF](https://www.sebi.gov.in/sebi_data/commndocs/may-2021/Business%20responsibility%20and%20sustainability%20reporting%20by%20listed%20entitiesAnnexure1_p.PDF)



# An Empirical Investigation of Impact of Green Human Resource Management Practices on Employee Behavior

Dr. Hawa Singh\*, Rachna Kumari\*\* and Dr. Bhanwar Singh\*\*\*

---

## ABSTRACT

*The management of limited resources and compliance with stakeholder expectations have recently taken the spotlight for businesses all around the world. In some industries, where human resource departments are crucial for the organizations adopting green concept, the green HRM becomes a standard corporate practice. Green human resource management (GHRM) has been conceptualized as an emerging idea which affects employee workplace behavior. The following article discusses several green human resource management approaches used by the industries and defines what GHRM actually means. Furthermore, the purpose of this research was to determine the impact of green HRM practices on employee behavior in the corporate sector. The findings demonstrated that green HRM has a substantial impact on employee behavior. Furthermore, the study would give understanding to researchers and HR managers to aid in the development of environmental concerns among different stakeholders.*

**Keywords:** Green HRM, Employee Behavior, Green Practices

---

## INTRODUCTION

According to Zubair and Khan (2019), “green human resource management” (GHRM) is a set of practices, procedures, and policies that support employees’ environmentally friendly conduct in order to create organizations that are resource-efficient, socially responsible, and environmentally conscious. The primary goal of GHRM is to make employees aware of the difficulties associated with environmental management, including the necessary steps, its roles, and how it contributes to reducing climate change. The idea of “green HRM” refers to methods used to encourage environmentally friendly behaviour at the workplace (Tang et al., 2018). These methods assist in creating environmentally conscious corporate cultures that in turn help develop pro-environmental behaviour among stakeholders at the employee level, which in turn could be followed for societal and family norms (Muster & Schrader, 2011). According to Zibarras and Ballinger (2011), the Green HRM promotes pro-environmental attitudes and behavior at work; hence, further research is needed to corroborate employee attitudes and behaviors. Referring to green (Muster & Schrader, 2011). The goals

encourage the employees and make them feel proud to be contributing to sustainable growth. GHRM fosters an environmentally conscious workplace culture among employees (Bahuguna et al., 2023). Beyond this global issue, the organizational leadership must consider how to handle these sustainability-related problems in order to maintain their reputation and long-term competitive advantage (Miller et al., 2012). In order to comprehend how different management structures affect employees’ attitudes and behaviors towards the environment, it is thus necessary to investigate Green HRM in a global perspective (Jackson, 2012).

Additionally, despite the focus of study on changes in HRM practice in industrialized countries, developing countries have received less attention (Baum et al., 2016). The majority of the study has been on environmental management practices, including customer attitudes and behavior (Kang et al., 2012), and water and energy conservation (Molina et al., 2015). Employee behavior for green practices hasn’t been studied all that much (Paillé et al., 2014). Therefore, the purpose of this study was to ascertain whether there was an association

---

\* Assistant Professor, Department of Management, Gurugram University Gurugram. E-mail: Hawasingh@gurugramuniversity.ac.in

\*\* Assistant Professor, Department of Commerce, GCW Bahadurgarh. E-mail: rachna.jan@gmail.com

\*\*\* Assistant Professor, University School of Management, Kurukshetra University Kurukshetra. E-mail: write2bhanwar@kuk.ac.in

between green HRM practices and employee behavior in the corporate sector.

## REVIEW OF LITERATURE

Due to the fact that businesses are increasingly shifting their business plans and initiatives in favor of a more environmentally oriented agenda, HR must change its mandate and broaden its emphasis by including environmental management in order to reform how it carries out its basic HR duties (Angel Del Brío et al., 2008). Numerous green HRM practices have been found in previous studies. For instance, in order for green HRM to be successful in encouraging workplace green behavior among employees, the company must have effective recruitment strategies that aim to entice candidates who share its environmental values and beliefs; development, performance, and reward practices that consider each employee's environmental performance; and efficient training programmes that foster environmental awareness, attitudes, skills, and knowledge (Cher). The creation of employment opportunities for the skilled eco-friendly workforce is essential if businesses are to survive in the modern business world (Aggarwal & Sharma, 2015). This will give businesses an edge over their rivals and help them to establish a distinctive green image in the marketplace and adhere to corporate social responsibility. Green performance management, sustainable recruiting and selection, and green training and development are just a few examples of green HRM practises. Green training and development is a technique that highlights how increasing workers' knowledge, experience, and skills prevent knowledge that is relevant to EM and attitudes from deteriorating. Employees who receive sustainable training and development are taught the value of EM, given information about how to work in a way that conserves energy, and given opportunities to engage in the industry's efforts to address environmental challenges (Ojo et al., 2022). Green T&D initiatives make employees aware of various issues and cherish the environment. Additionally, it aids in the implementation of different waste management and conservation procedures by the staff. On the other hand, it enhanced an employee's ability to connect with numerous environmental challenges. Green Performance Management (PM) is the process by which employees are compelled to improve their working methods in order to successfully achieve both industrial and personal goals. The sustainability wave is effectively

affecting the identification of the working principles, PM. Some of the difficulties that relate to environmental concerns and industry laws are part of sustainable performance. Environment management is safeguarded from destruction when HR managers integrate social performance into PM systems (Mousa et al., 2020). An system for evaluating a representative's performance in the process of environmental management is known as a "green performance evaluation." One of the crucial requirements for green HRM is the evaluation of expert green employment performance. Without this preparation, any association cannot, over the long run, guarantee the helpful shared introduction. Delegates' green performance should be evaluated, independently and whenever practical as part of the affiliation's performance assessment system (Milliman & Clair, 2017). The most challenging and difficult area of HR is regarded as compensation, which may be one of the core elements of HRM. The payment is the total of all benefits provided to a worker in exchange for management they provide. To "attract, retain, and motivate employees" is the primary goal of providing compensation (Mondy & Noe, 2005).

Employee behaviour is generally pro-social (Chou, 2014), and according to pragmatism, regular workplace green behaviour should encompass both in-role and extra-role green behaviour (Ramus & Killmer, 2007), since both types of behavior contribute to organizational results through value creation. There may be situations in many occupations that call for employees to act "green", such as positions that demand employees to make sure that toxic waste is not dumped into nearby waterways or that hazardous materials are disposed of in line with organizational policy and governmental requirements. A person's official work obligations include engaging in the kinds of behaviors that would be expected of them (Paille & Boiral, 2013). According to Nishii, Lepak, and Schneider (2008), the behavioral research on HRM also contends that HRM attributions heavily influence the ways in which HRM affects employees. For the following reasons, green HRM influences employee workplace green behavior. According to Renwick et al. (2013), green HRM practices include communicating the organization's green focus, emphasizing individual green values in recruiting and selection, and promoting green values through training are likely to boost staff members' green cognition. In order to encourage employees to engage in green activities, it is crucial to implement work and

job designs that adhere to environmental standards as well as green training techniques that aim to increase employee competence (Pless, Maakby, & Stahl, 2012). Third, the HRM attribution literature contends that the success of HRM practises on employee work behaviour depends on how workers perceive the reasons why the organisation employs particular HRM practises (Nishii et al., 2008).

## RESEARCH METHODOLOGIES

This study employed a survey based approach and drew conclusions on primary data gathered from employees of the corporate sector in NCR, India. All the employees working in corporate sector in NCR, made up the study's population. Convenient sampling method was employed to select the sample from the population. Distribution of the questionnaire required prior approval and authorization from the senior management. With the agreement of top management, questionnaires were distributed in order to collect data. The data gathering led to the emailing of certain questionnaires to managers and executives. Due to time constraints, the researcher only picked 120 respondents. Multiple regression analysis was used by the researchers to measure the impact of GHRM practices on employee behaviour. Based on the information that was acquired and the literature review, the following hypothesis was developed:

$H_{01}$  Green Human Resource Management Practices have no significant impact on employee behavior.

## SURVEY RESULTS

The effect of green HRM practices on employee behavior was examined using multiple regression analysis. Six statements were used to quantify employee behavior (as the dependent variable), whereas 28 statements on a five-point Likert scale were used to quantify green recruiting and selection, green training and development, green performance management and green rewards and recognition.

**Table 1:** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.708 <sup>a</sup>	.499	.455	.60572

<sup>a</sup> Predictors: (Constant), Green recruiting and selection, Green training and development, Green performance management, Green rewards and recognition.

Source: Primary data

According to the regression model, the R value is 0.708, R Square is 0.499, and the modified R Square is 0.455. 49.9% of the variance in the dependent variables may be attributed to independent variables, whereas 50.1% can be attributed to unknown causes. Therefore, it can be said that 49.9% of the influence on employee behavior was caused by HRM practices.

**Table 2:** ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.518	4	6.107	16.629	.000 <sup>b</sup>
	Residual	42.325	115	.448		
	Total	66.763	119			

<sup>a</sup> Dependent Variable: Employee behaviour

<sup>b</sup> Predictors: (Constant), Green recruiting and selection, Green training and development, Green performance management, Green rewards and recognition.

Source: Primary data

The results of the ANOVA test indicated that the f-value, or 16.629, was significant at a level of confidence of 99 percent. Thus, a substantial association between the independent variables of Green recruiting and selection, Green training and development, Green performance management, Green rewards and recognition, and the dependent variable Employee behavior was created in the regression model.

**Table 3:** Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.383	.479		2.761	.005
	Green recruitment and selection	.324	.056	.504	6.652	.000
	Green training and development	.260	.058	.383	4.765	.000
	Green performance management	.247	.059	.334	4.452	.000
	Green rewards and recognition	.212	.061	.266	3.731	.000

<sup>a</sup> Dependent Variable: Employee behaviour

Source: Primary data



The regression coefficient was 1.383 (unstandardized), its t-value was 2.761, and its associated p-value was 00.005. Consequently, it is possible to conclude that green HRMP significantly impacted employee behavior. Additionally, the green HRM factors—Green recruiting and selection, Green training and development, Green performance management, Green rewards and recognition—showed significant values below 0.05. As a result, the variables were clearly having a big influence on employee behavior. As a result, the null hypothesis “Green Human Resource Management Practices have no significant impact on employee behavior.” was rejected, demonstrating that HRMP have a significant impact on employee retention.

## CONCLUSIONS

The field of green HRM is rather relatively new. Sectors like public and private administrations applying green HRM can answer any environmental challenges and the requirement to become green. The GHRM paradigm is straightforward and does not call for an extensive reorganization of the way HRM functions, yet it will have a favorable long-term impact. Organizations must innovate and adopt procedures that will aid in their growth and enable them to contribute to society. Since it may help them get closer to employing environmentally friendly practices. At work, green HRM efforts typically set the bar for achieving one of the fundamental principles of environmental sustainability. In any company, human resource departments have a significant impact on the personnel and the commercial enterprises as a whole. Since human activity contributes to environmental issues, a lot of attention should be paid to altering people’s behavior in order to preserve natural resources. One such action to take to encourage employees to select a sustainable management style is to implement a pay plan at work. It is therefore feasible to conclude that Green HRM is acting as a decision-maker in altering time-honored management practices and thereby making conscious attempts to safeguard natural environment.

## REFERENCES

- Aggarwal, S., & Sharma, B. (2015). Green HRM: Need of the hour. *International journal of management and social science research review*, 1(8), 63-70.
- Angel Del Brio, J., Junquera, B., & Ordiz, M. (2008). Human resources in advanced environmental approaches—A case analysis. *International Journal of Production Research*, 46(21), 6029–6053.
- Bahuguna, P.C., Srivastava, R. and Tiwari, S. (2023). Two-decade journey of green human resource management research: A bibliometric analysis. *Benchmarking: An International Journal*, 30(2), pp. 585–602.
- Baum, T., Solnet, D., Robinson, R. and Kralj, A. (2016), Tourism Workforce Research: Review, Taxonomy and Agenda. *Annals of Tourism Research*, 60, 1–22.
- Cherian, J., & Jacob, J. (2012). A study of green HR practices and its effective implementation in the organization: A review. *International Journal of Business and Management*, 7(21), 25–33.
- Chou, C-J. (2014). Hotels’ environmental policies and employee personal environmental beliefs: Interactions and outcomes. *Tourism Management*, 40, 436–446.
- Hsiao, T.Y., Chuang, C.M., Kuo, N.W., & Yu, S.M.F. (2014). Establishing attributes of an environmental management system for green hotel evaluation. *International Journal of Hospitality Management*, 36, 197–208.
- Jackson, S.E. (2012). Chapter twenty: Building empirical foundations to inform the future practice of environmental sustainability. In S.E. Jackson, D.S. Ones, & S. Dilchert (eds.), *Managing human resources for environmental sustainability*, 416–432.
- Millar, C., Hind, P., & Magala, S. (2012). Sustainability and the need for change: Organizational change and transformational vision. *Journal of Organizational Change Management*, 25, 489–500.
- Milliman, J., & Clair, J. (2017). Best environmental HRM practices in the US, 49–73.
- Molina-Azorín, J.F., Tari, J.J., Pereira-Moliner, J., López-Gamero, M.D., & Pertusa-Ortega, E.M. (2015). The effects of quality and environmental management on competitive advantage: A mixed methods study in the hotel industry. *Tourism Management*, 50, 41–54.
- Mondy, R.W., & Noe, R. (2005). *Human Resource Management*, 9th edition.
- Mousa, S.K. & Othman, M. (2020). The impact of green human resource management practices on sustainable performance in healthcare organisations: A conceptual framework. *Journal of Cleaner Production*, 243, p.118595.
- Muster, V. and Schrader, Ulf. (2011). Green Work Life Balance: A New Perspective for Green HRM. *German Journal of Research in Human Resource Management*, 25(2), 140–156.
- Nishii, L.H., Lepak, D.P., & Schneider, B. (2008). Employee attributions of the “why” of HR practices: Their effects on employee attitudes and behaviors, and

- customer satisfaction. *Personnel Psychology*, 61(3), 503–545.
- Ojo, A.O., Tan, C.N.L. & Alias, M. (2022). Linking green HRM practices to environmental performance through pro-environment behaviour in the information technology sector. *Social Responsibility Journal*, 18(1), 1–18.
  - Paillé, P., Boiral, O., & Chen, Y. (2013). Linking environmental management practices and organizational citizenship behavior for the environment: A social exchange perspective. *International Journal of Human Resource Management*, 24(18), 3552–3575.
  - Paillé, P., Chen, Y., Boiral, O., & Jin, J. (2014). The impact of human resource management on environmental performance: An employee-level study. *Journal of Business Ethics*, 121(3), 451–466.
  - Pless, N.M., Maakby, T., & Stahl, G.K. (2012). Promoting corporate social responsibility and sustainable development through management development: What can be learned from international service learning programs? *Human Resource Management*, 51(6), 873–904.
  - Ramus, C.A. (2002). Encouraging innovative environmental actions: What companies and managers must do. *Journal of World Business*, 37(2), 151–164.
  - Ramus, C.A., & Killmer, A.B.C. (2007). Corporate greening through prosocial extra-role behavior – A conceptual framework for employee motivation. *Business Strategy and the Environment*, 16(8), 554–570.
  - Renwick, D.W.S., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15(1), 1–14.
  - Tang, G., Chen, Y., Jiang, Y., Paille, P., & Jia, J. (2018). Green human resource management practices: Scale development and validity. *Asia Pacific Journal of Human Resources*, 56(1), 31–55.
  - Zibarras, L.D., & Coan, P. (2015). HRM practices used to promote pro-environmental behavior: A UK survey. *The International Journal of Human Resource Management*, 26(16), 2121–2142.
  - Zibarras, L., & Ballinger, C. (2011). Promoting environmental behaviour in the workplace: A survey of UK organisations. *Going green: The psychology of sustainability in the workplace*, 84–90.
  - Zubair, D.S.S. and Khan, M. (2019). Sustainable development: The role of green HRM. *International Journal of Research in Human Resource Management*, 1(2), 1–6.





## Book Review

Dr. Chand Prakash\*

**Title : Rich Dad Poor Dad**  
**Author : Robert Kiyosaki**  
**Publisher : Plata Publishing, LLC.**  
**ISBN : 9781612681122**

**R**ich Dad Poor Dad by Robert Kiyosaki is a personal finance classic that has had a profound impact on many readers. It revolves around Kiyosaki's childhood experiences with two influential figures in his life: his real father (the "poor dad") and his friend's father (the "rich dad"). Through their differing approaches to money and wealth, Kiyosaki shares powerful lessons and mindsets for achieving financial success.

The book challenges conventional beliefs about money and highlights the importance of financial education, assets versus liabilities, and the mindset required to attain financial independence. Kiyosaki emphasizes the significance of investing in assets that generate income rather than solely relying on a pay check.

One of the book's key takeaways is the concept of financial intelligence—understanding how money works, making it work for you, and cultivating a mindset that fosters wealth-building rather than just working for money.

While some praise the book for its straightforward advice and motivational tone, others criticize its lack of specific investment strategies or its oversimplification of financial concepts. It's essential for readers to approach the book as a starting point for changing their mindset and seek additional financial education to implement practical strategies.

Overall, "Rich Dad Poor Dad" serves as an inspirational guide to reframe one's thinking about money and wealth, encouraging readers to take control of their financial future by adopting a more entrepreneurial and asset-focused mindset.

## OVERALL IMPRESSION

Rich Dad Poor Dad is an engaging and thought-provoking book that challenges conventional thinking about money and wealth creation. Kiyosaki's message is simple yet powerful: financial education is essential for achieving financial freedom, and traditional education often fails to provide it.

### Strengths

- **Simple and accessible language:** Kiyosaki uses clear and concise language, making complex financial concepts easy to understand for readers of all backgrounds.
- **Engaging storytelling:** Kiyosaki's personal anecdotes and stories about his two fathers keep the book engaging and relatable.
- **Challenging conventional wisdom:** Kiyosaki questions the traditional belief that financial security is achieved through a high-paying job and a steady income.
- **Emphasis on financial education:** Kiyosaki emphasizes the importance of acquiring financial knowledge and skills necessary for building wealth.
- **Focus on passive income:** Kiyosaki encourages readers to focus on generating passive income sources, which provide income regardless of their active involvement.

### Weaknesses

- **Oversimplification of complex topics:** Some complex financial concepts are oversimplified, which may lead to misunderstandings.

---

\* Assistant Professor (Selection Grade), The Northcap University, Gurugram.



- **Lack of academic rigor:** Kiyosaki's claims are not always backed by strong academic research or evidence.
- **Limited focus on risk management:** While Kiyosaki encourages taking risks, he downplays the potential downsides and risks associated with some investment strategies.
- **Promotion of Kiyosaki's other products:** The book can sometimes feel like an advertisement for Kiyosaki's other products and services.

Overall, Rich Dad Poor Dad is a valuable resource for anyone interested in learning more about personal finance and wealth creation. It provides a powerful wake-up call to take control of your financial future and challenges conventional wisdom. However, it is important to read the book with a critical eye and do further research before making any major financial decisions.



## GURUGRAM UNIVERSITY BUSINESS REVIEW (GUBR)

### Call for Papers

**G**UBR is an internationally recognized bi-annual peer-reviewed journal, featuring releases in both June and December annually. The journal seeks to promote high quality original research with a view to generate new knowledge and disseminate the same among academicians, practitioners and policy makers. It aims at creation of new intellectual capital by bridging the knowledge gaps in some of the frontier areas of research related to business issues. Papers with trans-disciplinary perspectives are encouraged. In addition, you may also submit Case Study, Book Review, and Perspective on various facets of business and management.

#### CALL FOR PAPERS (Future Issues)

*Gurugram University Business Review (GUBR)* seeks original and innovative theoretical, methodological and empirical research related to various facets of business in a global context. Papers with trans-disciplinary perspective are encouraged. Contributions in diverse fields of management and business in a global context covering (but not limited to) the following disciplines are invited:

- Economics and Economic Environment
- Business Strategies Post-Covid period
- AI & ML in Business
- Business Analytics
- Economics and Business Economics
- International Trade, Investment and Business
- Corporate Governance
- Technology Management
- Knowledge Economy and Knowledge Based Development
- International Strategic Management
- International Marketing
- International Finance
- Strategic Applications of Information Technology
- Human Resource Management

In addition you may also submit Case Study, Book Review, and Perspective on various facets of business and management.

#### Manuscript Submission & Review Process

All papers submitted to GUBR will go through a double blind review process as per the standard procedures of well-known referred journals. Only those papers/articles/case studies, which are complete in all respects and are duly formatted, will be considered for publication. GUBR follows the APA style for citation and referencing. It is the author's responsibility to obtain permission of copyright issues wherever required. The editorial team has the right to modify or edit the work in order to match the standard and style requirement of the journal. The papers can be sent to: ***editor.gubr@gmail.com*** latest by May 15, 2024.

#### AUTHOR GUIDELINES

##### A. Typescript Guidelines

1. The original typescript should be submitted electronically in A4 size format, with a word count of 4000–6000 (including figures and tables).
2. Typescript should have double line spacing at the time of submission.
3. A final paper which would exceed 6000 words or occupy more than 15 pages of the Journal may be returned for abridgement.
4. The text of the paper should include title, abstract, keywords, text, references & notes, tables, figure captions, figures, but not the names of authors, their biographical notes or any acknowledgements. Author needs to submit a separate file containing the title of the paper, plus the names affiliation and complete addresses, e-mail and contact number of author(s), and an abstract, keywords, and any acknowledgements.

5. Author(s) name(s) is/are not to be included in the document/file properties.
6. All papers must be written in English. If English is not your first language, please ask an English-speaking colleague/expert to proofread your paper.

#### **B. Title, Abstract, Keywords, Addresses, Biographical Notes**

1. **Title:** As short as possible.
2. **Authors affiliation details and address:** Author Name and Position, department, name of institution, full postal address and email address for each author.
3. **Abstract:** Approximately 150 maximum
4. **Keywords:** 5–7 words or phrases.
5. **Biographical notes:** Approximately 100 words per author, maximum 150.

#### **C. References and Notes**

1. GUBR uses the APA (name and date) short reference system for citations in the text with a detailed alphabetical list at the end of the paper. For example ‘Large (2010) suggests...’ or ‘Liang and Zeger (1986) found that ...’
2. Footnotes, if any, should be short, succinct notes making a specific point, may be placed in number order following the alphabetical list of references.
3. References should be made only to works that are published, accepted for publication (not merely ‘submitted’), or available through libraries or institutions. Any other source should be qualified by a note regarding availability.
4. References should be mentioned only for those scholars whose name is mentioned in the paper.

#### **D. Ethical Guidelines for Authors**

1. **Content:** All authors must declare they have read and agreed to the content of the submitted manuscript.
2. **Ethics:** Manuscripts may be rejected by the editorial office if it is felt that the work was not carried out within an ethical framework.
3. **Plagiarism:** Plagiarism in any form constitutes a serious violation of the most basic principles of scholar writing and cannot be tolerated. Examples of plagiarism include:
  - (a) Word-for-word copying of portions of another’s writing without enclosing the

copied passage in quotation marks and acknowledging the source in the appropriate scholarly convention.

- (b) The use of a particularly unique term or concept that one has come across in reading without acknowledging the author or source.
- (c) The paraphrasing or abbreviated restatement of someone else’s ideas without acknowledging that another person’s text has been the basis for the paraphrasing.
- (d) False citation: material should not be attributed to a source from which it has not been obtained
- (e) False data: data that has been fabricated or altered in a laboratory or experiment; although not literally plagiarism, this is clearly a form of academic fraud.
- (f) Unacknowledged multiple submission of a paper for several purposes without prior approval from the parties involved.
- (g) Unacknowledged multiple authors or collaboration: the contributions of each author or collaborator should be made clear.
- (h) Self-plagiarism/double submission: the submission of the same or a very similar paper to two or more publications at the same time.

#### **E. Manuscript Guidelines**

##### **1. Fonts**

- Font Type: Times New Roman
- Font Size (Text): 12
- Font Size (Tables and Figures): 12

##### **2. Paragraph**

- Alignment: Left
- Outline Level: Body Text
- Indentation: Left: 0, Right: 0
- Spacing: Before: 0, After: 0
- Line Spacing: Double

##### **3. Page Setup Margins**

- Top: 2.5 cm
- Bottom: 2.5 cm
- Left: 1.5 cm
- Right: 1.5 cm
- Gutter: 0
- Paper Size: Letter

**4. Structure of Paper**

- Abstract with Keywords
- Introduction
- Literature Review
- Research Method
- Analysis and Discussion
- Conclusion
- Limitations of the Study
- Scope for Further Research References

**5. Word Count**

- Article/Research Paper/Case Study: 6000 words maximum

**F. Address for Correspondence**

The Editor-in-Chief

Gurugram University Business Review

Department of Management, Gurugram University  
Sec-51, Mayfield Garden, Gurugram, Haryana.

E-mail: editor.gubr@gmail.com

Tel: 8802485693

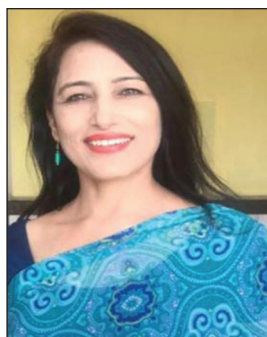






## Editorial Team Profiles

### Dr. Amarjeet Kaur – *Editor-in-Chief*



An accomplished academician; an exemplary leader and an action-oriented self-motivated individual; Dr. Amarjeet Kaur has nearly three decades of experience in education and food industry. She is currently working as professor of Accounting; Dean, Faculty of Commerce & Management and Director, Foreign Students Cell at Gurugram University, Gurugram, India. She holds a Ph.D in Commerce from MD University, Rohtak, India and is a Certified Management Accountant (CMA) from the Institute of Management Accountants (IMA), USA. She has dual master's degree: an MBA from The University of the West of the Scotland (UWS), UK and M.Com from MD University, India. She has traveled extensively and has taught at two prestigious Universities of USA, viz., College of Business (AACSB Accredited) at Valparaiso University, Indiana and North Dakota State University, North Dakota. She has 8 books and 51 research papers to her credit; about half of these papers are published in Emerald, Sage, Inderscience and ABDC listed journals.

Dr. Amarjeet is associated with UGC EDUSAT program for higher learning and delivers live lectures on Television at Doorsarshan VYAS Channel for Higher Education and has more than 120 videos available on YouTube. She has been conferred with 'Excellence in Academic Leadership' Award by Top Rankers, New Delhi and has been felicitated by Indian Society for Training & Development (ISTD) for her Innovative Practices at her workplace in the year 2015. She has also been conferred with 'Great Indian Woman Leader in Education' Award by Golden Signatures in the year 2021. She holds vast administrative experience as Director and Dean while working with prestigious business schools and regularly conducts training programs for corporate clients. As corporate trainer, she conducts management development programs on Trade Finance, IFRS, Cost Analysis, Letter of Credit and Finance for Non-Finance Executives. She is a very dedicated person, who loves and admires nature and enjoys yoga & travelling.

LinkedIn: <https://www.linkedin.com/in/dramarjeetkaur/>

### Dr. Naveen Kumar – *Editor*



Dr. Naveen Kumar has done B.com (Hons), MBA, M.Com; B.Ed. He has obtained his Ph.D Degree from Department of Commerce, MDU Rohtak. He has passed the UGC NET-JRF exam in both subjects (Commerce & Management). He is also passed the HTET (HSBE, Bhiwani), CTET (CBSE) & RTET exams (conducted by RPSC Rajasthan). His areas of interest are Quantitative Techniques, Statistics, Income Tax and Finance & Computer Application in Business. He has four-year teaching experience in the Department of Commerce, MDU Rohtak as a research scholar. He was the founder member of Commerce Department at Gurugram University, Gurugram. He has published 15 research papers in Peer-Reviewed International and National Journals. He has presented various research

papers in National Seminars and Conferences.

**Dr. Hawa Singh – Associate Editor**

Dr. Hawa Singh is a person of high intellect and insights. He started his academic journey with completion of Ph.D degree in Management from Institute of Management Studies And Research (IMSAR), Maharishi Dayanand University, Rohtak, Haryana. In 2012, he qualified the National Eligibility Test UGC-NET/JRF in Management subject. He obtained his master's degree in Master of Business Administration with specialization of Human Resource Management & Marketing Management. He has participated in a number of seminars and conferences and presented research papers. He has published several research papers/articles in the esteemed national and international journals and magazines of national repute.

**Dr. Ritu Yadav – Associate Editor**

Dr. Ritu Yadav is an Assistant professor in Department of Management, Gurugram University, Gurugram. Dr. Yadav holds more than 5 years of experience in teaching, research and academia. She has obtained her Doctorate Degree in Management field on the topic “Determinants of Employer Branding and its impact on Employer Attractiveness in Banking Sector” from Institute of Management Studies and Research (IMSAR), Maharshi Dayanand University, Rohtak, Haryana. She holds Master's degree in the field of Management as well as Commerce and has qualified UGC NET with JRF in Management & Commerce. She has authored and co-authored more than 25 research papers in renowned journals indexed with ABDC, SCOPUS, WOS, etc. She has presented more than 20 research papers in national and international conferences. <https://orcid.org/0000-0003-1224-8575>

Website: [gurugramuniversity.ac.in](http://gurugramuniversity.ac.in)



## **Gurugram University, Gurugram**

---

Mayfield Garden, Sec. 51, Gurugram, Haryana 122003  
Ph. +91 88024 85693