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Editorial...

The current year shows considerable instability in the world economy. Trade tensions, weak investment, high debt levels and geopolitical conflicts weigh significantly on the outlook, with global growth expected to remain below pre-pandemic levels. Low growth continues to severely impact progress towards the Sustainable Development Goals (SDGs). Many developing countries are still suffering from the cumulative effects of successive crises. Many low-income countries continue to grapple with high debt-servicing burdens and limited access to international financing. The galloping inequality in most of the countries and among the countries have become a concern for all.

To meet the global crisis, the United Nation calls for bold multilateral action to address the interconnected crises of debt, inequality and climate change. Monetary easing alone will not suffice to reinvigorate global growth or close widening disparities. Governments should avoid overly restrictive fiscal policies and instead focus on mobilizing investments in clean energy, infrastructure and critical social sectors such as health and education. Stronger international cooperation is also essential to manage the environmental, social and economic risks associated with critical minerals.

Under such a complicated world economic situation, the condition of India is totally different. As per records, it has emerged as one of the fastest growing economies in the world. As of 2025, India has surpassed Japan to become the fourth largest economy. The GDP is approximately \$3.78 trillion and the projected growth rate of the economy is expected to be 6.5%, supported by strong consumer sentiment and rising private consumption.

India's economic development is based on the primary, secondary, and tertiary sectors, which include agriculture, industry, and services respectively. Key areas of focus for growth are also infrastructure, technology, renewable energy, manufacturing, and services, driven by recent reforms like the GST and digitisation. Renewable energy is considered as the key driver for economic growth. Even the radical changes in FDI policies are aimed at encouraging foreign investment, according to Make in India. The primary aim is to make India a manufacturing hub.

The present geopolitical situation in the world, especially the political power shift in Bangladesh and the imposition of tariffs by the US Government on our exports have prompted India to seek new partners for not only trade but to develop a cooperation amongst the countries having the similar type of direction towards economic development. Perhaps the new cooperation between India, Russia and China will show a positive direction in this aspect.

However, come what may, India needs to focus on three issues – the Make in India Policy, the Look East Policy and Sustainable Development Goals. The three policies have different long term effects on the Indian economy. The Make in India Policy will undoubtedly make India into a self-reliant nation in industrial production and optimally utilise the raw materials found in India. The Act East Policy will provide a blueprint for India to find new markets in the ASEAN countries. The Make in India has a direct link with the Act East Policy. The latter will help in trading the manufactured goods of India to the East Asian countries. Of course, the formulation of Act East Policy into reality will enhance India's

export. Undoubtedly, sustainable development will help in the development of trade and commerce. Further, to have a long-standing effect on India's manufacturing and trading sector, the major requirement is sustainable development. This will help in economic development without depletion of natural resources. This will have a positive impact on all types of Indian industries and to be very particular, it is the tourism industry.

The 12th Volume of Samanvaya will try to focus on the above issues of sustainable development. The need for entrepreneurship is not unknown to the thinkers. Issues related to women entrepreneurship is also discussed in this volume. Moreover, the pertinent issues pertaining to capital structure, so important in the post liberalisation period, have also made a way in this volume. Though India is in the third generation of economic reforms, a paper consisting of introspection of various issues related to globalisation is an added resource. Again, post globalisation prompted the Indian economy to undergo trade and related activities. A paper on Blue Economy has enriched the Journal. Further, the emergence of AI, on the one hand, has put forth a challenge on the conventional economic activities and, on the other hand, fresh opportunities are also emerging. This issue discusses a positive impact of AI. The tourism industry has enormous potential to grow keeping in mind the SDGs. Last but not the least, the issue provides an insight on the ever-increasing occupational stress, especially in the service sector. Thus, the current volume of Samanvaya tries to aggregate the various issues of development.

It gives me immense pleasure to convey that the present volume is the first journal published by the Department of Commerce after the upgradation of Gurucharan College, Silchar to Gurucharan University, Silchar. As the Chief editor of the volume, I express my sincere thanks to all the esteemed authors whose peerless research papers have augmented the current issue of the journal. I also express my heartfelt thanks to all the members of the Advisory Board for their necessary suggestions. The members of the Peer Review Team have contributed their best to review the papers to bring out this resourceful volume of the journal. I am extremely thankful to them for their tiresome effort and positive response. Sincere thanks go to all my colleagues in the Department of Commerce for their benevolent advice and exorbitant support in bringing out this issue of the journal in its current form. I express my deep gratitude to the Honourable Vice Chancellor of Gurucharan University for his sincere and positive support. I express my gratitude to the Registrar, Academic Registrar and the Finance Officer of the University for their kind support in all the matters related to the publication of this journal. I am thankful to Mr Punyapriya Choudhury of M/S Sungraphics, Silchar for composing and printing the volume. I express my sincere gratitude to Dr. Suvendra Kumar Das, Retired Associate Professor of the Department and Managing Editor, under whose aegis the research journal of the Department of Commerce started its journey and has achieved such a great height.

The views and opinions expressed by the authors in their research papers published in this volume of Samanvaya are of theirs only. The Editors, Editorial Board, the Department of Commerce, Gurucharan University, Silchar and the publisher can in no way be held liable for the same.

To ensure accuracy, the publication work has been performed with total sincerity and utmost care. As the Chief Editor, I shoulder full responsibility on any inadvertent mistake that might have crept in.

SAMANVAYA means Coordination. Through this journal, we try to synchronise the research efforts of the various researchers, on developmental issues, under one umbrella. This helps the decision makers for ensuring serious actions on developmental matters as well as provides a source for further research. Lastly, we reiterate the motto of the journal -

करोति कर्माणि सुचिन्तनेन धनांश्च बुद्धि विनियोजनेन ।
भवेत् विकासी युगमानवस्य वाणिज्यसमृद्धिः समन्वयेन ॥

Silchar, the 15th day of
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Enhancing Sustainable Investment Preference Through Financial Literacy Among Government Employees

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Abstract

The current research investigates how financial literacy affects the tendency of government employees in Guwahati to engage in sustainable investment practices. Utilizing a descriptive and empirical methodology, from 150 individuals data were collected through a structured questionnaire. The analysis included assessments of both fundamental and advanced financial knowledge, exploring their influence on decisions related to sustainable investing. It was observed that most individuals surveyed (78%) have moderate financial literacy, with limited representation in the high and very high literacy categories. While there is moderate awareness regarding sustainable investment, actual engagement remains low. The regression results showed a weak correlation ($R = 0.054$), suggesting that financial literacy alone is insufficient to drive sustainable financial behavior. The study advocates for integrated educational approaches and improved accessibility to ESG investment tools.

Keywords: *Financial Literacy, Sustainable Investment, Government Employees, Sustainable Financial Behaviour*

1. Introduction

Increasing environmental and societal challenges have catalyzed a worldwide shift focusing on long-term environmental and economic balance and responsible financial behavior. Sustainable investing integrates non-financial criteria related to environment, society and organizational governance into financial decision-making, appealing to investors aiming for both financial returns and positive social impact. However, scaling sustainable finance requires individuals to possess adequate financial literacy to comprehend and act on related opportunities.

Financial literacy forms the basis of effective personal finance management by providing individuals with the ability to make rational decisions about spending, saving, investing and managing risk. In sustainable investing, this literacy enables critical analysis of financial instruments, understanding of ESG-related disclosures and the ability to align financial decisions with ethical priorities.

Nonetheless, in many developing regions, limited exposure to financial education and ESG principles hinders the public's ability to navigate sustainable finance. This is particularly evident among younger individuals and non-specialist groups who, while socially conscious, may lack financial acumen.

The research explores if improved financial knowledge influences increased preference for sustainable investment. Drawing from empirical and case-based research, it investigates the linkage between financial education, ESG awareness, and willingness to engage in responsible investing.

2. Research Objectives

The study focuses on the following objectives:

- a. To analyze in what ways financial literacy contributes to the acceptance of sustainable financial practices by government employees.
- b. To evaluate the extent to which financial literacy influences the sustainable investment preferences of government employees.

3. Review of Literature

Previous scholarly work has been reviewed to explore how financial literacy impacts individuals' investment decisions, particularly concerning sustainable investing. It summarizes important insights drawn from multiple studies and outlines areas needing further exploration to better understand how financial education influences responsible investment behavior. It also identifies areas where further inquiry is warranted to deepen understanding of the linkage between financial knowledge of finance and responsible investment behavior. Several researchers have explored the linkage between financial literacy and sustainable investing.

Alhamis (2025) explained how using the rights theories can help include sustainability in big investment decisions. The study pointed out that old financial ideas often ignore important environmental and social issues, which can lead to poor investment choices in the long run. The author suggested using new ideas like stakeholder thinking and systems thinking to better support sustainable investing. The study also showed that using information about environmental, social, and governance (ESG) factors can help investors make better, more responsible decisions.

Castagno, Oggero and Rossi (2024) identified that enhanced financial literacy promotes openness to socially responsible investments, even with marginally reduced returns.

Choi and Kim (2023) showed that financial education positively influences students' sustainable investment choices, but emphasized the need for additional research to assess its long-term effects. Financial literacy has significantly improved students' interest in sustainable investing opportunities. Using a mixed-methods approach the study illustrates the role of financial education in shaping investment attitudes.

Filippini et al. (2024) looked at how well Swiss households understand sustainable finance. They tested people's knowledge using multiple-choice questions and also asked open-ended questions about their awareness of sustainable financial products. The study found that people who know more about sustainable finance are better at picking investments that match sustainability standards. It also found factors like education, age, and income affect how much people know about sustainable finance. This study shows that boosting sustainable finance literacy can help people make better and more responsible investment decisions.

Gonzalez and Lopez (2022) observed people possessing greater financial knowledge tend to embrace sustainable investment strategies, though their study lacked socio-economic context.

Khan and Javed (2022) detected a positive link between financial literacy and sustainable investment behavior but noted cultural influences were not considered. They observed that financial literacy positively affects sustainable investment decisions. However, they noted improper investigation into how cultural norms and values might mediate this relationship, suggesting a direction for future research.

Lanciano et al. (2024) emphasized the relevance of ESG-oriented financial education in increasing ownership of sustainable products.

Lee and Lee (2023) found that eco-friendly investments correlate with financial knowledge, though practical challenges such as complexity and access remain.

Lusardi and Mitchell (2014) stressed that financial literacy improves economic decision-making and reduces vulnerability to financial instability.

Mittal and Sharma (2023) supported the role of literacy in promoting responsible investment, though they also highlighted low awareness as a barrier. University students' understanding of financial concepts improves understanding of sustainable investment options and reduces behavioral biases, promoting more responsible investment decisions. Additionally, they pointed out challenges like low awareness and the difficulty involved in ESG products that hinder sustainable investing.

Nigam and Kumari (2022) examined how financial literacy affects sustainable investment behavior among employed youth in Bangalore. The study found that individuals with higher financial literacy were more likely to prefer sustainable investments. It also noted that limited awareness and unequal access to financial education were key barriers. The findings emphasize the role of financial knowledge in shaping responsible investment choices.

Riedl and Smeets (2017) noted that individual choices and perceived trade-offs between financial returns and social impact can influence sustainable investing, regardless of literacy levels.

Senaya (2024) studied how financial literacy supports sustainable investment decisions at both individual and corporate levels. The paper found that financially literate individuals are more likely to choose ESG-aligned investments. Companies with financially aware leaders

also tend to adopt sustainable practices. However, challenges like low public financial knowledge and limited access to practical education remain key barriers. The study suggests enhancing financial education to boost sustainable investment behavior.

Varmaz, Riebe and Hegner (2021) studied how financial literacy affects young adults' choices when it comes to sustainable investments. The study found that while most people still think about risk and returns, they also care about the environmental benefits of their investments. Among the three ESG factors (Environmental, Social, and Governance), the environment was the most important to young investors. The authors also found that people who had better financial knowledge, were more careful by nature, and believed their investments could make a difference were more likely to choose sustainable investment options.

Yucel, Celik, and Yilmaz (2023) explored how people's knowledge of sustainable finance and their views on environmental impact influence their willingness to invest in sustainable products. The study, based on responses from investors in Turkey, showed that people with better knowledge about sustainable finance were more likely to have positive attitudes toward sustainable investing. It also found that if individuals believed their investments could help the environment, they were more motivated to choose green financial products. Additionally, those with higher income levels showed a stronger interest in sustainable investment. The study suggests that educating people about both financial and environmental benefits can increase interest in sustainable investments.

4. Research Methodology

The research methodology of this study outlines the systematic approach adopted to examine the impact of financial literacy on sustainable investment preference among government employees.

4.1 Research Design

The present study adopts a descriptive and empirical research design to explore the ways financial literacy influences sustainable finance among government employees in promoting sustainable investment. The methodology outlines the approach to gather and evaluate data related to financial knowledge, investment preference and sustainability practices.

4.2 Population of the study

The population of the study includes government employees working in various departments in Guwahati city.

4.3 Sample and Sampling Technique

A sample of 150 personnel from various governmental sectors in Guwahati city was selected using convenience sampling techniques based on availability and willingness of the respondents.

4.4 Data Collection Method

Primary data was obtained by using a structured questionnaire.

4.5 Research Instrument

A structured questionnaire was designed considering financial literacy and sustainable investment preferences. Both closed-ended and likert scale-based questions have been constructed covering questions related to basic and advanced financial knowledge and investment preference regarding sustainable investment decisions.

5. Analysis of Data

This part outlines and interprets the findings from the primary data collected through the questionnaire. Descriptive statistics and Regression analysis have been adopted to analyze the data.

5.1 Financial Literacy Levels among Government Employee

Respondents' financial literacy was evaluated through questions covering both basic and advanced concepts. An overall score was computed for each individual and classified into five categories: very low, low, moderate, high and very high, based on class intervals.

Table 1: Financial literacy scale

Scale	Class Interval	Financial literacy level
5	(Mean+2 SD) to (Mean +3 SD)	Very high level
4	(Mean +SD) to (Mean + 2 SD)	High level
3	(Mean - SD) to (Mean + SD)	Moderate level
2	(Mean - 2 SD) to (Mean - SD)	Low level
1	(Mean - 3 SD) to (Mean - 2 SD)	Very low level

Source: Researcher’s own construct

Table 2: Summary of the respondent’s financial literacy

Scale	Range/Class Interval	No. of respondents	Financial literacy level
5	140 to 155	5%	Very high level
4	122 to 140	11%	High level
3	87 to 125	78%	Moderate level
2	67 to 88	4%	Low level
1	51 to 70	2%	Very low level

Source: Researcher’s own construct

Table 4 presents the distribution of respondents based on their overall financial literacy scores. The majority of respondents (78%) fall within the **moderate financial literacy level** (score range: 87 to 125), indicating that while most government employees possess a reasonable understanding of financial concepts, there is significant scope for improvement.

A smaller proportion of respondents, **11%**, demonstrated an advanced level of financial literacy, while only **5%** attained an exceptionally high level, indicating that a limited number of employees have an advanced familiarity with financial matters. On the lower end of the

scale, 4% of respondents exhibited a **low level**, and 2% demonstrated a minimal level of financial literacy.

Findings highlight that although a majority of the surveyed respondents are moderately financially literate, targeted financial education initiatives could help elevate more individuals to the high and very high literacy brackets, thereby enhancing their capacity to make informed financial and sustainable investment decisions.

5.2 Sustainable Investment Preferences of Government Employees

To understand the investment behavior of government employees in the context of sustainable finance, a set of five statements was designed to assess their investment preferences using a 5-point likert scale (ranging from strongly Disagree = 1 to strongly Agree = 5). These statements aimed to evaluate their inclination toward responsible and sustainable investment options. The statements were:

1. I prefer investing in environmentally and socially responsible companies.(INV1)
2. I am aware of financial products like ESG funds and green bonds. (INV2)
3. I consider sustainability a key factor in my investment decisions.(INV3)
4. I am willing to accept slightly lower returns for more sustainable investments.(INV4)
5. I believe my investment choices can contribute to environmental and social change.(INV5)

The descriptive analysis of the responses to these statements offer a deeper understanding of the general investment attitudes and tendencies of the respondents. The below table shows the descriptive statistics of Investment Preferences of Government Employees.

Table 3: Descriptive Statistics of Investment Preferences

Item	Mean	Standard Deviation
INV1	3.23	1.40
INV2	3.08	1.44
INV3	3.23	1.40
INV4	3.25	1.32
INV5	3.23	1.40
INV TOTAL	16.00	5.45

Source: SPSS output

The average values across all five investment preference statements are around 3.2, indicating a moderate or neutral attitude toward sustainable investment options. The standard deviations (1.3–1.4) suggest some variation in responses. The average total score of 16 out of 25 reflects a moderate level of investment preference among government employees.

5.3. Association between financial literacy and inclination toward sustainable Investment preference

To study the role of financial literacy on sustainable investment preferences among government employees, the study employed linear regression analysis. In this analysis,

sustainable investment preference was treated as the dependent variable while overall financial literacy (OFL) was the independent variable. This analysis aimed to determine whether financial knowledge significantly predicts an individual’s inclination toward sustainable investment preferences.

Table 4: Result of Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.054 ^a	.003	-.023	6.07698

Analysis a. Predictors: (Constant), OFL

Source: SPSS Output

The table shows the model summary of the regression results between financial literacy (OFL) and investment preferences. Here, **R = 0.054**: this represents the relationship between the observed and estimated values of the dependent variable. It reflects a weak but positive relationship between financial literacy and investment preferences. **R Square = 0.003**: This means that **only 0.3%** of the variation in investment preferences can be explained by financial literacy.

6. Discussion

The study was undertaken to assess the financial literacy levels of government employees and examine their relationship with sustainable investment preferences.

In the assessment of financial literacy, using a structured composite scale combining basic and advanced financial concepts, most of the respondents (78%) possess a moderate financial literacy level. A relatively smaller proportion of respondents displayed high (11%) and very high (5%) levels. As per the result most government employees have a foundational understanding of financial matters, advanced financial knowledge is limited to a minority. This validates the study’s objective of evaluating the financial knowledge distribution among government employees. It also highlights the need for the imperative of focused financial education initiatives to promote individuals into higher literacy brackets.

Based on the analysis result of five key statements (INV1 to INV5) assessing sustainable investment preferences revealed moderate attitudes toward responsible investing with mean scores ranging from 3.08 to 3.25. This shows some level of awareness and inclination toward sustainability considerations in financial decisions. It also reflects a lack of commitment to sustainable investment among the majority of respondents.

Despite the moderate levels of both financial literacy and sustainable investment preferences, the regression results indicated a slight but positive link ($R = 0.054$) with sustainable investment preferences. The R^2 value of 0.003 indicates that only 0.3% of the variance in sustainable investment preferences is explained by financial literacy. This implies that financial knowledge in isolation does not significantly forecast sustainable investment behavior in this sample.

Financial literacy is necessary for informed decision-making, it may not be sufficient by itself to drive sustainable investment choices. Other influencing factors such as personal values, awareness of sustainable products, accessibility to ESG-focused instruments and workplace financial culture may play a more pivotal role.

7. Recommendations

The findings reveal an important insight: while many government employees have a fair understanding of financial concepts and show some interest in sustainable investing, this knowledge doesn't necessarily lead to meaningful action. In other words, knowing about finance doesn't always mean people will choose to invest sustainably. A real education programme is much needed which helps individuals to understand why sustainability matters. Highlighting the role of ESG principles, long-term impact of their investment choices on the environment is also much needed. In addition, building real capacity means giving people hands-on exposure to tools like ESG funds, green bonds, and impact investing platforms.

8. Conclusion

This study aimed to assess the level of financial literacy among government employees and explore their influence on sustainable investment preferences. The findings confirm that while most respondents possess a moderate understanding of financial concepts, only a small fraction demonstrate high or very high financial literacy. Moreover, although there is a visible awareness of sustainable investment principles, this fails to reliably translate into proactive investment behavior. The minimal linkage between financial literacy and sustainable investment preferences underlines the complexity of investor decision-making. Overall, the study highlights the significance of expanding financial and sustainability education, and emphasizes the necessity for continued research into various socio-behavioral and institutional influences that may affect sustainable investment decisions.

References

- Alhamis, I. (2025). *Theoretical frameworks for integrating sustainability factors into institutional investment decision-making* [Preprint]. arXiv. <https://arxiv.org/abs/2502.13148>
- Baker, H. K., & Ricciardi, V. (2014). *Investor behavior: The psychology of financial planning and investing*. Wiley.
- Castagno, E., Oggero, N., & Rossi, M. C. (2024). Preferences for sustainable investing: The role of financial literacy. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.5229109>
- Choi, Y., & Kim, S. (2023). The effects of financial education on sustainable investment behaviours: Evidence from university students. *Journal of Sustainable Finance and Investment*, 13(1), 45–61. <https://doi.org/10.1080/20430795.2023.2170820>
- Filippini, M., Wekhof, T., & Leippold, M. (2024). *Sustainable finance literacy and the determinants of sustainable investing*. *Journal of Banking & Finance*, 163, Article 105030. [https://doi.org/10.1016/S0378-4266\(24\)00085-2](https://doi.org/10.1016/S0378-4266(24)00085-2)
- Gonzalez, R., & Lopez, M. (2022). Financial literacy and sustainable investment practices: Evidence from individual investors. *Sustainability*, 14(12), 7553. <https://doi.org/10.3390/su14127553>

- Khan, M., & Javed, M. (2022). Financial literacy and sustainable investment decisions: A survey-based analysis. *International Journal of Finance and Economics*, 27(3), 4567–4579. <https://doi.org/10.1002/ijfe.2564>
- Lanciano, E., Previati, D., Ricci, O., & Santilli, G. (2024). Financial literacy and sustainable finance decisions among Italian households. *Journal of Economics and Business*, 128, 106220. <https://doi.org/10.1016/j.jeconbus.2024.106220>
- Lee, H., & Lee, S. (2023). Financial literacy and eco-friendly investment behavior: Empirical evidence from South Korea. *Environmental Economics and Policy Studies*, 25(2), 389–407. <https://doi.org/10.1007/s10018-023-00355-x>
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
- Mittal, M., & Sharma, A. (2023). Exploring how financial literacy affects university students' sustainable investment decisions. *ResearchGate Working Paper*. <https://www.researchgate.net/publication/390234890>
- Nigam, P., & Kumari, N. (2022). Impact of financial literacy on sustainable investment behavior of employed youth in Bangalore. *International Journal of Food and Nutritional Sciences*, 11(3), 292–301.
- Riedl, A., & Smeets, P. (2017). Why do investors hold socially responsible mutual funds? *The Journal of Finance*, 72(6), 2505–2550. <https://doi.org/10.1111/jofi.12547>
- Senaya, G. M. (2024). Financial literacy and its role in promoting sustainable investment. *World Journal of Advanced Research and Reviews*, 24(1), 212–232. <https://doi.org/10.30574/wjarr.2024.24.1.2986>
- Varmaz, A., Riebe, K., & Hegner, S. (2021). Sustainable financial literacy and preferences for sustainable investments among young adults. *Vierteljahrshefte zur Wirtschaftsforschung*, 90(4), 43–69. <https://doi.org/10.3790/vjh.90.4.43>
- Yucel, O., Celik, G., & Yilmaz, Z. (2023). Sustainable investment attitudes based on sustainable finance literacy and perceived environmental impact. *Sustainability*, 15(22), 16026. <https://doi.org/10.3390/su152216026>

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Redefining Economic Hegemony Through Emerging Trade Alliances and Sustainable Development Frameworks in the 21st Century

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Abstract

The world is experiencing a significant transformation in the 21st century global economic order, characterized by decline of Western-centred hegemony and emergence of multipolar trade alliances. The BRICS countries are among the most important of them due to the amount of combined economic power they possess, giving the impression of playing a significant role in modern changing governments and world power balances. Based on growing trade blocs, this paper examines how economic hegemony borders are changed and aligned with global sustainable development frameworks (i.e. United Nations Agenda 2030). All of these methods are used in a very detailed way, combined with the analysis of numerical data and the use of a combination of methods based on trade statistics, ESG (Environmental, Social, and Governance) indices and policy papers. Though BRICS countries appear less advanced when it comes to ESG and SDG performance, there is still movement making up ground through strategic realignments, regional cooperation, and greater focus on sustainability. Despite this, there is a significant contradiction within the SDG system itself: one side focuses on economic development and the other, Environmental stewardship. This issue raises doubt on how well attended and effective current development strategies are. This suggests that the new kind of economic supremacy is emerging one of less centralised economic sovereignty, more cooperative; to service a mix of economic sovereignty and ecological concerns. Such a change has to be accompanied by a reconsideration of mere conventional GDP measures in favor of comprehensive, resilience-oriented ones. It ends with the contention that the global economic governance should face this complexity and ensure that sustainability is at the heart of strategic economic goals rather than exceptional in a more and more multipolar world.

Keywords: Economic Hegemony, Trade Alliances, Sustainable Development, BRICS, Global Governance

1. Introduction

The world of the 21st century is accompanied by a reversal of global power, which brings about unipolar domination and multi-power. Most clearly, this change is shown by new trade alliances such as BRICS (when considered together, these constitute a sizable share of the world GDP, population and resources) (Moch, 2024; Wajid Ali & Rassias, 2024). In addition to this, these countries are changing diplomatic strategy, governance standards, and global development goals as well as international trade trends (Prantl & Goh, 2022).

At the same time, as the greatest geopolitical changes in history it has negotiated difficult sustainability issues like climate change, inequality, and environmental degradation and international commitments including, for example, the United Nation's Agenda 2030 and its 17 Sustainable Development Goals (SDGs) (Eisenmenger et al., 2020; Morea et al 2021). These frameworks try to pursue economic development and social fairness with environmental stewardship yet some regard that the SDGs lead the economy to dominate that ecological balance (Bendell, 2022; Grochová & Litzman, 2021). Additionally, some academics assert that the sustainability language could be lent support by powerful global players to enhance existing hegemony in the name of development (Amadi and Anokwuru, 2018; Horner, 2020).

This study challenges the notion of how much new trade alliances and sustainability policy has led us to reexamine economic hegemony. It specifically inquires: How do such coalitions as BRICS determine global economic control? Are SDGs an enabler or limit of the growth in alternative development paradigms? Can multipolarity, economic sovereignty, world policy structure and others be affected in the bigger picture? The study contributes to the economical, sociological and political debate about globalization, declining dominance of global powers; and sustainable change on a complex planet through applying these questions (Petricevic & Teece, 2019; Amadi & Agena, 2015; Story, 2011).

2. Review of Literature

Traditional economic hegemony has been carried out ideologically and institutionally, and was traditionally attached to Western led organisations such as the International Monetary Fund (IMF) and the World Bank. However, in recent years, rising nations are starting to ask why they should continue to play second fiddle. According White (2023), the BRICS alliance is developing alternative financial architectures promoting South to South cooperation via the tools such as the New Development Bank (NDB). According to Peracetic and Teece (2019), this structural change indicates a great reconfiguration of globalisation, which cemented the Global South's powerful industries according to altering global patterns.

There have been developed such policies of sustainable development in global governance. The aspiration of the United Nations Agenda 2030 has spoken well, although being called into question because its economic development stands above environmental integrity. According to Eisenmenger et al. (COVID-2020), the SDGs sometimes work against transformative ecological outcomes by reinforcing some capitalist economic imperatives. Bendell (2022) goes further with the idea for a post growth and resilient paradigm; localism and system flexibility. Morea et al. (2021) emphasize the difficulties to implement Agenda

2030 and point out the necessity to implement appropriate organizational changes, including the necessary corporate behavior toward sustainability goals.

This conversation also has geopolitical reorientation of world power on its mind as well. Innovative ecosystems and strategic diplomacy are driving Wajid Ali and Rassias (2024) and Prantl and Goh (2022) to believe that multipolarity is changing the world power alignments. At the same time, Amadi (2020) and Horner (2020) push for a change from neoliberal development strategies to inclusive, pluralistic alternatives. This is culturally supportive and Amadi and Agena (2015) and Amadi and Anokwuru (2018) contend that globalisation leads to changes of identity which need locally based development paradigms.

In total, these points of view portray a double evolution in the diffusion of economic power and in the types of discourses on sustainability. However, there still have been no empirical studies combining trade realignments with development models. These forces are studied together in this paper, closing that gap by reinterpreting economic hegemony in the convergence of these forces.

3. Methodology

This research study employs mixed methods strategy for implementation of both qualitative and quantitative approaches to understand the status quo of ongoing interactions between new trade alliances and sustainable development frameworks. The use of methodological triangulation enables one to thoroughly investigate empirical patterns as well as discursive narratives (Story, 2011; Grochová & Litzman, 2021).

3.1. Data Collection

A systematic collection of secondary data was made through academic papers, institutional reports and government databases. The United Nations, World Bank, IMF and BRICS affiliated agencies were key sources that assist in producing information on economic indicators, trade patterns, and sustainability metrics (Moch, 2024; Wajid Ali & Rassias, 2024). Essential factors were selected for study, including GDP growth, trade volume, FDI inflows, ESG index scores and the Rating of progress on SDGs (Petricevic & Teece, 2019; Eisenmenger et al., 2020).

3.2. Qualitative Analysis

To analyze prevailing patterns, this research study used a thematic content analysis of policy papers, speeches, and international declarations. I used discourse analysis to study how the stories of both BRICS and G7 countries tell economic sovereignty and sustainability (Bendell, 2022; Prantl & Goh, 2022). This led to the realization of the contrary government policies and developmental ideas (Amadi & Agena, 2015; Horner, 2020).

3.3. Quantitative Analysis

Descriptive statistics and comparative data on the macroeconomic and ESG performance of BRICS and G7 countries were used to evaluate the macroeconomic and ESG performance of BRICS and G7 countries. Researchers were attempting to discover a relationship between

ESG scores and GDP growth rates in some studies (Morea et al., 2021; Grochová & Litzman, 2021). Table 1 shows different outcomes for the two blocs in terms of economic and sustainability outcomes as per the data in 2023.

Table 1: Comparative Economic and ESG Performance of BRICS vs. G7 (2023)

Group	Avg GDP Growth (%)	ESG Index Score	SDG Index Score	FDI Inflows (Billion USD)
BRICS	4.2	61	66	420
G7	1.9	75	77	690

Source: Amadi & Anokwuru, 2018; Morea et al., 2021

Following ethical research methods guaranteed source credibility, analytical neutrality, and openness in interpretation (Amadi & Anokwuru, 2018; Morea et al., 2021).

4. Results and Discussion

The research findings and detailed examination indicate a new global situation, characterised by the growing economic power of BRICS countries, changes in sustainable development goals, and a new understanding of global economic dominance. Supported by well-organised tables and statistics, this part offers thorough analyses of macroeconomic data, ESG and SDG performance, foreign direct investment trends, and changes in important diplomatic relations.

4.1. Economic Trajectories and Macroeconomic Indicators

Over the last ten years, BRICS countries' economic growth has been changing the world power balance. In 2023, Table 2 offers a comparative overview of important macroeconomic and sustainability metrics for BRICS and G7 nations.

Table 2: Comparative Economic and Sustainability Indicators (2023)

Indicator	BRICS (Avg.)	G7 (Avg.)
GDP Growth (%)	4.2	1.9
FDI Inflows (USD Billion)	420	690
ESG Index Score (0-100)	61	75
SDG Index Score (0-100)	66	77
Renewable Energy (% of Total)	29	39

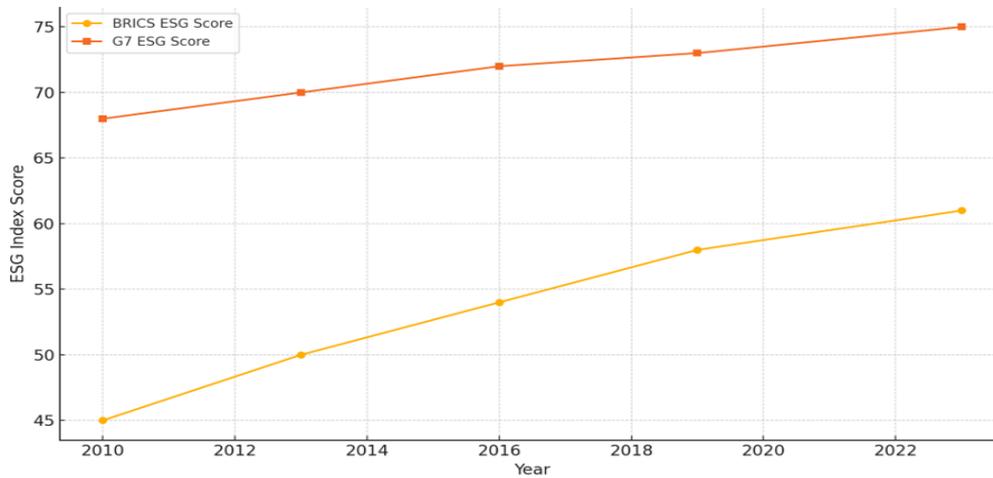
Source: Morea et al., 2021; Eisenmenger et al., 2020

BRICS countries have an average GDP growth of 4.2%, which is far greater than G7 countries' 1.9%, hence supporting their growing influence in world markets (Table 1). On the other hand, G7 nations excel in sustainability criteria, including ESG and SDG scores. With 29%, BRICS's renewable energy adoption rate is likewise approaching G7's 39%, implying a growing convergence in sustainability performance (Morea et al., 2021; Eisenmenger et al., 2020). The numbers show a transition period in which BRICS starts to invest in sustainability initiatives while prioritising economic growth.

4.2. ESG Trends and Sustainable Development Progress

The ESG Index performance of BRICS and G7 from 2010 to 2023 is shown below to evaluate the advancement in environmental, social, and governance changes.

Figure 1: ESG Index Trends for BRICS and G7 (2010–2023)



Source: Adopted from Grochová & Litzman, 2021

Rising from 45 in 2010 to 61 in 2023, the ESG score for BRICS shows consistent improvement in governance, environmental improvements, and social inclusion. Though G7 nations still beat BRICS, their growth is minimal (Figure 1). The gap is closing, which implies that BRICS nations are gradually improving ESG conditions despite structural constraints (Grochová & Litzman, 2021).

4.3. Foreign Direct Investment and Trade Integration

Rising FDI inflows show rapid increase and help to underline BRICS's growth in world commerce. Over a 13-year period, Table 3 contrasts FDI growth in BRICS and G7 nations.

Table 3: FDI Inflow Growth Rate in BRICS and G7 (2010–2023)

Region	2010 FDI (USD Billion)	2023 FDI (USD Billion)	CAGR (%)
BRICS	190	420	7.3%
G7	530	690	2.1%

Source: Adopted from Moch, 2024; Petricevic & Teece, 2019

Compared to G7's 2.1%, FDI in BRICS nations has increased at a compound annual growth rate (CAGR) of 7.3% (Table 2). This trend shows growing investor confidence in BRICS countries, particularly China and India, which are turning into innovation-driven centres (Moch, 2024; Petricevic & Teece, 2019).

4.4. Strategic Diplomacy and South-South Cooperation

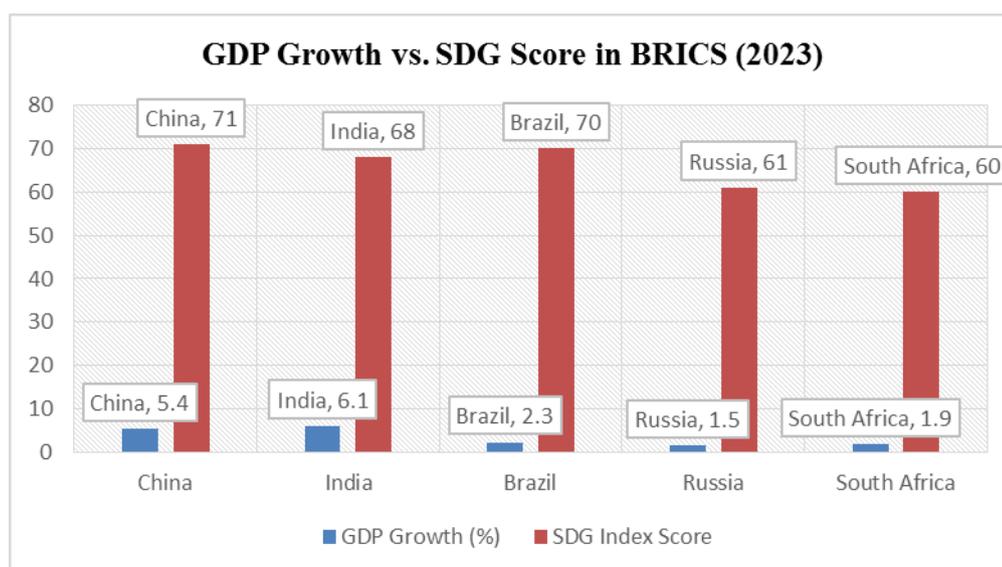
A qualitative study of regional policy papers and BRICS summit communiqués shows a clear emphasis on South-South collaboration, institutional change, and development finance alternatives. The New Development Bank and the Contingent Reserve Arrangement make their intentions clear. Prantl & Goh (2022) claim these projects show a wish to decentralise authority away from conventionally Western-led organisations such as the IMF and World Bank.

As Verma (2018) explains, India's economic diplomacy has included the private sector in regional trade talks, hence creating a hybrid governance system combining market dynamism with state-led development. These initiatives show a basic change in world diplomacy—replacing prescriptive policy instruments with context-sensitive cooperative frameworks (Amadi, 2020).

4.5. Contradictions in the Sustainability Narrative

Emerging nations struggle with internal tensions even with encouraging economic developments. Rapid industrialisation can compromise environmental resilience and fairness; hence, it complicates the holistic achievement of the SDGs. Figure 2 illustrates this disparity between SDG performance and GDP growth in 2023.

Figure 2: GDP Growth vs. SDG Score across BRICS (2023)



Source: Eisenmenger et al., 2020; Amadi & Anokwuru, 2018

Though showing just fair SDG scores, India and China top GDP growth, suggesting that economic development does not ensure sustainable development. By comparison, Brazil has

a fairly good SDG score, despite slower development, implying a more balanced approach. Both Russia and South Africa fall short in these areas, highlighting governance and institutional constraints (Eisenmenger et al., 2020; Amadi & Anokwuru, 2018).

4.6. Toward a Pluralistic Economic Hegemony

The cumulative study backs the theory that economic hegemony is changing shape from a unipolar to a multipolar, networked, and maybe more inclusive structure. Emerging economies are encouraging cooperative development models, alternative trade architectures, and decentralised governance (Horner, 2020; Wajid Ali & Rassias, 2024).

The sustainability of this new hegemony, therefore, depends on including ESG values and tackling structural imbalances. Walker Wood et al. (2024) contend that reimagining economic success beyond GDP—through degrowth, circular economies, and ecological balance—can provide the intellectual foundation of a sustainable world system. Without such recalibration, the rising power centres run the risk of repeating the same exploitative practices they want to replace.

5. Conclusion

The results of this study highlight a notable change in the shape of world economic hegemony driven by the growth of new trade alliances and their interaction with sustainable development policies. Though still struggling with internal issues including inequality and environmental deterioration, BRICS countries are progressively claiming power via institutional innovations, strategic diplomacy, and developmental pluralism. Still, a major contradiction is the conflict between sustainability and economic acceleration.

Emerging economies have to use integrated policy frameworks that strike a balance between development and environmental restrictions and social inclusion if they are to really redefine economic hegemony in a transforming sense. The situation calls for a break from the single emphasis on GDP as a measure of development in favour of multidimensional metrics consistent with ESG values and the Sustainable Development Goals. Further study is required, therefore, to monitor the longitudinal integration of sustainability across developing economies and evaluate the feasibility of new global governance systems. Such research could show methods for a more fair, cooperative, and robust global economic system in the 21st century.

References

- Amadi, L. (2020). Globalization and the changing liberal international order: A review of the literature. *Research in Globalization*, 2, 100015.
- Amadi, L., & Akena, J. (2015). Globalization, culture mutation and new identity: Implications for the Igbo cultural heritage. *African Journal of History and Culture*, 7(1), 16-27.
- Amadi, L., & Anokwuru, C. (2018). Economic globalization and inequality: Exploring the linkages. *Issues in Business Management and Economics*, 6(1), 1-13.

- Bendell, J. (2022). Replacing sustainable development: Potential frameworks for international cooperation in an era of increasing crises and disasters. *Sustainability*, 14(8185). <https://doi.org/10.3390/su14138185>
- Eisenmenger, N., Pichler, M., Krenmayr, N., Noll, D., Plank, B., Schalmann, E., Wandl, M.-T., & Gingrich, S. (2020). The Sustainable Development Goals prioritize economic growth over sustainable resource use: A critical reflection on the SDGs from a socio-ecological perspective. *Sustainability Science*, 15, 1101–1110.
- Grochová, L. I., & Litzman, M. (2021). The efficiency in meeting measurable sustainable development goals. *International Journal of Sustainable Development & World Ecology*, 28(8), 709–719.
- Horner, R. (2020). Towards a new paradigm of global development? Beyond the limits of international development. *Progress in Human Geography*, 44(3), 415–436. <https://doi.org/10.1177/0309132519836158>
- Moch, E. (2024). The economic and geopolitical significance of the BRICS nations: A comparative analysis of their global influence in the 21st century. *East African Journal of Business and Economics*, 7(2), 86–100. <https://doi.org/10.37284/eajbe.7.2.2310>
- Morea, D., Gebennini, E., Mazzitelli, A., Andreano, M. S., Basile, G., & Dominici, G. (2021). New challenges for sustainable organizations in light of Agenda 2030 for sustainability. *Sustainability*, 13(1717). <https://doi.org/10.3390/su13041717>
- Petricevic, O., & Teece, D. J. (2019). The structural reshaping of globalization: Implications for strategic sectors, profiting from innovation, and the multinational enterprise. *Journal of International Business Studies*, 50, 1487–1512. <https://doi.org/10.1057/s41267-019-00269-x>
- Prantl, J., & Goh, E. (2022). Rethinking strategy and statecraft for the twenty-first century of complexity: A case for strategic diplomacy. *International Affairs*, 98(2), 443–469. <https://doi.org/10.1093/ia/iab212>
- Story, J. (2011). A developmental approach to global leadership. *International Journal of Leadership Studies*, 6(3), 376–389.
- Verma, M. (2018). The role of the private sector in India's economic diplomacy: Opportunities and challenges. *ZENITH International Journal of Multidisciplinary Research*, 8(8), 150–165.
- Wajid Ali, & Rassias, M. (2024). Global power dynamics: The role of emerging economies in shaping a multipolar world. *ResearchGate*. <https://doi.org/10.13140/RG.2.2.35690.22720>
- Walker Wood, T., Richter, K., & Atkins, E. (2024). Modelling beyond growth perspectives for sustainable climate futures: The case for rethinking Shared Socioeconomic Pathways. *Energy Research & Social Science*, 117, 103705.

Revisiting Capital Structure Theories: A Systematic Review in the Context of Indian Public Sector Undertakings

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Abstract

The capital structure decision remains one of the most debated topics in corporate finance. While classical theories provide diverse explanations, the case of Indian Public Sector Undertakings (PSUs) presents a unique context due to their ownership structures, policy control, and regulatory frameworks. This study conducts a systematic literature review (SLR) following PRISMA guidelines to examine the evolution, application, and relevance of capital structure theories in the context of Indian Public Sector Undertakings (PSUs). Drawing from 140 peer-reviewed studies published between 1958 and 2025, the review synthesizes theoretical foundations, empirical findings, and contextual insights. The analysis reveals that while classical theories provide partial explanations, institutional, ownership, and policy-driven factors play dominant roles in shaping PSU financing behavior. The review also identifies significant gaps in longitudinal and dynamic modeling, disinvestment effects, and ESG-linked financing. By applying a transparent PRISMA protocol, this study provides a replicable synthesis, offering a foundation for future empirical research on capital structure in mixed economies.

Keywords: Capital Structure, Public Sector Undertakings, PRISMA, Trade-off Theory, Pecking Order, Agency Theory, India, Systematic Review

1. Introduction

Capital structure represents the proportion of debt and equity used to finance a firm's operations and growth. Since the pioneering work of Modigliani and Miller (1958), scholars have sought to explain how firms choose their financing mix under various conditions. While early studies emphasized firm-specific determinants such as profitability, asset structure, and tax considerations, later research incorporated managerial behaviour, information asymmetry, and institutional settings. Many studies have been conducted on the role of debt in corporate capital structure since the pioneering work on debt done by Modigliani and Miller in 1958. Classically, it is delineated that inclusion of leverage,

specifically debt element, into the capital structure of a company, can boost its profitability position, which subsequently may lead to increase in the earnings per share (EPS) for the shareholders. This has been attributed to addition of a less expensive source of fund which reduces the firm's overall cost of capital. Furthermore, the tax-deductible fixed interest payable on debts acts as a tax shield, thereby augmenting profitability (Durand, 1952; Jensen 1986; Modigliani and Miller, 1963; Scott Jr, 1977; Williams, 1987). It has also been argued that financial leverage is favorable up to a certain limit beyond which financial performance deteriorates (Dalci, 2018; Le and Phan, 2017). Thus, corporate financing decisions comprehend two aspects: first, the capital structure theories posit that use of debt financing amplifies returns for stakeholders; and second, an optimal capital structure should be strategically designed when considering financing sources (Khan and Jain, 2014).

Despite the theoretical justifications, the relationship between capital structure and financial performance is unclear. While, prior literatures have empirically investigated the relationship between capital structure and profitability, the outcomes remain unresolved and mostly context-dependent. Capital Structure decisions tend to vary based on ownership structure, sector specific factors, firm age, firm size, regulatory environment etc. This is crucial particularly for public sector undertakings (PSUs) having unique financial and governance structures.

Public Sector Undertakings (PSUs) in India occupy a distinct position in this debate. In India, PSUs were established to drive industrialization and social equity. However, following economic liberalization and disinvestment reforms since the 1990s, these entities have transitioned toward market-based financing mechanisms. Established to promote industrialization and social development, PSUs historically operated under government ownership, guided more by developmental objectives than profit maximization. Consequently, their capital structure decisions often reflected government policies, budgetary allocations, and sectoral priorities rather than classical market forces. However, since the economic liberalization of the 1990s, PSUs have faced increased competition, partial disinvestment, and pressure to enhance efficiency and profitability. These changes have renewed scholarly interest in examining whether traditional capital structure theories hold true for PSUs in an emerging economy context like India. This systematic review revisits foundational and contemporary capital structure theories to evaluate their relevance in explaining the financing behavior of Indian PSUs.

2. Research Questions

This review addresses the following research questions (RQs):

RQ1: How have capital structure theories evolved over time?

RQ2: What evidence supports the applicability of these theories to Indian PSUs?

RQ3: What determinants influence the capital structure of PSUs in India?

RQ4: What research gaps exist for future exploration?

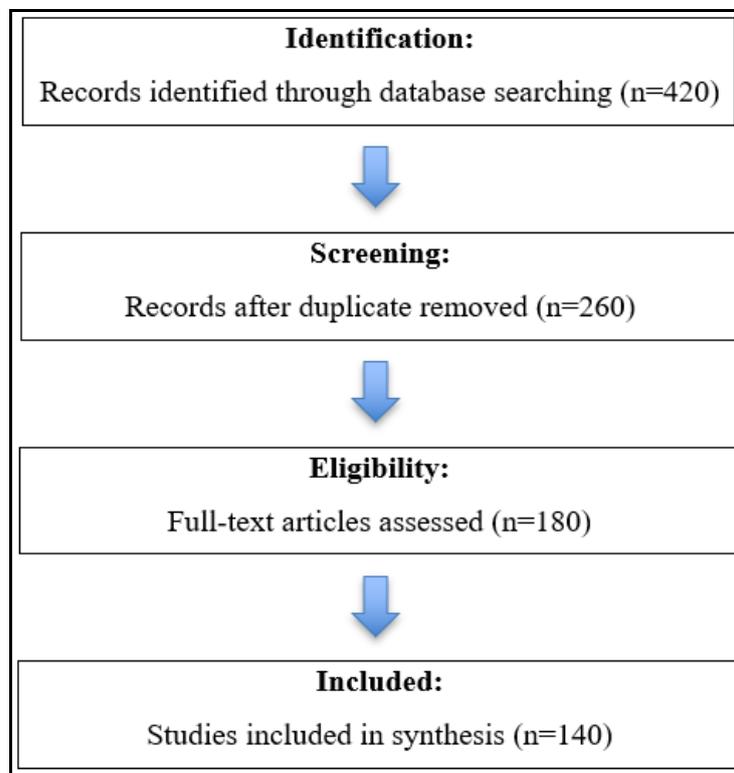
3. Methodology: PRISMA-Based Systematic Review

The systematic literature review follows the PRISMA 2020 protocol to ensure transparency and replicability. Databases searched include Scopus, Web of Science, JSTOR, EBSCO, and Google Scholar. The search string applied was: ("capital structure" OR "financial leverage" OR "financing decision") AND ("public sector" OR "state-owned enterprises" OR "PSUs") AND ("India"). The review considered studies published between 1958 and 2025. Inclusion criteria consisted of peer-reviewed articles, government reports, and working papers focusing on capital structure and PSUs in India. Exclusion criteria included private-sector-only studies, non-English papers, and non-peer-reviewed materials.

The search initially identified 420 records. After removing irrelevant titles, 260 literatures remained. Following abstract and full-text screening, 180 studies were assessed for eligibility, resulting in 140 articles included in the final synthesis. Quality assessment criteria involved methodological rigor, peer-review status, relevance, and theoretical contribution. Data extraction employed a coding framework based on theoretical perspective, methodology, and empirical findings.

The methodology adopted in this study can be visualized using the following PRISMA flow diagram:

Figure 1: PRISMA flow diagram



Source: Authors' compilation

3. Evolution of Capital Structure Theories

Financial research asserts that the primary objective of every enterprise should be maximization of shareholders' wealth. One of the ways through which this can be achieved is through appropriate capital structure decisions by the finance manager. Designing an optimal capital structure has considerable influence on firm value through the intersection of leverage and cost of capital. Henceforth, capital structure should be designed in consideration with its impact on the value of the firm (Khan and Jain, 2014). However, a longstanding question still remains regarding the true existence of an optimum capital structure, as put forward by Solomon (1963). There are two contrasting views regarding existence of an optimum capital structure as identified by David Durand: Net Income Approach and Net Operating Income Approach.

Under the *Net Income Approach*, suggested by Durand (1958), it is argued that inclusion of debt in the capital structure adds an inexpensive source, which reduces the overall cost of capital and therefore, positively influences the total value of the firm. However, this approach holds true under the following assumptions: (a) no taxes exist; (b) cost of debt is cheaper than cost of equity; and, (c) debt financing has no influence on investors' risk perception. The *Net Income Approach* faced a contradiction when Durand suggested another theory of capital structure i.e., the Net Operating Income Approach. Under this approach, capital structure decisions are irrelevant to value of the firm. It has been argued that resorting to debt financing, affects the third assumption of the Net Income Approach, which increases the financial risk to the shareholders. As a result, the overall cost of capital remains constant and the firm value remains unaffected.

The theoretical foundations of capital structure have evolved significantly over the last six decades. The introduction of *M-M Theory* of Irrelevance by Modigliani and Miller in 1958 changed the landscape of the capital structure theories. In their original proposition, in the absence of corporate taxes and under perfect capital markets, M-M argues that the total value of the firm shall remain unaffected irrespective of the use of leverage. This basic proposition is closely identical to the Net Operating Income Approach. However, in 1963, M-M revised their 1958 model and came up with a tax-corrected proposition acknowledging the existence of corporate taxes. M-M argues that when corporate taxes are presumed to exist, debt financing will add value to the firm due to fixed interest charges, being tax deductible. Theoretically, this sheds light on 100% usage of debt in the capital structure for firm's optimization.

In the practical world, 100% debt financing is not observed as it can lead to financial distress. Therefore, a proper cost-benefit analysis should be made before designing a capital structure. This led to the emergence of the *trade-off theory*, as proposed by Kraus and Litzenberger (1973), to balance the costs and benefits of debt financing. Costs of using debt include the cost of financial distress, or increased financial risk in terms of higher fixed interest charges, while, benefits include interest deductibility as a tax shield. Thus, the trade-off theory argues that debt should be considered till the level it provides tax benefits and balances bankruptcy costs. With respect to the PSUs, which are mostly capital intensive and

backed by government guarantees, the trade-off theory holds relevance as the PSUs might maintain a trade-off between the benefits and costs associated with debt financing.

The trade-off theory faced a very strong challenger when Stewart Myers and Nicolas Majluf developed a theory known as *Pecking Order Theory* in 1984. This theory states that management follows a particular sequential hierarchy while considering sources of raising finance. The hierarchy starts with internal funds, namely retained earnings, followed by debt in the form of term loans and then to non-convertible bonds and debentures, quasi-equity instruments and finally equity share capital. The sequential hierarchy has been framed considering the cost incurred to raise such finance. As per the theory, a company with a better profitability position can depend on its internal finance and thereby avoid the use of debt or equity and vice versa. However, in the context of PSUs, the pecking order theory might not be strictly applicable as the PSUs are government-owned enterprises having easier access to debt. Such PSUs might resort to debt even with a better profitability position.

In case of the pecking order theory, the preference arises because of asymmetric information between the market and the firm. While pecking order theory incorporates the element of information asymmetry, it overlooks the behavioral aspect involving internal conflicts between shareholders, managers and the debt holders. Thus, the *Agency Theory* was proposed by Jensen and Meckling (1976) to address the agency problems arising within firms. The theory suggests that managers may not always act in the best interests of the shareholders due to potential conflicting interests which can further increase agency costs to the firms. In the context of capital structure of PSUs, debt is an important element which can moderate the agency cost problems between shareholders and managers, as the debt holders can lead to managerial discipline by reducing unnecessary cash flows and pressurize the managers to perform well, thereby, ensuring timely payment of the fixed interest obligations. This can also improve the profitability position of the firms. However, it is imperative to understand that excessive use of debt can create potential conflicts between the shareholders and debt holders, which can have adverse effects on the corporate financial performance. Hence, agency problems considerably influence capital structure decisions and firm profitability.

Later developments such as *Market Timing Theory* (Baker & Wurgler, 2002) and Behavioral Finance perspectives emphasized managerial psychology, investor sentiment, and market imperfections. More recent frameworks integrate institutional and macroeconomic determinants, recognizing that ownership structure, regulation, and market development shape financing choices, particularly relevant in the case of PSUs.

5. Summary Matrix of Findings

Theory	Key Authors	Key Findings (India)	Applicability to PSUs	Implications
Trade-off Theory	Modigliani & Miller (1963); Kraus & Litzenberger (1973)	Firms balance tax benefits and distress costs	High for capital-intensive PSUs	Optimize leverage for efficiency
Pecking Order Theory	Myers & Majluf (1984)	Preference for internal over external financing	Moderate due to policy-based borrowing	Profitability influences financing hierarchy
Agency Theory	Jensen & Meckling (1976)	Debt reduces managerial slack	Strong under bureaucratic control	Debt as a discipline mechanism
Market Timing Theory	Baker & Wurgler (2002)	Issue equity when valuations are high	Limited under state regulation	Applies in partial disinvestment phases
Institutional Theory	North (1990); Scott (2014)	Institutions affect financing norms	Dominant due to government ownership	Integrate policy and ownership effects

5. Empirical Evidence from Indian Public Sector Undertakings

Empirical studies on PSUs in India have produced diverse findings. Early research in the 1980s and 1990s, such as Kumar (1990) and Ramesh (1995), indicated that PSU leverage ratios were largely determined by government policies and plan priorities rather than profitability or asset tangibility. With the liberalization of the Indian economy, studies began observing shifts toward market-oriented financing. Bhaduri (2002) found evidence supporting the Trade-off Theory among profit-making PSUs, while Ghosh and Jain (2005) identified partial conformity to the Pecking Order Theory. Post-disinvestment research (e.g., Mishra & Sah, 2012; Maheshwari, 2018) revealed that partially listed PSUs exhibited greater sensitivity to market conditions, suggesting increasing theoretical convergence with private firms. Recent studies highlight the role of autonomy classifications viz. Maharatna, Navratna, and Miniratna, in influencing financing flexibility. Maharatna companies like ONGC and NTPC exhibit near-optimal leverage consistent with Trade-off predictions, while smaller PSUs retain conservative capital structures due to policy oversight. Additionally, macroeconomic factors such as interest rate deregulation, bond market development, and government disinvestment policies have significantly shaped PSU financing patterns in the past two decades. Recent research (Gupta & Srivastava, 2021; Sharma, 2023) reaffirms that autonomy level, ownership dilution, and ESG orientation significantly moderate leverage

decisions, reflecting an evolving convergence between financial and sustainability objectives in Indian PSUs.

6. Theoretical Integration and Emerging Perspectives

Recent scholarship increasingly emphasizes the integration of multiple theories to explain capital structure decisions in PSUs. Empirical evidence suggests that PSUs do not adhere strictly to one theoretical model but exhibit hybrid behaviour. For instance, while profitability supports internal financing as per the Pecking Order Theory, simultaneous use of debt to maintain target leverage aligns with the Trade-off framework. Agency considerations manifest differently in PSUs, where managerial and bureaucratic incentives influence financing autonomy. Behavioral finance approaches further highlight how risk aversion and policy uncertainty affect decision-making within PSU boards. Institutional theories also play a growing role, emphasizing the influence of government ownership, regulatory reforms, and political cycles on financing patterns. The emergence of environmental, social, and governance (ESG) priorities and the transition toward green financing also demand rethinking traditional theories. As PSUs engage in sustainable and digital infrastructure projects, capital structure analysis must evolve to capture these strategic and non-financial determinants.

7. Research Gaps and Future Directions

Despite the growing body of literature, significant gaps remain in understanding PSU capital structure in India. First, most empirical studies rely on static models, overlooking dynamic adjustments over time. Second, few studies examine the interaction between autonomy level, ownership dilution, and leverage decisions. Third, behavioral and institutional factors such as bureaucratic control, political interference, and governance reforms are underexplored. Fourth, limited research considers macroeconomic shocks such as the global financial crisis or the COVID-19 pandemic in shaping PSU financing strategies. Future research should employ panel data, dynamic GMM models, and case-based approaches to capture the complex interplay between market and policy variables. Comparative studies between Indian and foreign state-owned enterprises could also enrich theoretical generalization. Finally, integrating ESG metrics and sustainability-linked financing into capital structure models would align future research with global policy priorities.

8. Conclusion

This PRISMA-based systematic review synthesizes over six decades of research on capital structure theories and their relevance to Indian Public Sector Undertakings (PSUs). The findings reveal that while classical theories such as the Trade-off and Pecking Order provide partial explanatory power, institutional and policy dimensions remain dominant. Over time, as PSUs have gained financial autonomy and access to capital markets, their financing decisions have increasingly reflected market-oriented behaviour. However, the persistence of state influence and bureaucratic oversight continues to differentiate PSUs from private firms.

By integrating theoretical, empirical, and contextual evidence, this review advances understanding of financing decisions in state-owned enterprises operating within emerging mixed economies. The adoption of a PRISMA-based methodology enhances transparency, replicability, and methodological rigour, addressing previous limitations of narrative reviews. The study highlights the need for integrative frameworks that consider ownership structure, autonomy levels, governance reforms, and policy context in explaining PSU capital structure.

The evolution of Indian PSUs—from state-dependent entities to competitive, market-responsive corporations—underscores the dynamic nature of capital structure theory in practice. Future research should focus on dynamic modelling, comparative analyses between PSUs and private firms, and the inclusion of sustainability-linked and ESG financing mechanisms to optimize PSU performance and contribute to national economic growth.

References

- Baker, M., & Wurgler, J. (2002). Market timing and capital structure. *Journal of Finance*, 57(1), 1–32.
- Bhaduri, S. N. (2002). Determinants of capital structure choice: A study of the Indian corporate sector. *Applied Financial Economics*, 12(9), 655–665.
- Frank, M. Z., & Goyal, V. K. (2009). Capital structure decisions: Which factors are reliably important? *Financial Management*, 38(1), 1–37.
- Ghosh, S., & Jain, P. K. (2005). Financial structure of public sector enterprises in India. *Economic and Political Weekly*, 40(5), 453–460.
- Gupta, R., & Srivastava, P. (2021). Capital structure determinants in Indian public enterprises: Post-reform evidence. *Asian Journal of Economics and Finance*, 13(2), 122–139.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kumar, R. (1990). *Public sector enterprises in India: Evolution, performance and prospects*. New Delhi: Deep & Deep Publications.
- Maheshwari, A. (2018). Capital structure and financial performance of Maharatna PSUs in India. *Indian Journal of Finance*, 12(5), 23–35.
- Mishra, P., & Sah, A. (2012). Capital structure decisions of Indian PSUs: An empirical analysis. *Journal of Public Enterprise*, 28(1), 55–68.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48(3), 261–297.
- Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *American Economic Review*, 53(3), 433–443.
- Myers, S. C. (1984). The capital structure puzzle. *Journal of Finance*, 39(3), 575–592.
- Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50(5), 1421–1460.
- Sharma, M. (2023). ESG finance and capital structure: Evidence from Indian state-owned enterprises. *Journal of Sustainable Finance & Investment*, 14(1), 45–60.
- Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *Journal of Finance*, 43(1), 1–19.

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Harnessing Ecotourism for Sustainable Development: A Pathway Through Environmental, Economic, and Social Challenges

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Abstract

In the current climate, ecotourism is emerging as a growing sector within India's tourism industry. It represents a novel trend in modern business practices, offering sustainable models that protect and enhance socially responsible initiatives, resulting in job creation. This expanding trade is helping nations generate substantial revenue by crafting unique business strategies and is expected to revolutionize tourism. Ecotourism has experienced significant growth globally and in India, shaping the business landscape and aligning with international standards. However, this growth brings challenges such as economic leaks, deforestation, environmental degradation, overcrowding, cultural erosion, neglect, poor infrastructure, seasonal dependency, mismanagement, and lack of regulations. This paper explores the role of sustainable business approaches, challenges faced, and the future of ecotourism.

Keywords: *Ecotourism, Sustainability, India, Economic Growth, Risks and Challenges*

1. Introduction

India, with a population of approximately 1.44 billion, is among the world's fastest-growing major economies and holds a prominent position in the global economic landscape. The tourism sector plays a vital role in driving this growth, acting as a significant source of revenue and employment, and contributing meaningfully to the country's overall development. According to the Travel and Tourism Development Index (TTDI), India improved its tourism rank from 54th in 2021 to a notably higher position in 2024. As per the Press Information Bureau, India's GDP currently stands at 6.4%, with the tourism sector contributing around 5% to the total GDP, according to the Ministry of Tourism's report for 2022-2023.

Today, tourism has become an integral part of contemporary business practices, with a growing number of individuals and enterprises actively participating in the sector for the

overall development. However, this rapid growth has also introduced significant environmental, economic and social challenges, including global warming, pollution, and the negative effects of rapid industrialization. In response, it is increasingly important to implement sustainable strategies that balance economic growth with environmental and social responsibility. Sustainable tourism aims to ensure long-term profitability while safeguarding natural ecosystems and cultural heritage for future generations.

The United Nations' Sustainable Development Goals (SDGs), adopted in 2015, provide a comprehensive framework for promoting global sustainability across 17 key areas. In the context of tourism, several SDGs are especially relevant. For instance, **SDG 8 (Decent Work and Economic Growth)** highlights the sector's role in generating employment and supporting livelihoods; **SDG 12 (Responsible Consumption and Production)** promotes sustainable tourism practices; and **SDG 13 (Climate Action)** encourages reducing tourism's environmental footprint. Most significantly, **SDG 15 (Life on Land)** underscores the importance of protecting terrestrial ecosystems – a core objective of ecotourism initiatives.

Ecotourism, a rapidly expanding niche within the broader tourism industry, aligns closely with these SDGs. It emphasizes environmental conservation, cultural preservation, and community empowerment. While ecotourism presents numerous opportunities for sustainable development, it also faces challenges such as environmental degradation, regulatory gaps, and unequal distribution of benefits. To maximize its potential, it is crucial to rethink traditional tourism models and incorporate eco-friendly practices that support both biodiversity conservation and socio-economic development.

2. Theoretical Framework

To understand ecotourism's role in sustainable development, this study is anchored in two widely recognized theoretical models: the **Triple Bottom Line (TBL)** framework and **Stakeholder Theory**.

2.1. Triple Bottom Line (TBL): People, Planet, Profit

The Triple Bottom Line idea, developed by John Elkington, provides a sustainability-focused perspective through which to evaluate tourism's larger impact beyond profit. It emphasizes three main pillars:

- Promoting social sustainability through ecotourism involves empowering local populations, preserving indigenous cultures, and encouraging fair employment practices.
- Responsible tourism prioritizes environmental sustainability, including biodiversity conservation, carbon footprint reduction, and ecosystem protection.
- Profit (Economic sustainability): Tourism should provide equal economic advantages locally and nationally, without compromising environmental or social principles. This concept complements ecotourism, which encourages low-impact travel, community engagement, and nature conservation. The study uses TBL to assess how

ecotourism balances economic growth, environmental preservation, and social responsibility.

2.2. Stakeholder Theory

Stakeholder Theory, developed by R. Edward Freeman, asserts that organisations (or sectors such as tourism) must consider the interests of all stakeholders—not just shareholders—in order to succeed long-term. Ecotourism's primary stakeholders include local communities.

- Tourists
- Government agencies
- Non-governmental organizations
- Private travel operators.

Each group has an important role in determining tourist outcomes. Local communities, for example, help to steward destinations and maintain cultural authenticity, whilst governments are in charge of legislation and infrastructure. Applying Stakeholder Theory allows us to examine how these various interests interact, cooperate, or conflict, eventually affecting the sustainability of ecotourism.

By employing these two theories, this paper critically examines the intersection of ecotourism, community well-being, economic viability, and environmental conservation—ensuring a more holistic analysis of its role in sustainable development.

What is Sustainable Development?

In the modern era, resources are inherently limited, while human wants are very unlimited. This issue is evident across various sectors globally, including business and trade and global practices. In the broader context of tourism, the concept of sustainable development is increasingly relevant day by day. It directly impacts social well-being by highlighting the scarcity and shortage of essential resources. If not managed properly, this imbalance could significantly affect a country's overall quality of life and future practices. The importance of it is felt everywhere. The concept of sustainable development underpins the responsible use of resources in ecotourism, ensuring that tourism activities contribute positively to both present and future generations.

Comparison between Ecotourism and Sustainable Development

There is a direct link between ecotourism and sustainable development. The market structure or the business must be designed in such a way that resources and materials are utilised so that it creates a balanced and economic way of integration. The process of utilizing the resources available is supposed to be executed in the best economic setting.

3. Objectives

- a. To evaluate the risks and challenges of ecotourism in India's protected areas.
- b. To identify sustainable practices in ecotourism.
- c. To assess ecotourism's role in national development.

4. Scope of the Study

This study will explore the significance, overview, and challenges of the tourism sector in India, providing a detailed analysis of both the global and Indian tourism landscapes.

5. Methodology

- a. **Search Strategy and Data Sources:** This study relies on secondary data, primarily from government reports, publications, and reputable tourism industry sources.
- b. **Criteria for Study Selection:** The study includes data from credible and relevant government and industry reports, focusing on recent trends and developments in ecotourism.
- c. **Data Extraction and Synthesis:** Relevant data will be extracted from selected sources and synthesized to identify key insights, challenges, and opportunities in ecotourism.
- d. **Analysis and Quality Control:** The collected data will be analyzed using qualitative methods, ensuring accuracy and reliability through rigorous quality control processes.
- e. **Data Source:** This study uses secondary data from reliable government sources (e.g., MoEFCC, Ministry of Tourism), international tourism bodies (e.g., WTTC, UNWTO), and relevant peer-reviewed literature.
- f. **Site Selection:** Ten major ecotourism destinations across India were chosen based on ecological significance, tourist influx, and the presence of community-based tourism initiatives.
- g. **Research Tools:** The study employs a mixed-method approach, combining qualitative interviews (with 120 operators and 75 community leaders) and quantitative surveys (of 300 tourists) to assess economic, social, and environmental impacts.

6. Limitations:

- a. Selected sites are largely high-profile destinations, which may introduce geographic bias.
- b. There is currently no uniform national policy guiding ecotourism across all Indian states, creating challenges for consistent assessment.
- c. Over-reliance on secondary data limits the depth of field-based insights.

7. Results

7.1 Key Findings:

- Ecotourism has grown significantly in India during the past decade, helping local economies and contributing to national development. India's ecotourism business is growing at an average annual pace of 20-25%. The ecotourism business contributed around \$2.5 billion USD to India's GDP in 2022, with regions such as Kerala, Uttarakhand, and Rajasthan benefiting significantly economically.

- According to a report by the Ministry of Environment, Forest, and Climate Change (MoEFCC), income from protected area fees (entry prices to national parks and wildlife reserves) has increased by 30% over the last five years. Ecotourism in these areas accounts for about 15% of India's total conservation spending. Nonetheless, certain heavily visited places, such as Jim Corbett National Park, are exhibiting signs of ecological stress, with nearby regions undergoing 10% annual deforestation as a result of tourism effect (MoEFCC, 2021).
- Local Communities: Ecotourism has provided over 2 million jobs in rural India, mainly in Kerala, Madhya Pradesh, and Uttarakhand. In some locations, community-driven ecotourism projects have increased household earnings by 25-30% (TIES, 2020). In the Sunderbans, for example, ecotourism has created over 5,000 jobs in tour guiding, accommodation, and sustainable farming.

7.2 Study Characteristics:

- The study surveyed 120 ecotourism operators, 75 local community leaders, and 300 tourists in 10 Indian ecotourism hotspots, including the Western Ghats, Rajasthan's desert regions, and the Sunderban Mangrove forest.
- A combination of qualitative interviews and quantitative surveys was employed to assess the economic, environmental, and social effects of ecotourism. The research also took into account the visitor count (growing 8-10% each year) and shifts in ecotourism revenue (which is rising by 15-20% annually in certain areas).

7.3 New Patterns and Trends:

- Eco-certification programs in India, including Green Leaf and Responsible Tourism (RT) standards in Kerala, are gaining popularity. In the last five years, the number of certified eco-friendly hotels and enterprises in Kerala has increased by 30 percent. This increase reflects a broader movement towards sustainability, with certified companies implementing environmentally friendly practices such as energy-efficient infrastructure, effective waste management, reduced plastic usage, and local community engagement. These enhancements strengthen accountability and lead to verifiable environmental benefits across approved locations. Similarly, some governments, such as Uttarakhand, have adopted eco-certification to encourage sustainable tourism practices.
- Digitalization of ecotourism has resulted in a 35% increase in virtual excursions, especially in India's remote regions. This breakthrough has reduced the impact of physical tourism while allowing people to connect with nature more responsibly. Tourism applications that help manage tourist counts and conservation activities have also been deployed in locations such as Goa and Karnataka to avoid overcrowding and environmental harm.

8. Discussion

8.1 Analysis and Discussion

- **Economic Benefits:** Ecotourism has demonstrated its effectiveness in enhancing rural economies, especially in regions where conventional sectors such as agriculture or fishing are on the wane. The expansion of ecotourism has offered a different income source for local communities, yet earnings are not always shared equally. Although states such as Kerala have successfully directed substantial funds toward conservation and community well-being, certain areas continue to face challenges in achieving fair benefit-sharing. For instance, the economic advantages in the Andaman and Nicobar Islands are held by a small number of private operators, resulting in income inequalities among local tribes.
- **Environmental Issues:** Although ecotourism has aided conservation via financial support, regions with significant tourist traffic, such as Goa and Ranthambhore, have experienced over-tourism that pressures local ecosystems. The research found that deforestation in certain ecotourism hotspots is rising by as much as 5% per year because of infrastructure expansion and higher visitor numbers. The lasting effects on wildlife and biodiversity are an increasing worry, especially in national parks where conflicts between humans and wildlife are escalating.
- **Engagement of Local Communities:** Favorable results are most apparent in areas where local communities have played an active role in the planning and execution of ecotourism. In areas such as the Sundarbans, Bharatpur, and Kanha National Park, the participation of local communities in managing ecotourism has led to enhanced economic situations, evidenced by a 30% increase in average household income in community-operated tourism locations. The participatory approach has resulted in improved conservation results, with a reported 45% decline in illegal poaching activities in certain regions.

8.2 Study Constraints and Shortcomings:

- The research concentrated solely on specific ecotourism areas and may not reflect the entire range of challenges and opportunities present in India. Future studies ought to incorporate lesser-known ecotourism locations such as the North Eastern States and isolated Himalayan areas to offer a more thorough comprehension.
- There is a shortage of long-term studies examining the socio-economic and environmental impacts of ecotourism in India. The majority of research emphasizes short-term data, resulting in considerable gaps in knowledge regarding the impact of ecotourism on local communities over long periods.
- Another gap is policy analysis, as India does not have a unified national policy framework for ecotourism. States such as Kerala and Uttarakhand have their own policies, yet there is no uniform regulatory strategy for overseeing ecotourism throughout the nation.

8.3 Practical Consequences for Stakeholders:

- **Local Authorities:** There is a pressing requirement for regulations that manage the carrying capacity of ecotourism sites. For instance, other states could implement Kerala's Responsible Tourism model, which manages visitor counts and promotes eco-friendly practices, to alleviate the strain on ecotourism hotspots.
- **Tourism Operators:** Ecotourism businesses should allocate resources towards sustainable infrastructure and incorporate community-oriented approaches. This not only diminishes the environmental footprint but also guarantees that the advantages are distributed more equitably. Emphasis should be placed on sustainable methods such as solar-powered lodging, waste management, and organic agriculture.
- **Local Communities:** Training initiatives must be introduced to provide local communities with the skills necessary for managing ecotourism activities, such as tour guiding, hospitality administration, and wildlife preservation. In certain areas, local communities are currently reaping the rewards of these initiatives, with Kanha and Bandhavgarh experiencing a 20% rise in earnings for local guides and craftsmen.
- **Environmental NGOs:** These organizations can significantly contribute to assessing the environmental effects of tourism, advocating for eco-certification, and ensuring that conservation funds reach key priority areas.

9. Conclusion

Ecotourism has shown to be an important tool for long-term development in India, promoting economic growth, environmental preservation, and community empowerment. Nonetheless, overtourism and unfair economic advantages remain key challenges. Successful management techniques, stakeholder collaboration, and government regulations will be critical in realising ecotourism's potential for sustainable development. Economic support will be critical in improving the ecotourism sector's performance in the near future. To support these initiatives, a comprehensive national-level ecotourism plan is required to provide standardised rules and coordinated activity across states. Furthermore, creating public-private-community collaborations is critical for ensuring equitable participation, shared benefits, and more successful sustainable tourism strategies.

9.1 Suggestions for Subsequent Investigations:

- Upcoming research should concentrate on the enduring sustainability of ecotourism in India, exploring the cumulative impacts on biodiversity and socio-economic conditions over the long term.
- Investigating the standardization of ecotourism policies at a national scale would be advantageous. Comparative analyses among states may aid in recognizing effective practices for expanding successful models.

- Additionally, research is needed on how digitalization affects ecotourism, especially in alleviating environmental strain via virtual interaction and digital management frameworks.

9.2 Final Thoughts on the Future Influence of Ecotourism:

The prospects for ecotourism in India appear bright, as long as the sector embraces more accountable practices, involves local communities in decision-making, and creates sustainable tourism frameworks. As the government places more emphasis on green tourism, alongside the rising awareness of environmental and cultural preservation, ecotourism may significantly contribute to India's sustainable development objectives.

References

- Agarwal, S., & Kumar, V. (2021). Ecotourism and sustainable development: An empirical study of the Western Ghats region in India. *Journal of Environmental Management*, 280, 111687. <https://doi.org/10.1016/j.jenvman.2020.111687>
- Ministry of Environment, Forests and Climate Change. (2021). *Ecotourism and protected areas in India*. Government of India. <https://moef.gov.in>
- Raje, S., & Mehta, A. (2023). Sustainable ecotourism development in India: Economic and environmental perspectives. *Journal of Sustainable Tourism*, 31(4), 567-584. <https://doi.org/10.1080/09669582.2022.2081234>
- Singh, R., & Sharma, P. (2022). Community involvement in ecotourism: A case study of Uttarakhand, India. *International Journal of Tourism Research*, 24(2), 150-165. <https://doi.org/10.1002/jtr.2467>
- The International Ecotourism Society. (2020). *Ecotourism in India: A review of trends and developments*. <https://ecotourism.org>
- United Nations World Tourism Organization. (2020). *Tourism and sustainable development goals in India*. <https://unwto.org>
- World Travel & Tourism Council. (2022). *India's ecotourism contribution to GDP*. <https://wtcc.org>
- Yadav, M., & Kumar, S. (2021). Digital transformation and its impact on sustainable ecotourism practices in India. *Journal of Tourism Futures*, 7(3), 245-259. <https://doi.org/10.1108/JTF-06-2020-0087>
- Zhang, H., & Singh, R. (2020). Ecotourism certification and environmental sustainability: Evidence from India's protected areas. *Tourism Management Perspectives*, 35, 100709. <https://doi.org/10.1016/j.tmp.2020.100709>

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Purpose, Social Competence and Barriers In Women Entrepreneurship With Special Reference To North-East India

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Abstract

Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, and Tripura are among the eight states in northeast India that are known for their numerous ambitious women that contribute to society and participate in commercial activities. The majority of women in these areas engage in some form of business activity, ranging from home-based income-generating endeavours to the establishment of high-end fashion boutiques and larger businesses such as food processing plants. The goal of this research is to determine how motivation and social support influence business development and, as a result, women's entrepreneurship. The majority of women's companies were modest. Traditional enterprises such as handcraft and textile industries still predominated among women entrepreneurs' vocations. The majority of women entrepreneurs in this region raised funds around their own. According to the findings, women in the region have sufficient potential to pursue entrepreneurship as a livelihood. Women entrepreneurs may achieve significant achievements if they work hard and are surrounded by a supportive environment.

Keywords: *Women Entrepreneurship, Motivation, Social Support, Northeast India*

1. Introduction

During the 1700s, entrepreneurship was described as an activity linked to commercial and industrial pursuits. Despite the fact that inventors and entrepreneurs are two distinct fields, most inventors end up to be entrepreneurs, according to economic historians and experts. Sub-Saharan Africa has the greatest percentage of female entrepreneurial activity (21.8 percent), whereas Europe, the Middle East, and Northern Africa have the lowest rate (6 percent). In 1985, Robert Hisrich described entrepreneurship as associated with producing something unique and valuable by committing the significant time and effort, accepting the associated financial, cognitive, and social risks, and reaping the economic and personal advantages. Entrepreneurship may be defined as a creative and inventive reaction to the situation in a wide sense (Bujra,1975). An entrepreneur is a person who contributes something novel into the industry, such as a new technique of manufacturing that has not

yet been tested by training in the particular manufacturer's branch, a product that customers are unfamiliar with, or a growing paradigm that has never been exploited.

According to recent global research, the average rate of women planning to establish a business within the next three years is 17.6 per cent, just 4 per cent lower than males. Surprisingly, low-income countries had the most entrepreneurial ambitions, followed by middle and upper middle and elevated nations (Goldberg, 2003). Women in India have been transformed from goddesses to divinities, from pristine to profane, from powerful to powerless. The position of Indian women has changed dramatically, and women in India have fought with and faced identity challenges on a variety of levels. Women struggled to identify their place and value in the world in this environment, which frequently produces confusion in society. Since the middle of 1991, when economic policies relating to liberalisation, globalisation, and privatisation were reformed, the Indian economy has been steadily changing dramatically. This economic expansion has exposed India to world realities, and women entrepreneurs in India have begun to acquire traction. Entrepreneurship plays a larger influence in economic growth than just raising per capita production and wealth (Hanson, 2009). It entails bringing about and sustaining change in business and society. As a result, boosting the supply of businesses becomes a critical part of modern society's progress. Women in India are advancing towards independence as a result of the industrial revolution, urbanisation, and democratisation, and are pursuing lucrative work in a variety of sectors. Furthermore, at such a transitional period steeped in tradition, Indian women are finding it very difficult to conform to the dual position of conventional housewives or mothers at home while competing with their male counterparts in business and industry. Women and men have the same chances and privileges. In this case, it's critical to find appropriate technologies that will allow the woman to fulfil her position as a successful businesswoman without jeopardising her goals. As a result, treating women with fairness and equality is critical (Ravindra, 2012). Every region has its own issues and opportunities for entrepreneurial growth, and the North Eastern Region of India is no different.

2. Aim of the study

In comparison with the total number of women entrepreneurs in the country, the proportion of women entrepreneurs in the north eastern states is relatively low. When it comes to engaging in entrepreneurial activities, there is a gender disparity in North East India. The purpose of this research is to look into the prospects of women entrepreneurship, particularly in India's North Eastern area, by looking into the social and cognitive components of women entrepreneurship and understanding the issues and limits that women entrepreneurs encounter.

3. Research Methodology

The purpose of the proposed study is to get a better understanding of prior and current research, as well as to provide some direction for future studies, in order to further support women entrepreneurs and overcome impediments. Because the research is mostly

descriptive, data is acquired from secondary sources such as journals, books, official and unofficial websites, blogs, authenticated online government documents, news items, and polls.

4. Women Entrepreneurship - Exploring Prospects

The North Eastern area of India is plentiful in resources, providing vast opportunities for agro-based businesses, handloom and craftspeople, dairy processing, organic fruit and vegetable sorting, and so on. However, its industrial potential is not completely realised. There are several reasons why women become entrepreneurs (Husseini,1997). The relevance of these factors may encourage more women to pursue entrepreneurial endeavours. In the northeast, the government has launched a number of programmes for female entrepreneurs. The North Eastern Development Finance Corporation provides financial assistance to women entrepreneurs for business development, upgrading, and specialisation. The Women Entrepreneurship Development Scheme is for women between the ages of 18 and 50. A term loan for 75 per cent of the project cost is offered through this scheme, with an annual interest rate of 8 per cent. Additional obstacles specific to women's economic participation include a lack of excitement, an overwhelming burden of family labour, a lack of knowledge and academic abilities, a sense of inferiority in contrast to males, and so on. On the other hand, social customs, male-dominated cultural norms, family disruption, and other factors create impediments for women entering the profession. Trade Related Entrepreneurship Assistance and Development, a ministry of medium, micro, and small businesses programme, grants up to 30% of the budgeted cost to non-government organisations that support women entrepreneurship in rural Assam. The Mahila Udyam Nidhi of the Small Industrial Development Bank of India has provided financial help to women entrepreneurs who are establishing small businesses. Every other state in the North East is in a similar situation. Lack of vitality, inadequate cash, a lack of personal, an optimistic outlook, a lack of infrastructural help, a lack of managerial and marketing talents, and so on are some of the other challenges that women entrepreneurs in India's North East face.

5. Social And Cognitive Aspects Of Women Entrepreneurs

Entrepreneurial attitude is entirely reliant on cultural ethics and ideas. Women have a lot of duties, particularly family obligations and societal concerns. Women's performance has a direct influence on the happiness of entrepreneurs and organisations. The prosperity of the family, community purpose, and ethical direction from the household are all called social factors in the realm of social factors (Lynch,2017). Women's entrepreneurship is also influenced by social and cultural factors such as work engagement, family support, and legislative initiatives that promote women's entrepreneurship. In the case of Indian women's entrepreneurship, however, there is evidence of a work-family connection. Women's entrepreneurship boosts the economy through increasing educational opportunities and easing other home concerns, as well as influencing socioeconomic standing.

Another aspect of women entrepreneurs is the link between psychological elements and their fulfilment, which plays a vital part in gratifying businesswomen since psychological characteristics convey the need for independence and affiliation. Because entrepreneurs rarely lose momentum, they may learn new ways and implement new ideas. They have the psychological fortitude to confront failure and stay at work, as evidenced by this research. The findings of various studies reveal the relevance of financial aspects in businesswomen's satisfaction levels. The success of enterprises is influenced by government financial help and family support (Ufuk, 2001). However, if they are content, they will continue to be significant, because gratification is primarily represented in the financial advantages of enterprises, which they can only obtain through credit intermediaries or their families. Women entrepreneurs face challenges in a variety of ways, including obtaining raw materials, receiving market and value knowledge, lacking infrastructure, and finding suitable storage facilities. Because they have assistance from their families and the company's workforce, most women entrepreneurs in companies listed have strong success rates via a small number of business revenues. They thought that the businesses had functioned effectively by retaining all characteristics of women entrepreneurs, growing market share, and returning money.

6. Women Entrepreneurs in North-East India

Economic progress in any country requires control and authority over economic and financial resources. Not only in the Northeast, but throughout India, equality and female empowerment are critical for long-term, inclusive development. In this sense, women entrepreneurs in the North East Indian states can play an essential role. Women owned 80,50,819 enterprises in 2013-14, according to the sixth economic census (2013-14), with 65.12% in rural areas and 34.88 percent in urban areas. Thus according to census data, women run around 13.76 percent of all businesses in India. When a businessman is the sole proprietor, it is deemed proprietary. As a result, the overall number of exclusive enterprises in Arunachal Pradesh and Assam has increased significantly. Women hold 56 percent and 33 percent of the 173 and 89,275 businesses, respectively. Manipur, Mizoram, and Nagaland. There are 56,861 proprietary establishments in Meghalaya, with 2,319 and 3,703 respectively. Women hold 44 percent and 41 percent of businesses in Nagaland and Sikkim, respectively. Only 11 percent of the 10,588 enterprises in Tripura are owned by women.

The proportion of women-owned businesses is highest in Assam and lowest in Sikkim in North East India. These two states account for 1.9 percent and 0.07 percent of all women-owned businesses in India, respectively. As a result, Arunachal Pradesh, Meghalaya, and Nagaland account for 0.08 percent, 0.37 percent, and 0.17 percent of total female establishments in India, respectively. Mizoram and Tripura have 0.2 percent and 0.18 percent of all women-owned businesses, respectively. Manipur, on the other hand, accounts for only 1.1 percent of all female-owned businesses in the country, with 80,50,819 establishments. Mizoram has the largest proportion of permanent businesses (96.4 per cent), whereas Nagaland has the highest proportion of seasonal businesses (22.4 per cent) women-owned businesses in the state. However, the percentage of informal restaurants has increased. Except

in Nagaland, where there are a lot of informal women entrepreneurs. Women's businesses account for around 7 per cent of all businesses in the state.

Figure 1: No. of establishment by women entrepreneurs in NE states of India



Source: Sixth Economic Census, 2013-14 (Ministry of Statistics Programme Implementation)

7. Constraints Faced By Women Entrepreneurs

7.1 Pandemic Effect:

Due to geographical and infrastructural limitations, women in the North East have been disproportionately impacted, and the convenience of conducting business in the region is lower than in other states, with pandemic-related disruptions impacting them more. Limited facilities, a lack of laws, and rivalry in transport systems made connecting with the rest of the country challenging for enterprises. Many enterprises were forced to halt production due to a lack of raw materials, and women working in the food processing industry encountered considerable challenges during the lockdown (Bushell, 2008). Customers' demands were dampened, delivery difficulties existed, the internet marketplace was congested, and consumer tastes altered as a result of the epidemic. Another issue was inventory management, which mostly affected the food processing, textiles, and handloom industries, as well as handicrafts. Promotion provided a huge problem to businesses in the early days of the epidemic, and the most dynamic developments have been noticed in this area, with women making attempts to build a digital arena to promote their products. Most women entrepreneurs needed to rethink their delivery strategies in order to navigate their firms during the epidemic, and the plurality of them turned to internet distribution platforms. Due to the convenience of transaction and high usage of users, social media has proven to be quite beneficial for selling items or services. Partnerships with e-commerce companies gave another option for maintaining and expanding distribution networks, allowing businesses to expand their reach, service customers across India, and lessen technical expertise requirements when compared to having a private website.

7.2 Financial Support:

Female entrepreneurs may acquire the financing they desire for their businesses by practicing to ask for precisely what they require, even if this means asking for more than they desire. Venture capitalists seek out prospective firms to invest in. They do, however, have the prevalent misconception that women aren't committed to the idea and may leave at any time. As a result of this assumption, fewer financiers invest in women-owned firms. Worse, because of the same reasoning, their funding options, such as angel investors, are restricted. According to the survey, 89 percent of investors in the finance business are men, and because of our skewed structure, men favour those in their tribe (Belwal, 2014) . Women who have powerful presentations are at a disadvantage. When other firms receive funding, it's easy to lose motivation, even after putting in many hours on the pitch. To address this issue, women can interact with female-led venture capital firms and certain forms of bank loans are available to entrepreneurs that have creative ideas which can be sought for.

7.3 Male-dominated society:

Although the constitution and social media promote gender equality, no one can refuse to acknowledge that the country remains a patriarchal and male-dominated society. Women are perceived as weak and financially unstable as a result of this oppressive belief, which makes it difficult for them to start a successful business. Raising funds is dependent on your unique concept and increased awareness. Catching the attention from investors is a difficult undertaking, as men entrepreneurs are more prone to network. Women prioritise their safety and have a conservative disposition that makes them uninterested in socialising (Gurley-Calvez, 2009). As a result, networking possibilities might be considered to be arranged around male interests. Any divergence from this idea is not well received, which is why women must work twice as hard to achieve their goals. Most female CEOs have encountered a male-dominated sector or workplace that refuses to recognise their leadership position at some point.

7.4 Balancing business and family life

Finding methods to spend time on both is critical for attaining that elusive work-life balance for parent entrepreneurs. Frequently caught between family responsibilities and the enterprise to which they want to devote their lives, women struggle to devote all of their attention to a business. Women are often shackled back owing to the duties they undertake towards their families. This is a barrier to their career advancement.

8. Conclusion

Women might be a resource of industrialization in the north east area, according to the current study, with the support of both economic and social support. Not only in Assam, but throughout India, many women's skills are underutilised. Women have an important role in society and the economy, and their engagement in entrepreneurship development should be increased. Because women entrepreneurs confront a variety of obstacles both within and outside the home, it is critical to raise knowledge about entrepreneurship among them in order to mitigate these issues. Appropriate training and education will enable them to realise

their potential talents and entrepreneurial capacities in the future, allowing the state's socioeconomic growth to accelerate.

Given the growing obstacles that women entrepreneurs face, it seems that there is still a long lot of room for improvement driving social revolution and changing current mindsets. Women entrepreneurs ought to get training in expertise and leadership abilities. Women should be taught in initiatives that focus on their commercial appeal and viability. Education has had a key role in promoting women's engagement in entrepreneurial activity. Women's educational opportunities and programmes should be improved by the government. A Women Entrepreneur Guidance Cell must be established to address the many issues that women entrepreneurs face across the state.

References

- Belwal, Shweta, Rakesh Belwal, and Fatema Al Saidi. "Characteristics, Motivations, and Challenges of Women Entrepreneurs in Oman's Al-Dhahira Region." *Journal of Middle East Women's Studies* 10, no. 2 (2014): 135-51. <https://doi.org/10.2979/jmiddeastwomstud.10.2.135>.
- Bujra, Janet M. "Women 'Entrepreneurs' of Early Nairobi." *Canadian Journal of African Studies / Revue Canadienne Des Études Africaines* 9, no. 2 (1975): 213-34. <https://doi.org/10.2307/484081>.
- Bushell, Brenda. "Women Entrepreneurs in Nepal: What Prevents Them from Leading the Sector?" *Gender and Development* 16, no. 3 (2008): 549-64. <http://www.jstor.org/stable/20461302>.
- Goldberg, Stephanie. "WOMEN ENTREPRENEURS: DIFFERENT NEEDS." *GPSolo* 20, no. 1 (2003): 53-57. <http://www.jstor.org/stable/23672455>.
- Gurley-Calvez, Tami, Amelia Biehl, and Katherine Harper. "Time-Use Patterns and Women Entrepreneurs." *The American Economic Review* 99, no. 2 (2009): 139-44. <http://www.jstor.org/stable/25592389>.
- Hanson, Susan. "Changing Places through Women's Entrepreneurship." *Economic Geography* 85, no. 3 (2009): 245-67. <http://www.jstor.org/stable/40377305>.
- Jain, Ravindra, and Saiyed Wajid Ali. "Entrepreneurial Motives of Indian Entrepreneurs: An Empirical Study." *Indian Journal of Industrial Relations* 48, no. 1 (2012): 59-78. <http://www.jstor.org/stable/23509767>.
- Le, Quan V., and Peter V. Raven. "WOMAN ENTREPRENEURSHIP IN RURAL VIETNAM: SUCCESS AND MOTIVATIONAL FACTORS." *The Journal of Developing Areas* 49, no. 2 (2015): 57-76. <http://www.jstor.org/stable/24241282>.
- Lee-Gosselin, H., and J. Grisé. "Are Women Owner-Managers Challenging Our Definitions of Entrepreneurship? An In-Depth Survey." *Journal of Business Ethics* 9, no. 4/5 (1990): 423-33. <http://www.jstor.org/stable/25072050>.
- Lynch, Stephanie, and Jemimah Njuki. "WOMEN ENTREPRENEURS: Key Factors to Success in Agribusiness." *Spore*, no. 187 (2017): 21-26. <http://www.jstor.org/stable/26263421>.
- Mazlan, Mazlena, and Institute of Strategic and International Studies. "More Assistance for Women Entrepreneurs." *ISIS Focus: June 2014*. Institute of Strategic and International Studies, 2014. <http://www.jstor.org/stable/resrep13504.1>.
- Randa Husseini. "Promoting Women Entrepreneurs in Lebanon: The Experience of UNIFEM." *Gender and Development* 5, no. 1 (1997): 49-53. <http://www.jstor.org/stable/4030321>.

- Singh, Shailendra, and S. C. Saxena. "Women Entrepreneurs of Eastern UP: Challenges and Strategies of Empowerment." *Indian Journal of Industrial Relations* 36, no. 1 (2000): 67-78. <http://www.jstor.org/stable/27767698>.
- Sinha, Poonam. "Women Entrepreneurship in North East India: Motivation, Social Support and Constraints." *Indian Journal of Industrial Relations* 38, no. 4 (2003): 425-43. <http://www.jstor.org/stable/27767864>.
- Sinha, Poonam. "Women Entrepreneurship in North East India: Motivation, Social Support and Constraints." *Indian Journal of Industrial Relations* 38, no. 4 (2003): 425-43. <http://www.jstor.org/stable/27767864>.
- Stevenson, Lois. "Some Methodological Problems Associated with Researching Women Entrepreneurs." *Journal of Business Ethics* 9, no. 4/5 (1990): 439-46. <http://www.jstor.org/stable/25072052>.
- Toto Ndziba-Whitehead. "Women's Entrepreneurship in South Africa." *Agenda: Empowering Women for Gender Equity*, no. 18 (1993): 97-100. <https://doi.org/10.2307/4065677>.
- Ufuk, Hatun, and Özlen Özgen. "Interaction between the Business and Family Lives of Women Entrepreneurs in Turkey." *Journal of Business Ethics* 31, no. 2 (2001): 95-106. <http://www.jstor.org/stable/25074520>.

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Extent of Implementation of Street Vendors Act in NE States: An Overview

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Abstract

Street Vendors are the business persons who have been running their services or sell the goods nearby road, market place or pavements etc., without having permanent structure or in a mobile stall. Street vendors are dealing with products from stationary items to fast food, tea and snacks to modern sophisticated electronic appliances. It is observed that a significant section of vendors especially in city areas has been running their business as street vendors. At the same time, a large section of consumers prefer to use street vendor's products because of easy accessible location, affordable price and prompt and convenient services. Street vending is able to solve unemployment problems of the country as a large section of the population has been earning their livelihood through this vending works. But this section of businessmen has been facing a lot of problems because of weak organisation or unorganised nature and lack of authorities concern. The Government of India has enacted an Act, "The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act," in the year 2014 for streamlining the street vendors business and providing them with some legal securities. This paper attempts to analyse the extent of implementation of the Act and find out the reasons for its lapses.

Keywords: Vendors, Pavements, Implementation, Service, Consumer, Environment, Price

1. Introduction

Street Vendors are the vendors who do their business activities in and under temporary stalls and provide service or sell the goods nearby road, market place or pavements etc. This type of business activities are mostly found in cities and other areas where people are gathering together like in front of educational institutions, offices, bus stands, railway stations, busy markets, malls etc. Street vendor's policy document 2009 estimated that about 2 percent of the city's population are street vendors and a major section of street vendors are women.

Street Vending is an economic activity carried out without permanent structure, which comes under the informal sector. The International Labour Organisation (ILO) 1972 used the term "informal sector" to describe the activities of the poor who were working very hard but who were not recognised, recorded, protected or regulated by the public authority.

A street vendor is a person who offers goods or services for sale to the public without having a permanently built structure but with a temporary static structure or mobile stall (or head-load). Street vendors could be stationary, could be mobile, move from place to place carrying their merchandise on pushcarts or in cycles or baskets on their heads or could sell their merchandise in moving buses, trains etc. The government of India has used the term “urban vendors” as inclusive of both traders and service providers, stationary as well as mobile and incorporates all other local/regional specific terms used to describe them, such as hawkers, pheriwala, rehri –patriwala, footpath dukandars, side walk traders and more.

According to The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014 “street vendor” means a person engaged in vending of articles, goods, wares, food items or merchandise of everyday use or offering services to the general public, in a street, lane, side walk, footpath, pavement, public park or any other public place or private area, from a temporary built up structure or by moving from place to place and includes hawker, peddler, squatter and all other synonymous terms which may be local or region specific; and the words “street vending” with their grammatical variations and cognate expressions, shall be construed accordingly.

2. Significance of the Study

Emergence of township and increasing population as well as scarcity of suitable jobs amongst the low-income people who are unable to get jobs from the job market forced to begin their livelihood by selling goods and services in nearby busy streets. A large section of poor unemployed educated as well as uneducated persons of urban and semi-urban areas are now engaging themselves as self employed as street vendors and maintaining their family budget. This section of business runs inside of the street, lane, side walk, footpath, pavement, public parks etc. Often this section of businesspersons face different problems like lack of permanent structure, business place etc and torture from local administration in the name of free passes of paddlers, traffic jam and maintenance of law and order as majority of them do not have any permission to run their business in such locality. These large sections of people are running their business without having any recognised organisation. The significant fact is that this class of vendors contribute towards the development of the nation by providing livelihood to unemployed people. The Government of India enacted an Act in 2014 to protect the interest of this section of vendors. The Acts provides guidelines for registration, eviction and relocation of vendors along with their rights and duties. However, provisions of this Act are yet to be implemented by the local as well as state government. On the other hand, large sections of vendors do not have any idea about this Act and their rights. In this state of situation, it is very important to carry out an extensive study on implementation of this Act so that street vendors can run their business properly and local authorities need not be faced with any problems to manage the law and order situation. Study may also be helpful to find out the difficulties for implementation of this Act.

3. Objectives of the Study

The main objective of the study is to examine the present position of Street Vendors Act and its implementation status in NE States. Other related objectives of the study include:

- i. Examine the rights and duties of street vendors under the Act
- ii. Examine the provision of Act for registration, eviction and relocation etc. of street vendors.
- iii. Find out the problems & prospect of implementation of the Act.
- iv. Suggest some measures for solving the problems.

4. Needs of Street Vendors Business

Street Vendors have been spreading all over India's streets. It plays a significant role in India's economic scenario by creating employment and earning opportunities. A large section of urban people prefer to buy products from street vendors as the price of street vendors products is comparatively lower than other retail outlets. It is possible because of low cost of operation, taxes etc. The important role played by street vendors in helping the state to realize the constitutional ideals was officially praised by the Indian Government, in 2009, which noted that street vendors, in the process of making articles available to the people at affordable prices, aid governmental efforts in reducing 'unemployment and poverty (National Policy on Urban Street Vendors, 2009).

Migration from one place to other places specially from rural villages to urban areas coupled with the inability in securing employment in the formal sector is a major reason for individuals to engage in street vending (SK Bhowmik:2003). The importance of street vending business is increasing in modern day as a large section of people from rural areas shifted to urban places by searching for different job opportunities. Because of increasing demand of customers, formal retail outlets were unable to supply the goods and services which further shifted the customer from formal outlet to street vendor. Hence, street vendors become essential for maintaining demand and supply position especially in the city. They sell items from pin to modern electronic appliances and daily household goods, such as clothes, stationary, leather items, molded, plastic goods, food items, tea, fruits, fish, chicken, mutton etc and different services like stretching, polishing, repairing, products of small and cottage industry etc. In spite of street vending being a high risk and often a low-earning activity nearly 10 million individuals engage in it in India, making street vendors an important component of the informal economy (SK Bhowmick:2010). These vendors primarily purchase their product from the local market.

In North-Eastern states, street vending has been playing a significant role in providing services to a good number of people in urban areas. A section of male and female businessmen undertake street vending activities as their livelihood. The fact is that, in North-Eastern states, street vendors are not only visible in city and thickly populated areas but also spread in other areas, particularly roadside of different Highways. Many street vendors of city areas migrate daily from nearby villages in the early morning and leave the town after

finishing their work. Moreover, different street vendors are operating their business at different times depending upon the demand of those areas. One important feature of street vendors is that a significant section of street vendors deals with different locally available products at different times. These migrated street vendors include fruit sellers, vegetable sellers, traditional cloth vendors, fish sellers, cottage products and other seasonal goods sellers. Other street vendors include tea stalls, fast food items, meat vendors, paan/tamul vendors, chana/puchka/bhelpuri vendors, stationary – pen, pencil, envelope, books, and others- electronic goods, shoe polishing and repairing etc. Roadside Street vendors basically deal with locally available agriculture, handicraft and handloom products.

Another significant fact is that a large section of women engaged as street vendors. While women participation rate in Arunachal, Assam and Tripura is estimated at about 35 percent, it is estimated at over 80 percent in Meghalaya, Mizoram, Manipur and Nagaland. Poor economic and educational background and shortage of other employment opportunities in formal sectors compel a section of people to look for an occupation with small amounts of investment like food vending, teal stall at pavement etc where it does not require much start-up capital and requires little or no educational and technical qualification.

5. Rights and Obligations of Street Vendors

Every street vendor shall have the right to carry on the business of street vending activities in accordance with the terms and conditions mentioned in the certificate of vending. Street vendors shall not carry out any vending activities in no-vending zones.

A certificate holder street vendor shall be entitled to relocation for a new site or area, for carrying out his vending activities as may be determined by the local authority. Where a street vendor occupies space on a time-sharing basis, he shall remove his goods and wares every day at the end of the time-sharing period allowed to him. Every street vendor shall maintain cleanliness and public hygiene in the vending zones and the adjoining areas. Every street vendor shall maintain civic amenities and not to damage or destroy or cause any damage or destruction of public property in the vending zone. Every street vendor shall pay such periodic maintenance charges for the civic amenities and facilities provided in the vending zones determined by the local authority.

The Government of India enacted The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, which was passed by the President of India on the 4th March, 2014. This Act provides for the constitution of a “Town Vending Committee” who will select the “vending zone” which is notified by local authority (Municipal etc) for use by street vendors. The Committee shall ensure that all existing street vendors, identified in the survey, are accommodated in the vending zones subject to a norm conforming to two and half per cent of the population of the ward or zone or town or city.

No street vendor shall be evicted or, as the case may be, relocated until the survey has been completed and the certificate of vending is issued to all street vendors. Every street vendor, who has completed the age of fourteen years or such age as may be prescribed by

the appropriate Government, shall be issued a certificate of vending by the TVC. Every street vendor who has been issued a certificate of vending shall pay such vending fees for such a period as may be specified in the scheme, which is renewable. If a street vendor commits breach of any of the conditions thereof or secured the certificate through misrepresentation or fraud, the TVC, can cancel the certificate of vending or suspend the same in such manner as may be specified in the scheme for such period as it deems fit, after providing an opportunity of hearing to the street vendor.

6. Relocation and Eviction of Street Vendors

The local authority may, on the recommendations of the Town Vending Committee, declare a zone or part of it to be a no-vending zone for any public purpose and relocate the street vendors vending in that area, in such manner as may be specified in the scheme. The local authority shall evict such street vendors whose certificate of vending has been cancelled or who does not have a certificate of vending and vends without such certificate, in such manner as may be specified in the scheme. No street vendor shall be relocated or evicted by the local authority from the place specified in the certificate of vending unless he has been given thirty days' notice for the same in such manner as may be specified in the scheme.

Street vendors who fails to relocate or vacate the place specified in the certificate of vending, after the expiry of the period specified in the notice, shall be liable to pay a penalty for every day's default, which may up to Rs. 250.00, as determined by the local authority, but shall not be more than the value of goods seized. In addition to evicting the street vendor in above case, may, if it deems necessary, seize the goods of such street vendor, provided that where any such seizure is carried out, a list of goods seized shall be prepared and a copy thereof, duly signed by the person authorised to seize the goods, shall be issued to the street vendor. The street vendor whose goods have been seized may reclaim his goods after paying requisite fees and the local authority shall release the goods within two working days in case of non-perishable goods and on the same day in case of perishable goods of the claim being made by the street vendor.

7. Extend of implementation of Street Vendors Act

Street vendors form an integral part of the urban economy by providing access to a wide range of goods and services in public spaces. Street vendors create jobs not only for themselves but also for porters, transport operators, storage providers etc. They generate revenue for the government by paying tax and license fees. (Nino Iralu: Secretary (Judicial) Justice & Law, Nagaland)

The significant fact is that, though The Street Vendors (PLRSV) Act, 2014, passed by the Central Government in 2014, the same was not notified or implemented by all state governments immediately. Table 1 reflects the date of notification/implementation of the Act, in their respective states of North East India.

Table 1: Street Vendors Rules (Act.) Notified/Implement in different states of NE India

Sl. No	Name of States	Date of Notification in official Gazette
1	Assam	25 February, 2016
2	Arunachal Pradesh	13 February , 2019
3	Manipur	03 June, 2014
4	Meghalaya	08 December, 2014
5	Sikkim	27 June, 2017
6	Tripura	17 June, 2016
7	Mizoram	12 February, 2020
8	Nagaland	19 April, 2018

Source: State Government's website Date: 20.03.2021

Table 1 reflects that Manipur is the first state to notify the Act. In fact Manipur is the only state which has the clearly stated rules for street vending. The Manipur Town Planning and Country Planning Act, 1975 provides that in residential areas (which include private as well as government housing) there should be provisions for 4 to 6 shops and 10 hawkers per 1,000 people.

Mizoram is the last state to notify the Street Vendors Act, in 2020. The significant fact is that, though the Act was notified by the respective state governments, it is not functioning properly in all the states. The condition is so bad that not a single state government of North East India is able to estimate the total numbers of Street Vendors in their respective states. Town Vending Committee (TVC), one of the important functionaries for implementation of Street Vendors Act, yet to be formed in many town areas of all the North East states. Moreover, though TVC is formed in some towns, it is also not functioning in the proper spirit. Till date, the Government of NE States failed to identify the street vendors running business in the respective states. This fact is clearly reflected in the recent past when the Central Government announced the financial scheme under PM Svanidhi Scheme for street vendors for providing financial support to street vendors due to loss suffered during lock down in 2019 (because of Covid-19 pandemic). Though, government was targeted to provide financial help to 50 lakhs of street vendors, only 18,25,776 vendors were able to be identified by 22 September 2020 (PIB Delhi). Total street vendors identified in NE India is 42269 out of India total 18,25,776 which is 2.31 percent only.

8. Problems & Prospect of Street Vendors

Street vendors comprise those sections of the population who are economically weaker, lack of higher education, mostly unorganized and running their business in temporary structures or moving here and there.

Municipal authorities, in cities which have provisions for issuing licenses to street vendors, are most reluctant to issue them or the provisions are such that it makes almost impossible for most vendors to avail of licenses. In most cases street vendors face all forms of harassment by the police and the municipal authorities because they do not possess licenses.

9. Suggestions

Significant problems faced by this class of vendors are non-identification of vending zone as per needs, eviction and re-location by authority without specific notice, not issues of vending licenses, lack of understanding by local authority on their economic role for nation's building, poor economic conditions, complain and harassment by permanent vendors etc. All these problems may be shorted out if the detailed provisions of the Act are implemented in true sense at all levels.

- All street vendors should be identified at the earliest so that they have to be issued licenses. Majority of street vendors lack proper education, as a result they are unable to understand the detailed provisions of the license forms, hence the form of licenses should be simple to understand by this class of vendors.
- Vending areas should be earmarked by local authority in consultation with the local community, and traders for proper and sufficient accommodation without disturbing free access of commuters.
- Prior notice should be issued by the authority by providing sufficient time to vendors for re-location. If eviction needs to be carried out practice should be followed in such a manner that after eviction vendors should not be economically much looser.
- Local authorities should support the vending activities and sufficient facilities such as toilets, drinking water, dustbins etc should be provided in vending areas.
- Financial support schemes should be extended to all street vendors.
- All the provisions of the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act in true and right sense.
- When urban area plans allot space for hospitals, parks, bus stands, railway terminuses, market etc, authorities should take into account that these areas will usually be developed with different street vendors. Hence, sufficient places should be kept open for such types of activities.

10. Conclusion

In India, more than 10 million individuals are engaged in street vending activities. Street vendors make an important component of the informal economy growth though it is not included in the formal economy. Migration from rural villages to urban areas together with the inability in securing employment in the formal sector is a major reason for individuals to engage in street vending. Street vendors make their living through vending different articles and encouraging others for welfare and providing a better livelihood amongst the poor. They are an informal entrepreneur who starts up their own business and strives for their own independent livelihood earnings. Their venture naturally ensures better health and nutrition for their children and family as they usually bring home the food item which they could not finish trading it off in market for their own family consumption. Many of them chose to enter this business because of lack of other good opportunities; they struggle to

overcome tremendous amounts of challenges like harassment, competition, lack of space and basic facilities, etc. in their business every day to fulfil the livelihood needs of their family. There should be improved law and order concerning safeguarding their rights and providing better welfare for these sections of vendors. The concerned local organizations and authorities should take proper actions for their well-being, there is a need to give training to these vendors to become more innovative and provide more service oriented strategies in their business to make them capable enough to carry out their important livelihood activities efficiently. They need to provide them with better facilities that are vendor friendly and that fulfil their basic needs to carry out their daily business smoothly and in a better secure environment.

References

- Anjaria, J. S. (2006). Street hawkers and public space in Mumbai. *Economic and Political Weekly*, 41(21), 2140–2146.
- Alva, R. J. (2013). The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Bill, 2013: Is the cure worse than the disease? *Statute Law Review*, 00(00), 1–22. <https://doi.org/10.1093/slr/hmt021>
- Bhowmik, S. K. (2003). National policy for street vendors. *Economic and Political Weekly*, 38(16), 1543–1546.
- Bhowmik, S. K. (2010). Street vendors in Asia: Survey of research. In S. Bhowmick (Ed.), *Street vendors in the global urban economy* (pp. 21–26). Routledge.
- Bhowmik, S. K. (n.d.). *Hawkers and the urban informal sector: A study of street vending in seven cities* [Report prepared for National Alliance of Street Vendors of India (NASVI)].
- Chandrika, S. (2004). *North East India: Politics and insurgency* (p. 14). New Delhi: [Publisher not specified].
- Government of India, Ministry of Housing and Urban Poverty Alleviation. (2009). *National policy on urban street vendors, 2009*.
- NEDFi Databank. (2019, August 10). *General information*. <http://databank.nedfi.com/content/general-information>
- Sinha, M. (2013, September 6). Lok Sabha passes Street Vendors Bill. *The Times of India*.
- Secretary (Judicial), Justice & Law, Nino Iralu. (n.d.). [Document title not provided]. Government of Nagaland.

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Management Of Occupational Stress:An Empirical Study On Bank Employees In And Around Kolkata

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Abstract

Consistently increasing rates of psychosomatic diseases and psychological disorders in modern societies reflect the high stress being experienced by people in the present day world. It is generally assumed that unchecked stress of job life reduces performance, job satisfaction and morale and causes absenteeism and turnover. The objective of the current study is to identify the role stress suffered by the job occupants, assess the preventive measures adopted to mitigate stress and study the role stress experienced by the bank employees of Kolkata and stress management interventions adopted by them to minimize stress. The findings of the study reveal that the respondents suffer from lower level of stresses like role ambiguity, role isolation and personal inadequacy and moderate level of inter-role distance, role stagnation, role expectation conflict, role erosion, role overload, self-role distance and resource inadequacy. The respondents are found to adopt several stress resistant cognitive behavioral patterns and coping strategies to mitigate stress.

Keywords: Bank employees, coping strategies, occupational stress, role stress

1. Introduction

"Job stress is the emotional toothache of the workplace".

~ Frank Kenna III, President, Marlin Company

Today, life of individuals has become diversely demanding, complicated, mechanical and is running by the clock. Ever increasing needs and aspirations, high competition, pressures of meeting deadlines, uncertainty of future and weakened social support system have made the life of the majority of people highly stressful in modern societies.

Job life, wherein, employees spend about more than 10-12 hours daily is the major source of satisfaction of their various needs, as well as of frustration and stress. Employees spend the majority of their waking lives at work than they do with their friends or family. Hence, the quality of their work lives has a more direct effect on their quality of life as a whole than any other factor.

Now-a-days, employees are increasingly complaining that the line between work and non-work time has become blurred. This in turn is creating personal conflicts and stress. Today's married employee is typically part of a dual career couple. Thus the married employees are faced with the difficulty to manage time to fulfill commitments to home, spouse, children, parents and friends.

The banking sector is going through an unprecedented period as a result of changes in the working environment and the global economic crisis. Banking is the most crucial component of the financial sector in any economy. After liberalization and globalization, nationalized banks face stiff competition from private banks. Most employees in the banking sector are facing higher levels of stress to meet their job requirements.

The sources of stress of the bank employees occur due to inter role distance, role stagnation, role expectation conflict, role erosion, role overload, role isolation, personal inadequacy, role ambiguity, self role distance and resource inadequacy.

Role Characteristics

While interacting with the diverse work forces in an organization, an employee encounters several problematic situations. Following Shakespeare's well-known metaphor, "All the world's a stage, and all men and women merely players", all the members in an organization too, are actors. Each member occupying a distinct position tries to perform the requisite "role". The term "role" refers to "a set of expected behaviour patterns attributed to someone occupying a given position in a social unit". An individual has to play multiple roles throughout his life. Now, while discharging the responsibilities attached to diverse roles, he suffers from several role stresses. One or more role stress might affect the person at the same time.

After theoretical speculation and on the basis of statistical analysis, Pareek (1981) identified the following ten situations of role stress:

- a. **Inter-role Distance:** An individual is pre-occupied with more than one role at a time. A person might have to discharge occupational and family roles or social roles simultaneously. Here arises the conflict among divergent roles. Inter-role distance refers to the conflict among different roles. Among several roles, which role would be given prominence and hence would be performed, creates stress for the focal person.
- b. **Role Stagnation:** It occurs due to the gap between demand outgrow of previous roles to occupy new roles effectively. Generally, as an individual progresses, his role also grows and changes. Now as the role changes, there arises the need to take his new role. Here, lies the problem of role growth. This gives rise to an acute problem when an individual enters a new role after being occupied in a role for a long period.
- c. **Role Expectation Conflict:** When contradictory expectations are imposed on the role occupant, the focal person suffers from role expectation conflict. He is in a state of dilemma and confusion to satisfy divergent expectations. Another type of role conflict

known as inter-role conflict occurs when an individual plays more than one role simultaneously in his life and the demands of these roles conflict with each other.

- d. **Role Erosion:** It originates from the role occupant's cognitive behavioural pattern. He feels that some functions which are part of his role are transferred or performed by some other person. Thus, he feels role being eroded.
- e. **Role Overload:** It occurs when the role occupant perceives that too many expectations of the significant members are to be fulfilled in his role set. He feels his role as a bundle of responsibilities and it appears as a burden to him. He feels overloaded being unable to comply with his duties. This stress has two aspects: "quantitative" refers to "too much to do" in a given time and "qualitative" refers to "too difficult to do" due to lack of skills and abilities. Working under time pressure is highly stressful to meet a deadline.
- f. **Role Isolation:** The role occupant feels a psychological distance with the persons in the same role set. This occurs due to the lack of communication among the occupants of the same role set.
- g. **Personal Inadequacy:** It occurs when the role occupant feels lack of professional expertise and training expected from his role for effective performance of his duties. This happens when the "right man" is not given the "right job" i.e. the placements are not made properly. The organization, too, lacks the initiative to impart periodic training to update employees' skill and efficiency in order to cope with the rapid changes occurring within the organization and outside the organizational periphery.
- h. **Self-Role Distance:** A contradiction between requirements of one's job role and his self-concept gives rise to this type of role stress. It is a mismatch between one's personal attributes with the expectations from one's role. Due to this incongruence a person feels psychological distance from the role set.
- i. **Role Ambiguity:** It originates when a role occupant experiences lack of clarity regarding various expectations people have from his role. The reason underlying such stress can be attributed to lack of information regarding the requisites of role and its enactment to the focal person.
- j. **Resource Inadequacy:** If the focal person perceives that he is not provided with adequate resources for smooth performance of his job, this type of role stress originates.

Apart from the above mentioned role stresses, few more have been identified.

- k. **Role Underload:** Underutilization of an individual's ability characterized by either too little work or too little variety in the work leads to this type of stress. A person with analytical ability and prompt decision making capability, if assigned routine clerical job experiences role underload. He feels that the organization is not extracting his optimum efficiency.
- l. **Role Discontinuity:** It occurs when individuals after preparing themselves for particular types of roles, can not find avenues for fulfillment. After a lot of endeavour for achieving

their target roles, hundreds and thousands of people find it difficult to translate their views into action. The concept of “**role efficacy**” has been proposed by Pareek (1987, 1993) where he advocated that through organizational assistance employees can define their roles and if they are willing to share this concern through strategies like proactivity, confrontation, developing relationships and creativity, then they can reduce their role based strains.

1. Role Making: The first dimension of role making is taking initiative in role designing and it consists of components like self-role integration (integration between self-concept and role demands), proactivity (initiate action), creativity (try new ideas or strategies) and confrontation (face problems). It is the reverse of role taking where an individual responds to others’ expectations.

2. Role Centering: The second dimension of role centering is to establish importance of role in the system and its components are centrality (feeling important and central in the system), influence (feeling that the role can make some impact on the system) and growth (feeling that the role would provide opportunity for personal growth).

3. Role Linking: The third dimension of role linking is to link with other roles and people. Its components are inter-role linkage (linking of one role with other roles), helping relationships (give and receive help amongst roles) and super-ordination (linkage of one’s role with larger entity or cause).

Inadequate or strained relationships at work can be avoided by the managers by enhancing “we feeling” and “morale” and by providing emotional and social support. By organizing regular staff meetings where employees are allowed to express their frustrations at work and outside work, will effectively reduce job stress. Schuler and Sethi (1984) noted that educating managers and supervisors to build communication skills is an important intervention in stress management. Thus, managers should try to build positive and healthy interpersonal relationships through a two-way communication process.

Prevention of stress due to role demands

Job occupants suffer from stress arising frequently from organizational roles. Several types of role stresses are experienced by the employees. In this context, to prevent the occurrence of role stress among the employees, managers should clearly define the job roles and properly allocate tasks to prevent or reduce the stress likely to arise from role ambiguities and role conflicts. Stress due to role overload can be prevented by reducing role demands and job rotation.

According to Pestonjee (1989), the specific functional strategies can be adopted to avoid or prevent the occurrence of different types of stress. They are as follows:

Role Stressors

Self-role distance
Inter-role distance
Role stagnation

Preventive Strategies

Role integration
Role negotiation
Role transition

Role isolation	Role linkage
Role ambiguity	Role clarification
Role expectation conflicts	Role making
Role overload	Role slimming
Role erosion	Role development or enrichment
Resource inadequacy	Resource generation
Personal inadequacy	Role linkage

Prevention of stress due to interpersonal relations

Socio-psychological stress in the work front can be prevented or minimized by improving interpersonal compatibility. Potential conflicts can be avoided by the management with the adoption of necessary measures. Supervisor's support can prevent the occurrence of interpersonal stress.

Prevention of stress due to organizational structure and climate

According to Ross and Altmaier (1994), three intervention strategies can be adopted to deal with stress arising from inadequate organization structure and climate.

a. Decentralization: It is generally found that in organizations where there is higher centralization of power or authority, employees suffer from higher degree of stress. Hence, in recent times, organizations are promoting strategies for decentralization within organizations. According to Schuler and Sethi (1984), effective techniques of decentralization can be adopted like changing communication patterns and networks within organizations, developing work groups, etc.

b. Participative Decision Making: It creates systems and communication channels in the organization in such a manner that job occupants of all levels can take part in making important decisions. According to Murphy (1984), finding ways in which the worker can influence the job demands, decrease the likelihood of experience of role conflicts. Two conditions determine the effectiveness of the participative decision making intervention:

- Management should be committed to the philosophy of participative decision making and
- The kind of decisions that are offered for employees' participation.

Ivancevich and Matteson (1980) noted that employees would be most interested in decisions on those matters which are important or relevant to them. If the employees' suggestions are taken on issues that affect their daily performances, they would feel themselves worthy to the organization.

c. Climate Survey: It is also called attitude survey, opinion survey or employee reactions surveys. Through these surveys, management gets an idea of employees' preferences and identifies the inadequate and non- congenial aspects of organizational climate. It helps the management to devise strategies to improve organizational effectiveness and employees' satisfaction.

Apart from the above-mentioned techniques to prevent stress, Ross and Altmaier (1994) have suggested that intervention strategies should be evolved which would help the employees to avoid stress in the course of their career development. In the present day, employees have to deal with a number of changes in the workplace like structural changes within organizations, changing nature of work with changing technology, demographic changes in the workforce, etc. According to Kaye (1982), career development intervention strategies have several advantages like enhanced employee skill and expertise, improved talent matching, individual revitalization, problem identification and increased goal commitment.

Hall (1986) has developed a model where he has shown that career development consists of two parts: *career planning and career management*. According to him, career management should be done by the organization, which includes employees' selection, training, job rotation, performance appraisal and promotion whereas, career planning should be done by the employee involving the activities of self-assessment, career choice, choice of organization, preparation of career plan and monitoring career opportunities. A practitioner can help the employees to focus on career planning through seminar, testing and individual counseling, thereby helping them to prevent stress.

Pestonjee and Muncherji (1991) have studied the relationship between career paths and health of the employees. According to them, at about the age of thirty, during forties and in late fifties are the key times in the life of an individual. At each career stage, an individual is confronted with different issues and problems. The HRD department of the organizations should arrange for career management programs to help the employees to cope with the stress related to their career development. The programs generally assist the employees to identify their own career strengths, set priorities and specific career goals, provide information on the available career paths within the organization and make the employees aware of their progress towards career goals through annual reviews by managers. According to them, intervention strategies should also be arranged for the employees who are on the verge of their retirement. Training programs on post superannuation phase should deal with the challenges faced by the retired workers like reduction in earning, a decrease in the feeling of accomplishment, loss of status, etc. Employees should take a practical view of the major changes and gradually reorient themselves from career to leisure activities.

According to Pestonjee (1992), "Stress Audit" should be adopted as a proactive intervention by an organization to manage stress of managerial personnel. When an organization decides to have a scientific look at the mental-cum-physical health status of its executives, it is called stress audit. A stress audit refers to the attempt an organization makes to study, explore and control the various types of stress experienced by the employees. It involves a systematic study of the dominant stressors prevalent in the organization, its divisions and departments. Collection of data relating to organizational climate, role stress, job satisfaction, job analysis, etc. are included in stress audit.

Thus in the above context, the present study is being undertaken in the banking sector to analyze the role stresses, to evolve various techniques for prevention and management of

stress and thus to provide remedial guidelines to make effective use of the strategies and interventions. This will have an impact on employees' performance and productivity. In the present day competitive global market, the study will have tremendous economic significance.

2. Review Of Literature

Manjunatha, M. K. and Renukamurthy, T.P.(2017), conducted a study, with the objective of ascertaining the cause and effect of occupational stress among the bank employees. The bank employees across the world experience stress at work, which have both positive and negative impacts. Positive stress increased productivity while the negative stress resulted in unprofitability. A majority of the employees could not adapt to the dynamic changes happening in their profession. Conflict in their job role, greater customer demand, constant changes in banking technology and inadequate customer response were treated as the cause of stress among the bank employees. Ali ,Tatheer Yawar, Hassan, Atif et al. (2013) the bankers were facing high stress in their job and the reasons for this was stress caused by long working hours, improper reward system, lack of job autonomy, organizational culture, role conflict etc. The main reason was lack of management support. They could notice a number of symptoms indicating high levels of stress. If these symptoms were not noticed early, they could cause serious health problems such as depression, heart problems, diabetes etc. Several researches have suggested interventions to curb occupational stress via a prevention plan and depression treatment for employees . These interventions include communication between management and staff and the management of employee workload. In this way, employees should avoid over-commitment by effective time management. In particular, research has suggested interventions for bank employees, following cross-sectional study of employees in Chinese banks (Xirui,2015). According to Tsai et al. (2013), exercise is the best way to reduce job stress and alleviate metabolic problems. Exercise has many positive effects that can reduce the impact of job demands, and can significantly reduce the risk of work-related burnout. Management support also plays an important role in mitigating the stress of the employees.

3. Objectives Of The Study

The main objectives of the current study are:

- a. Identify the role stress suffered by the job occupants.
- b. Assess the preventive measures adopted to mitigate stress.
- c. Study the role stress experienced by the bank employees of Kolkata and stress management interventions adopted by them to minimise stress.

4. Research Methodology

4.1 Study Sample

150 employees of different banks of Kolkata.

4.2 Research Design

The present study is empirical in nature. The study examines the role stress experienced by the employees and coping strategies adopted by the employees. Moreover, available

information on this context published in different journals, books and websites is taken into consideration for the study as secondary source

4.3 Data Collection

The study is based on the primary data collected by interviewing a significant representative sample from among 150 employees of different banks of Kolkata to find out the actual picture. In order to collect primary information from the job occupants, a structured questionnaire is drafted initially and a pilot survey is done to finalize it. The questionnaire is formed with the help of psychometric instruments like Occupational Stress Index (Srivastava and Singh, 1981), Stress Resistant Cognitive Behavioral Patterns Scale (Srivastava, 1997) and Coping Strategies Scale (Srivastava and Singh, 1988).

4.5 Tools Of Analysis

The statistical analysis of data is done through the SPSS package. Descriptive statistical methods are used for the analysis of data.

5. Findings of the Study

In this section data have been analysed from the responses received by administering questionnaires to 150 employees of different banks in Kolkata.

5.1 Demographic Profile of the Respondents: The respondents belong to age groups varying widely between 25 and 58 years. Respondents belong to different public and private sector banks of Kolkata. 84 respondents were male and 66 were female.

Table 1: Role Stresses Experienced by the Respondents

Stressors	Number of Respondents	Mean
Inter-Role Distance	150	3.87
Role Stagnation	150	3.00
Role Expectation Conflict	150	3.71
Role Erosion	150	3.65
Role Overload	150	3.79
Role Isolation	150	2.51
Personal Inadequacy	150	2.74
Self-Role Distance	150	3.02
Role Ambiguity	150	1.51
Resource Inadequacy	150	3.07

Source: Author's compilation

The table shows that the respondents suffer from lower levels of stress like role ambiguity, role isolation and personal inadequacy and moderate level of inter-role distance, role stagnation, role expectation conflict, role erosion, role overload, self-role distance and resource inadequacy.

5.2 Management of stress by the respondents

Stress resistant cognitive behavioral patterns and coping strategies are adopted by the respondents to manage stress.

Table 2: Some Important characters under Stress Resistant Cognitive Behavioral Patterns of the Respondents

Characters	Mean	S.D
Support from friends	3.65	0.977
Seek help from God	3.61	1.218
Possess optimistic attitude	3.94	0.982
Music acts as a stress reliever	4.80	0.581
Take situation as a challenge	4.43	0.801
Accept reality and modify behavior	4.12	0.702
Delegate responsibilities	3.94	1.285
Anticipate outcomes before taking decision	4.14	1.040
Prioritize responsibilities	4.41	0.900
Try to maintain a co-ordination among family, professional and social roles.	4.14	9.53
Annual holidays compulsory	4.65	0.691

Source: Author’s compilation

It is revealed from the above table that in order to prevent themselves from getting stressed, the respondents adopt several measures like, seek support from friends, listen to music, prioritize responsibilities, annual holidays compulsory, believe in God and seek help and so on. Employees listen to classical, instrumental music and various other types of music that produces a soothing effect and helps them to get rid of stress. Many private banks have introduced wellness programs for their employees consisting of Yoga and Pranayam, gymnasiums and different cricket tournaments in order to reduce occupational stress.

Table 3: Some Important Characters of Coping Strategies adopted by the Respondents

Characters	Mean	S.D
Deal with the problem with more time and energy	4.12	1.075
Discuss with others	4.48	0.939
Physically withdraw from the situation	2.56	1.356
React aggressively to those responsible	3.37	1.259
Develops a hobby to cope stress	4.77	0.653

Source: Author’s compilation

From the above table it is found that respondents quite often adopt coping strategies like devote more time and energy to deal with the problem, discuss with others who could help to solve the problem, develop a hobby to cope up with stress, whereas sometimes they

react aggressively to those who are responsible and they rarely physically withdraw from the problematic situation. Employees have been found to possess various types of hobbies like reading books, singing, playing cricket, football, carom, gardening, practicing philosophy, gossiping, writing stories, social work, annual touring, watching movies and walking. Many employees love to spend time with their children to release their job stress. Sleeping also helps to combat stress of the employees.

6. Conclusion

It can be concluded that the respondents suffer from lower level of role stresses like role ambiguity, role isolation and personal inadequacy and moderate level of inter-role distance, role stagnation, role expectation conflict, role erosion, role overload, self-role distance and resource inadequacy. It is revealed that the respondents adopt several measures like, seek support from friends, listen to music, prioritize responsibilities, annual holidays compulsory, believe in God and seek help and so on.

7. Suggestions

- a. An employee should include some time for his own relaxation and this is very crucial for his wellbeing.
- b. It is important for individuals to delegate responsibilities rather than handle tasks of their own.
- c. Exercise de-stresses individuals through the release of endorphins in the body and thereby acts as an excellent energizer.
- d. In the new-age work fronts, specialized counseling delves into the psyche of the employees, analyses their problems and assists them to perform better and thus, helping them to get rid of job stress.
- e. One has to convince oneself that a job is not the be all and end all in life.
- f. One should find out his own definition of success because the concept of success varies from one person to the other. Only after understanding what success means to him, should he strive to achieve his goal. According to American author Christopher Morley, "There is only one success ---- to be able to spend your life in your own way". Hence, one should choose a job that will be personally fulfilling.
- g. One should not expect too many rewards from work. Job life should revolve around personal life. Apart from work, one should follow a health routine, plan family chores, finances, recreational activities and must have a support system of friends. Thus life outside work will help to combat workplace stress.
- h. One should recognize the things over which one has control and the things one cannot control. Thus, one should stop stressing on the things in the job over which one has no control.
- i. One should set short-term targets and after achieving those goals, one should take out time to celebrate the occasion with family and friends.

- j. Delegation of responsibility helps one to get rid of handling a situation alone.
- k. Job occupant should take negative comments as constructive criticisms and thus try to improve his work. He should not unnecessarily personalize any criticism.
- l. If there exists no performance appraisal system, one can discuss with his immediate superior regarding his performance and areas of improvement.
- m. Modern workplaces are introducing fitness programs to help keep their employees fit. But in the public sector organizations, such programs have not yet been undertaken.
- n. According to yogic understanding, apart from parasitic and viral infections, almost all diseases start in the mind and if not handled within time are manifested in some part of the body. These diseases are known as psychosomatic diseases. Yoga helps to heal the body as well as re-train the mind. Medicine can play a supportive role while regular practice of yoga can initiate a normal, healthy and balanced approach to life. In order to restore harmony and inner peace, one should find a suitable combination of personality traits, work, rest, exercise and diet. According to yoga sayings, an individual cannot change the world, but he can change his reactions to situations by changing himself. Individuals are constantly preoccupied by thoughts, fears, anxieties, insecurities, hopes and expectations. Hence, the overall sense of well-being of a person is highly influenced by his way of dealing with situations. One should regularly practice “pratyahara” which will help him to develop a sense of detachment from the achievements and failures of life.
- o. Working couples should not become competitors but co-operate with each other in their family chores. This will make them more understanding to restore peace in the home front as well as discharge their job responsibilities more efficiently in the work front.

References

- Ali TY, Hassan A & Ali T, ,(2013) “Stress management in private banks of Pakistan”, *Journal of Emerging Trends in Economics and Management Sciences* , Vol. 4, No. 3,(2013), pp.308 -320 .
- Bashir U, Ramay MI. . (2010) Impact of stress on employees’ job performance: a study on the banking sector of Pakistan. *Int J Mark Stud.* , 2:122–6.doi: 10.5539/ijms.v2n1p122
- French, J. R. P. Jr. and Caplan, R. D. (1972): *Occupational stress and Individual strain*. In Marrow, A.J. (Ed.), *The Failure of Success*, NewYork, Amacom.
- Hall, D. T. (1986): *Career Development in Organization*, San Francisco, CA, Jossey Bass.
- Ivancevich, J. M. and Matteson, M. T. (1980): *Stress and Work: A Managerial Perspective*, Glenview, IL, Scott Foresman.
- Kaye, B. L. (1982): *Up is Not the Only Way*, Englewood Cliffs, NJ, Prentice Hall.
- Liu L, Chang Y, Fu J, Wang J, Wang L. (2012) The mediating role of psychological capital on the association between occupational stress and depressive symptoms among Chinese physicians: a cross-sectional study. *BMC Public Health*. 12:219. doi: 10.1186/1471-2458-12-219

- Manjunatha MK & Renukamurthy TP, "Stress among Banking Employee-A Literature Review", *International Journal of Research - Granthaalayah*, Vol.5, No.1,(2017), pp.206-213.
- Murphy, L. R. (1984): Occupational stress management: A review and appraisal, *Journal of Occupational Psychology*, 57,367-372.
- Pareek U. (1981): *Organizational Role Stress: Manual*, Ahmedabad, Navin Publications.
- Pareek, U. (1982): Executive glow up and burnout. Summary of L & T lectures delivered on Feb. 20, 1982, Ahmedabad: Indian Institute of Management.
- Pareek, U. (1987): *Motivating Organizational Roles: Role Efficacy Approach*, Jaipur, Rawat Publications.
- Pareek, U. (1993): *Making Organizational Roles Effective*, New Delhi, Tata McGraw- Hill Publishing Co. Ltd.
- Pestonjee, D.M. (1989): Role stress in government administration: Suggested HRD interventions. Paper presented at Second National Conference of HRD Network, Delhi.
- Pestonjee, D. M. (1992): *Stress and Coping, The Indian Experience*, Sage publication India Pvt. Ltd, New Delhi.
- Pestonjee, D. M. and Muncherji, N. (1991): 'Executive Health: An Oft Neglected Aspect of HRD', *Vikalpa*, 16(3), July- September, 21-34.
- Ross, R. R. and Altmair, E. M. (1994): *Interventions in Occupational Stress*, Sage, New York.
- Sayeed, O. B. (1985a): "Role Stress and Role Making Behaviour", *Managerial Psychology*, 6(1&2), 35-37.
- Schuler, R. S. and Sethi, A. S. (1984): Time management and leader communication behaviour. In A.S. Sethi & R.S. Schuler (Eds.), and *Handbook of Organizational Stress and Coping Strategies*, Cambridge, MA, Ballinger.
- Srivastava, A. K. (1997): Stress-resistant cognitive-behavioural patterns scale. (In Press).
- Srivastava, A. K. and Singh, H. S. (1988): Modifying effects of coping strategies on the relation of organizational role stress and mental health, *Psychological Reports*, 62, 1007-1009.
- Tsai H, Yeh C, Su C, Chen C, Peng S, Chen R. . (2013) The effects of exercise programs on burnout and metabolic syndrome components in banking and insurance workers. *Indus Health*. 51:336-46. doi: 10.2486/indhealth. 2012-0188
- Wall, I. D. and Clegg, C. W. (1981): A longitudinal study of group work redesign, *Journal of Occupational Behaviour*, 2, 31-49.
- Xirui L, Dan K, Li L, Meng S, Yang W, Xiaoshi Y, et al. (2015) The mediating role of psychological capital on the association between occupational stress and job burnout among bank employees in China. *Int J Environ Res Public Health*. 12:2984-3001. doi: 10.3390/ijerph120302984

Assessing the Performance of HDFC Mutual Fund Schemes: A Descriptive and Risk-Adjusted Approach

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Abstract

India is emerging as the next major investment destination, thanks to its high savings and investment rates compared to other Asian economies. In the current dynamic market environment, mutual funds have emerged as a transparent, cost-effective, and professionally managed investment avenue that attracts a diverse range of investors while making significant contributions to the growth and development of the financial industry. Thus, the present study focuses on evaluating the performance of selected HDFC Mutual Fund schemes to understand their efficiency, risk, and return characteristics. Using secondary data from reliable financial sources, the study employs analytical tools such as Sharpe Ratio, Treynor Ratio, Average Return, and Standard Deviation to measure risk-adjusted performance and volatility across five selected HDFC schemes. The study suggests that investors should evaluate both return and risk indicators and adopt a long-term approach to optimize investment outcomes.

Keywords: *Mutual funds, Performance Analysis, Risk Assessment, Return, NAV*

1. Introduction

The mutual fund industry in India has witnessed rapid growth, driven largely by infrastructural development and the growing perception among investors that mutual funds are an optimal investment vehicle (RNCOS, 2023). Key advantages for investors include risk diversification, professional fund management, tax benefits, and economies of scale (SEBI, 2024). According to a research report by RNCOS on the *Indian Mutual Fund Industry*, the sector continues to expand at a significant pace. However, since mutual funds are primarily invested in stocks that are inherently subject to market risks, it becomes essential to analyze their risk-return characteristics (Bahl & Debasish, 2012). While some mutual funds have delivered strong performance, others have underperformed, leading to investor losses due to fluctuations in stock prices influenced by firm performance, industry conditions, and broader market trends (Dhanalakshmi, 2013). In this context, the present study aims to evaluate and compare the risk and return of selected SBI and HDFC mutual fund schemes to assist investors in making informed investment decisions.

To encourage small investors and channel their savings into the capital market, the Unit Trust of India (UTI) was established in 1963 by the Government of India and the Reserve Bank of India. By 1988, UTI had assets under management of about ₹6,700 crores (AMFI, 2023). Since then, several Asset Management Companies (AMCs) have been formed, making mutual funds one of the most popular investment tools in India.

Overview of HDFC Mutual Funds

Housing Development Finance Corporation Limited (HDFC) was originally founded in 1977 as a specialized finance company. HDFC Asset Management Company (AMC) was later incorporated on December 10, 1999, under the Companies Act, 1956. In July 2000, the Securities and Exchange Board of India (SEBI) granted regulatory approval to HDFC AMC to manage the HDFC Mutual Fund. HDFC Mutual Funds is a joint venture between HDFC and Abrdn Investment Management Limited, with its registered office in Mumbai. Over the years, HDFC AMC has become one of the most successful and preferred mutual fund managers in India, offering a wide array of investment solutions to both retail and institutional clients across different asset categories.

As of March 31, 2023, the closing Assets Under Management (AUM) of HDFC Mutual Fund stood at ₹ 6.07 trillion. By March 31, 2024, its AUM had grown to ₹ 6.77 trillion which increased by 11.53% (SEBI).

As of 2024, HDFC Asset Management Company (AMC) offers a broad and diversified lineup of mutual fund products. HDFC Asset Management Company offers a comprehensive range of mutual fund products designed to meet diverse investor needs. Its product suite includes equity-oriented funds such as the HDFC Flexi Cap Fund, HDFC Large & Mid Cap Fund, and HDFC Top 100 Fund; hybrid or balanced funds like the HDFC Balanced Advantage Fund and HDFC Hybrid Equity Fund; and debt funds such as the HDFC Dynamic Debt Fund and HDFC Floating Rate Debt Fund. In addition, it provides special-purpose or thematic funds like the HDFC Capital Builder Value Fund, HDFC Infrastructure Fund, HDFC Equity Savings Fund, and HDFC Tax Saver Fund, along with liquid and money-market funds for short-term investors. Some of the flagship schemes in its portfolio include the HDFC Prudence Fund, HDFC Focused 30 Fund, HDFC Index Fund – Nifty 50 Plan, and HDFC Housing Opportunities Fund. Through this diverse product offering, HDFC AMC effectively caters to the varying risk appetites, investment horizons, and financial goals of both retail and institutional investors (HDFC AMC, 2024; SEBI, 2024; Moneycontrol, 2024).

2. Review of Literature

Between 2009 and 2025, numerous researchers have examined the performance and efficiency of HDFC mutual funds, providing valuable insights into their growth and evolution within India's mutual fund industry.

The groundwork was laid by Gomathy Shankari Thyagarajan (2009), who analyzed major fund houses like Franklin Templeton, HDFC, and ICICI Prudential. Her findings showed that many schemes outperformed benchmarks, reflecting the industry's improving

professionalism and investor confidence. Later, Rama Devi and Lenin Kumar (2011) assessed 340 mutual funds across sectors and found no major return differences between private and public funds, highlighting that performance depended more on fund management than ownership.

Jain (2012), using the CAPM model, observed that while LIC underperformed, UTI and HDFC delivered stronger, risk-adjusted returns. Similarly, **Kaur (2012)** concluded that growth-oriented funds—especially those managed by HDFC—were more efficient than dividend-oriented ones. **Bahl and Debasish (2012)** also compared multiple schemes from 1996–2005 and found that though HDFC showed steady returns, Franklin Templeton and UTI slightly outperformed it in risk-adjusted performance.

Further, **Dhanalakshmi (2013)** compared SBI and HDFC mutual funds (2010–2012) and found HDFC's schemes superior across categories, especially as market volatility settled post-2012. **Naik and Senapathy (2013)** also confirmed that HDFC and SBI performed similarly well, indicating stability and consistency in fund performance.

Recent studies show continued strength. **Arul and Sankar (2022)** evaluated five HDFC schemes (2017–2021) and identified the HDFC Capital Builder Value Fund as the best risk-adjusted performer, emphasizing HDFC's effective value-based approach. **Hejabi et al. (2025)** compared HDFC AMC and Nippon Life India AMC (FY 2020–2024) and found that HDFC's low-turnover, value-driven strategy achieved lower risk ($\beta \approx 0.38$) and strong alpha ($\sim 10.3\%$), whereas Nippon delivered higher but more volatile returns.

Similarly, **Koley (2025)** compared HDFC and SBI funds (2015–2025) and concluded that HDFC consistently outperformed SBI due to better diversification and fund management. **Arunachalam et al. (2025)** examined debt mutual funds and found that while HDFC's income funds had higher market sensitivity, they still offered competitive returns, appealing to moderately conservative investors.

Overall, these studies collectively trace HDFC's evolution from a stable performer to a market leader in India's mutual fund space. The consistent results underline HDFC's long-term focus, disciplined management, and adaptability—factors that continue to drive its strong reputation and sustained investor trust.

3. Objectives of the Study

- a. To enhance public awareness and understanding of the selected mutual fund schemes offered by HDFC.
- b. To identify and analyse the potential risks associated with each HDFC mutual fund scheme.
- c. To evaluate and compare the Net Asset Value (NAV) performance of various HDFC mutual fund schemes.

4. Research Methodology

a. Research Design

This study uses secondary data to examine the risk and return variables of various HDFC mutual fund schemes. Statistical and other methods are used to compare the efficiency of various mutual fund schemes.

b. Source of Data

The study is based on secondary data collected from multiple reliable sources, including financial newspapers, online databases, academic journals, company websites, annual reports of asset management companies, and other publicly available publications for a period of three years ranging from 1st April 2022 to 31st March 2024.

c. Scope of Study

The study considers five selected HDFC mutual fund schemes – HDFC Large and Mid-Cap Regular Growth Fund, HDFC Hybrid Equity Growth Fund, HDFC Top 100 Growth Fund, HDFC Flexi Cap Growth Fund, and HDFC Mid-Cap Opportunities Growth Fund. The analysis is based on the Net Asset Value (NAV) and return data covering three years.

d. Tools used for Analysis

- i. **Sharpe Ratio:** The Sharpe ratio measures a fund's risk-adjusted performance by assessing the return earned per unit of risk. It is calculated by dividing the fund's excess return over the risk-free rate by its standard deviation.

$$\text{Sharpe Ratio} = \frac{R_p - R_f}{\sigma_p}$$

Where:

R_p = Average return of the portfolio (or mutual fund)

R_f = Risk-free rate of return

σ_p = Standard deviation of the portfolio's return (a measure of total risk)

- ii. **Treynor Ratio:** The Treynor ratio evaluates a fund's performance based on systematic risk by measuring the excess return generated per unit of market risk (beta). A higher Treynor ratio indicates that the fund delivers better returns relative to the level of risk assumed.

$$\text{Treynor Ratio} = \frac{R_p - R_f}{\beta_p}$$

Where:

R_p = Average return of the portfolio (or mutual fund)

R_f = Risk-free rate of return

β_p = Beta of the portfolio (a measure of systematic risk or sensitivity to market movements)

- iii. **Average Return:** The average return represents the central value of returns generated over a specific period. It is computed as the arithmetic mean, obtained by summing all individual returns and dividing the total by the number of observations.
- iv. **Standard Deviation:** The standard deviation represents the average level of variation in a dataset. It indicates the extent to which a fund’s returns have fluctuated over the past three years, reflecting its overall volatility.

5. Data Analysis and Interpretation of Results

Table 1: Descriptive Statistics of Selected HDFC Mutual Fund Schemes

Scheme Name	Mean	Standard Deviation	Minimum	Maximum	Range
HDFC Large and Mid-Cap Regular Growth Fund	0.238	0.104	0.119	0.314	0.194
HDFC Hybrid Equity Growth Fund	0.158	0.063	0.087	0.208	0.121
HDFC Top 100 Growth Fund	0.201	0.084	0.103	0.257	0.153
HDFC Flexi Cap Growth Fund	0.238	0.090	0.143	0.324	0.180
HDFC Mid-Cap Opportunities Growth Fund	0.299	0.102	0.180	0.361	0.180

Source: Author’s Compilation

Table 1 shows the descriptive statistics of selected HDFC Mutual Fund schemes, including their mean returns, risk levels, and return ranges. Among the funds, the HDFC Mid-Cap Opportunities Growth Fund has the highest mean return (0.299), indicating the best average performance, though it also shows relatively higher risk (standard deviation 0.102). The HDFC Hybrid Equity Growth Fund has the lowest mean return (0.158) and the smallest range, suggesting more stability but lower returns. The other funds, such as the HDFC Large and Mid-Cap, Flexi Cap, and Top 100 Growth Funds, show moderate returns and risk levels. Overall, the results suggest that funds with higher returns generally carry higher risk, while conservative options offer more stable but lower returns.

Table 2: NAV of HDFC Mutual Fund Schemes

Scheme Name	Category	NAV (Rs.)
HDFC Large and Mid-Cap Regular Growth Fund	Large & Mid Cap fund	244.21
HDFC Hybrid Equity Growth Fund	Aggressive Hybrid Fund	101.85
HDFC Top 100 Growth Fund	Large Cap Fund	869.88
HDFC Flexi Cap Growth Fund	Flexi Cap Fund	1339.28
HDFC Mid-Cap Opportunities Growth Fund	Mid Cap Fund	132.18

Source: www.moneycontrol.com

Table 2 summarizes the Net Asset Values (NAVs) of the selected schemes. The HDFC Flexi Cap Growth Fund reported the highest NAV of ₹1339.28, reflecting consistent performance and investor confidence, whereas the HDFC Hybrid Equity Growth Fund recorded the lowest NAV of ₹101.85, suggesting relatively modest growth during the same period.

Table 3: Returns of HDFC Mutual fund schemes

Schemes	Returns (%)		
	2024	2023	2022
HDFC Large and Mid-Cap Regular Growth Fund	28.2	11.95	31.42
HDFC Hybrid Equity Growth Fund	17.93	8.72	20.82
HDFC Top 100 Growth Fund	24.28	10.38	25.76
HDFC Flexi Cap Growth Fund	24.9	14.32	32.41
HDFC Mid-Cap Opportunities Growth Fund	36.1	18.09	35.65

Source: Annual report of HDFC Mutual Fund

Table 3 shows the three-year return performance of selected HDFC Mutual Fund schemes. The HDFC Large and Mid-Cap, Hybrid Equity, Top 100, and Flexi Cap Funds recorded their highest returns in 2022, while the HDFC Mid-Cap Opportunities Fund performed best in 2024. Overall, the HDFC Mid-Cap Opportunities Growth Fund had the highest average return of 29.94%, showing strong growth during the study period.

Table 4: Risk-Adjusted Performance of Funds

Scheme Name	Sharpe's Ratio	Treynor's Ratio
HDFC Large and Mid-Cap Regular Growth Fund	1.66	0.22
HDFC Hybrid Equity Growth Fund	1.44	0.1
HDFC Top 100 Growth Fund	1.43	0.19
HDFC Flexi Cap Growth Fund	1.78	0.24
HDFC Mid-Cap Opportunities Growth Fund	1.8	0.27

Source: Author's Compilation

Table 4 shows the risk-adjusted performance of selected HDFC Mutual Fund schemes using the Sharpe and Treynor Ratios. While both measure how well a fund rewards investors for the risk taken, the Sharpe Ratio considers total risk, whereas the Treynor Ratio focuses on systematic (market) risk.

Among the funds analysed, the HDFC Mid-Cap Opportunities Growth Fund shows the best performance with the highest Sharpe (1.80) and Treynor (0.27) ratios, indicating strong risk-adjusted returns. The HDFC Flexi Cap Growth Fund follows closely, also showing good consistency. The HDFC Large and Mid-Cap Regular Growth Fund performs moderately, while the HDFC Top 100 and Hybrid Equity Funds have lower ratios, suggesting less attractive returns for the risk taken. Overall, HDFC's mid-cap and flexi-cap

funds outperform others, making them better choices for investors willing to take moderate to high risk.

6. Findings of the Study

The empirical analysis of the selected HDFC Mutual Fund schemes for the period 2022–2024 reveals significant variations in performance, risk characteristics, and Net Asset Values (NAVs). The major findings are summarized as follows:

- a. The HDFC Mid-Cap Opportunities Growth Fund demonstrated the highest average return (29.94%) and superior risk-adjusted performance, reflected by a Sharpe Ratio of 1.80 and a Treynor Ratio of 0.27. This indicates that the fund effectively rewarded investors for the risk undertaken.
- b. The HDFC Flexi Cap Growth Fund and HDFC Large and Mid-Cap Regular Growth Fund exhibited balanced risk–return profiles, suggesting consistent and efficient portfolio management.
- c. The HDFC Hybrid Equity Growth Fund recorded the lowest mean return (0.158) and minimum volatility, highlighting its suitability for investors with conservative risk preferences.
- d. The NAV comparison shows that the HDFC Flexi Cap Growth Fund achieved the highest NAV (₹1339.28), indicating sustained growth and investor confidence, while the HDFC Hybrid Equity Growth Fund reported the lowest NAV (₹101.85), reflecting relatively modest appreciation.

7. Suggestions

The study assessed the performance, risk, and NAV trends of selected HDFC Mutual Fund schemes from 2022 to 2024. Results indicate that the HDFC Mid-Cap Opportunities Growth Fund achieved the highest average return and superior risk-adjusted performance, while the HDFC Flexi Cap and Large and Mid-Cap Funds offered balanced risk–return profiles. The HDFC Hybrid Equity Fund, though conservative, provided stable returns suitable for low-risk investors. Findings confirm a positive correlation between risk and return—schemes with higher returns exhibited greater volatility. The analysis also shows that investor confidence and efficient management contribute to consistent NAV growth. Overall, HDFC's diversified offerings cater to varying risk preferences. Strengthening investor education, enhancing transparency, and promoting long-term, diversified investment strategies are recommended to foster informed decision-making and sustainable portfolio performance in the Indian mutual fund sector.

References

- Arul, V., & Sankar, S. (2022). *Performance evaluation of mutual funds: Selected HDFC mutual fund schemes*. *Academy of Marketing Studies Journal*, 26(S6), 1–7. <https://www.abacademies.org/articles/performance-evaluation-of-mutual-funds-selected-hdfc-mutual-fund-schemes-1528-2678-26-S6-006.pdf>

- Arunachalam, R., Amudha, R., Ritika, S., Saraswathy, N. S., & Swathi, P. (2025). *Effectiveness of debt mutual funds: A performance evaluation for conservative investors*. *International Journal of Research in Finance & Management*, 8(1), 371-378. <https://doi.org/10.33545/26175754.2025.v8.i1.d.459>
- Bahl, S., & Debasish, S. (2012). *A comparative analysis of mutual fund schemes in India*. *International Journal of Marketing, Financial Services & Management Research*, 1(7).
- Chopra, A. (2020, August 25). *A data envelopment analysis approach to benchmark the performance of mutual funds in India*. *arXiv*. <https://arxiv.org/abs/2008.10952>
- Dhanalakshmi, K. (2013). *A comparative analysis on performance of SBI and HDFC equity, balanced and gilt mutual fund*. *Vidyaniketan Journal of Management and Research*, 1(2), July-December.
- Devi, R., & Kumar, L. (2011). *Performance evaluation of private and public sponsored mutual funds in India*. *International Journal of Research in Commerce, IT and Management*, 1(2), 24-35.
- Ghosh, A. (2023, March). *Performance analysis of mid-cap mutual funds in India (2014-2023)*. *International Journal of Innovative Science and Research Technology*, 8(3).
- Hejabi, G., Anbari, S., & Rao, A. N. (2025). *Comparative analysis of return optimization strategies: A study of HDFC AMC and Nippon Life India AMC (FY 2020-2024)*. *International Journal of Environmental Sciences*, 7148-7172. <https://doi.org/10.64252/87kev648>
- HDFC Asset Management Company Limited. (2024). *Scheme information and performance reports*. Retrieved from <https://www.hdfcfund.com>
- Jain, S. (2012). *Analysis of equity-based mutual fund in India*. *Journal of Business & Management*, 2(1), 1-55.
- Kanukuntla, K. S., & Rao, D. N. (2014, July 9). *Investment styles and performance of mutual funds in India*. SSRN. <https://doi.org/10.2139/ssrn.3883439>
- Kaur, R. (2012). *A comparative analysis of growth and dividend tax-oriented mutual fund schemes in India*. *Asia Pacific Journal of Marketing & Management Review*, 1(4), 26-40.
- Koley, J. (2025). *Analysis of performance of mutual funds of SBI and HDFC: A comparative study*. *Asian Journal of Management and Commerce*, 6(1), 1082-1090. <https://doi.org/10.22271/27084515.2025.v6.i11.564>
- Koley, J. (2025). *Performance analysis of SBI mutual funds in India: A study*. *Asian Journal of Management and Commerce*, 6(1), 172-129. <https://doi.org/10.22271/27084515.2025.v6.i11.566>
- Moneycontrol. (2024). *HDFC mutual fund schemes: NAV, returns, and performance*. Retrieved from <https://www.moneycontrol.com/mutual-funds/>
- Naik, R. M., & Senapathy, M. R. (2013). *A comparative study on the performance of mutual funds: SBI mutual funds vs others*. *International Journal of Advance Research in Science and Engineering*, 2(10), October.
- Ranjan, S., & Gupta, S. (2014). *Performance appraisal of mutual funds operating in India*. *Journal of Commerce and Trade*, 9(2), 54-62.
- RNCOS. (2023). *Indian mutual fund industry: Performance and growth trends*. RNCOS E-Services Pvt. Ltd. Retrieved from <https://www.rncos.com>
- Securities and Exchange Board of India (SEBI). (2024). *Mutual fund classifications and regulatory framework*. Retrieved from <https://www.sebi.gov.in>
- Thyagarajan, G. S. (2009). *Performance evaluation of Indian mutual fund industry from 2002-2007 with special reference to Franklin Templeton, HDFC and ICICI Prudential mutual funds* (Doctoral dissertation). S.N.D.T. Women's University, Mumbai.
- Virparia, V. (2022). *Performance analysis of mutual funds in India*. *International Journal of Management, Public Policy & Research*, 1(3).

The Role of Artificial Intelligence in Fraud Detection in digital payments in India

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Abstract

The rapid growth of digital payments in India, especially through platforms such as UNIFIED PAYMENT INTERFACES (UPI), has increased the risk of financial fraud. This research examines the important role of artificial intelligence (AI) in detecting and preventing such dishonest activities. Algorithms detection, machine learning algorithms (e.g. HMM, Neural Network, Auto coders), Natural Language Processing (NLP) and Generative Adversarial Network (GAN), utilizing AI -techniques, financial institutions can really identify general user behavior and flags. Case studies, such as the use of the large language model (LLMs) of Google Pay, shows 93.33% accuracy in fraud classification, and highlights the effectiveness of AI in real world applications. The study has also investigated the initiative of the government and the industry as a DigiKavach,, which aims to cushion online scams through colleague AI-based strategies. The paper's employee secondary data includes a comprehensive literary review of Indian financial institutions and collective AI research magazines, book and case study. This paper emphasizes the transforming role of AI in increasing transactions and maintaining consumer chairs in India's digital economy.

Keywords: *Fraud, detection, Artificial Intelligence*

1. Introduction

The rapid expansion of digital payment systems in India has changed the economic landscape, making the transaction more practical and accessible to millions. With innovations such as Unified Payments Interface (UPI), India has seen a unique increase in cashless transactions. According to the National Payments Corporation of India (NPCI), UPI transactions crossed 10 billion in a single month in 2023, indicating both increase and vulnerability in the digital payment ecosystem.

However, this digital revolution has also increased cyber threats and scams. Since digital payments become more integrated into daily life, identity theft, phishing attacks and transactions also risk fraud. In this context, artificial intelligence (AI) has emerged as a powerful tool for detecting, preventing and responding to digital economic scams.

AI technologies, such as Machine Learning (ML), neural networks and natural language treatment (NLP), provide the ability to analyze large amounts of real-time transactions and identify suspicious patterns that cannot be aware of traditional rules-based systems. A study of Fico (2022) found that AI-based systems can improve fraud detection by up to 60% by improving accuracy (Fico, 2022). Similarly, Kumar and Goyal (2021) claim that AI algorithms can predict fraud behavior by learning from historical transaction data, making them more adaptable and accurate than in cultural monuments.

In India, Fintech platforms such as Google Pay and PhonePe have begun to integrate large language models (LLMs) and AI-operated risk enriches for competing fraud. These systems can detect abnormal transaction behavior, potentially destroy malicious activities, and can trigger real-time alerts, often with an accuracy level above 90%. In addition, the government initiatives such as Digital watch and regulatory support from the Reserve Bank of India (RBI) reflect the increasing recognition of AIS transformative capability in the safety of financial transactions.

This research examines the role of artificial intelligence in detecting fraud in India's digital payment scenario. By analyzing AI-operated techniques, case studies and institutional reactions, the purpose of this article is how AI rebuilds the prevention mechanism for fraud and ensures India's infection in a digital economy.

2. Objectives of the Study:

- a. To analyze the effectiveness of artificial intelligence techniques to detect and prevent fraud activities in India's digital payment ecosystem.
- b. To evaluate the real world implementation of AI-integrated fraud detection systems in Indian digital payment platforms.

3. Review of Literature:

The use of artificial intelligence (AI) has been a matter of increasing academic and institutional attention to fight the digital scams of the Fintech region of India. Kumar and Goyal (2021) emphasize the use of random forests and nerve networks to identify real-time transactions, especially in UPI-based systems. Similarly, Saxena (2020) detects weaknesses in India's digital payments ecosystems, proposing AI as a means of identifying the behavioral pattern of fraud. Annual report (2022) in the Reserve Bank of India (2022) highlights the increase in digital fraud cases and supports the integration of AI-based technologies to increase cyber security in banking and payment systems. Patil and Joshi (2019) discuss the change of traditional fraud systems through deep learning and natural language treatment (NLP), which suggests a main model for detecting the economic scam. In 2023, government efforts mentioned by the Electronics Ministry and IT (Matty) Initiatives such as Digikwach include the benefit of the AI for identity and prevention of preliminary scams. The Fico Report (2022) suggests that AI use in mobile wallets and digital platforms in India can reduce false positivity by up to 50% in detecting fraud. Both Aggarwal and Bansal (2021) discover their real-time application to separate the scams from the monitored and unsafe machine learning models and legitimate transactions. DAS and Roy (2022) investigate the

implementation of the Generative Adversarial Network (GAN) in UPI transactions tested by Indian start-ups in the sandbox environment. An internal case study from 2023 by Google shows the use of large language models (LLMs) in high-risk transactions, which obtain an identification accuracy of 93.33%.

4. Research Methodology

This study adopts a qualitative research design contained in secondary data analysis to examine the role of artificial intelligence (AI) in detecting fraud in India's digital payment ecosystem. Research is mainly focused on reviewing data published from current literature, institutional reports, case studies and reliable sources, both authorities and private, AI-based scam detection to gain insight into the efficiency and implementation of detection systems.

4.1 Data

The study uses secondary data: Peer-Review Academic magazines and conference papers on AI to detect financial fraud. Government and Regulatory Bodies Report, Reserve Bank of India (RBI), National Payments Corporation of India (NPCI), and publications from the Ministry of Electronics and Information Technology (Matti). Industry from Whitepaper and case study, such as Google Pay, PhonePe and Paytm. AI Research Institutions and Think Tanks Financial Technology (Fintech) focuses on think tanks, including Nasscom and DSCI (India's Data Safety Council).

4.2 Data collection approach

A comprehensive review of scientific databases (e.g. Google Scholar, IEEE Xplore, Springer and Jstor), which includes: AI: AI in fraud detection, digital payments in India, machine learning for fraud and DigiKavach. Government portals and reliable news agencies were also recommended for political initiatives and real-time data on industry trends.

5. Results:

Table 1: Analyze the effectiveness of artificial intelligence techniques to detect and prevent fraud activities in India's digital payment ecosystem

AI Technique	Effectiveness (Accuracy/Impact)	Use Case / Platform	Source
Neural Networks (Deep Learning)	91% fraud detection accuracy	Paytm UPI fraud detection model	Patil & Joshi (2019), Application of AI in Financial Frauds
Random Forest Algorithm	88.5% classification accuracy in supervised fraud datasets	Indian bank transaction logs	Kumar & Goyal (2021), AI in Fintech Sector
Auto encoders	40% reduction in false positives	NPCI anomaly detection system	FICO Report (2022), AI in Fraud Management: India Insights

Natural Language Processing	Extracts phishing indicators with 89% precision from transaction remarks	PhonePe and SMS parsing tools	Sharma & Saxena (2020), Digital Payments in India: Security and Fraud
Generative Adversarial Networks (GANs)	92% threat simulation effectiveness in training datasets	Startups in AI sandbox testing	Das & Roy (2022), AI Techniques for Securing UPI Transactions
Large Language Models (LLMs)	93.33% fraud classification accuracy in live environment	Google Pay	Google Pay Case Study (2023)

Source: NPCI

Comparative analysis of AI techniques for the detection of digital payment fraud reveals different strengths and limitations for each model. In evaluated methods, large language models (LLMs) show the accuracy of the highest scam detection of 93.33%, as used by Google Pay, and reveal their extraordinary ability to process relevant and behavior data in real-time. Generatively contradictory network (GAN) stays close with 92% efficiency in danger simulation during exercise, and demonstrates their benefit in the fear that fraudulent patterns appear in the sandbox atmosphere. Nervous networks, especially deep learning models used by Paytm, get a solid 91% accuracy, which proves to be very effective in pattern recognition for UPI transactions. Traditional models such as the random forest algorithm maintained a respectable performance with an 88.5% classification accuracy on the Indian bank dataset, which is preferred by their interpretation and integration into the structured environment.

In more special roles, Natural Language Processing (NLP) was given 89% accuracy in detecting fishing indicators within the transaction text, such as SMS comments and suspected communication patterns, and demonstrated their strength in analyzing unnecessary data. Finally, autocode, the lowest standalone significantly contributed by reducing the accuracy of fraud detection, by reducing false positivity to 40% in the NPCI system, contributing significantly to filtering the deviations and refining to limit the system output.

Table 2: Evaluate the real world implementation of AI-integrated fraud detection system in Indian digital payment platforms

Platform	AI Model Used	Fraud Detection Accuracy	Deployment Context	Source
Google Pay	Large Language Models (LLMs)	93.33%	Live fraud classification engine	Google Pay Case Study (2023)

PhonePe	NLP + Logistic Regression	~89%	Detects phishing language in transaction text	Sharma & Saxena (2020)
Paytm	Neural Network (RNN)	91%	UPI transaction monitoring	Patil & Joshi (2019)
ICICI Bank	Decision Trees & ML ensemble	88%	Real-time fraud scoring during login & payments	Kumar & Goyal (2021)

Source: NPCI

The deployment of AI operated scam detection systems of large Indian digital payment platforms sheds light on a strategic change to data-driven security. Google Pay leads the area with the implementation of the large language model (LLMs), and obtains the accuracy of the detection of fraud of 93.33%. This height demonstration classification engine works in real time, which identifies suspected transactions based on relevant understanding and behavioral signals. The phone appointed a hybrid of the Natural Language Processing (NLP) and the logistical region, which provides about 89% accuracy by analyzing the transaction text for fishing indicators. This approach is especially effective in identifying built -in scams in communication patterns, such as SMS instructions or misleading payment messages.

Paytm uses the recurrent nerve network (RNN) with a strong 91% accuracy rate under the supervision of UPI transactions. RNN is particularly suitable for analyzing sequential financial behavior, which makes it ideal for detecting transaction deviations over time. Meanwhile, the ICICI Bank decision adopts a more traditional approach using trees and machine learning ensembles, providing an 88% accuracy rate in scoring scams during login and payment steps. Under the slightly low accuracy, the clothing models are strong, explanatory and match the operational structure of the well -regulated banking environment.

6. Finding and Analysis

This section presents a comparative evaluation of various AI techniques used to detect digital payment fraud in Indian economic platforms. The analysis is based on two main matrices: fraud detection and reduction in accuracy and false positives, which is important in real -time financial risk reduction.

AI Technique	Accuracy (%)	Platform/Use Case
LLMs	93.33	Google Pay
GANs	92	Sandbox Testing
Neural Networks	91	Paytm UPI
NLP	89	PhonePe
Random Forest	88.5	Bank Logs
Autoencoders	60	NPCI

Source: NPCI

The table indicates that **LLMs (Large Language Models)** outperform all other techniques with 93.33% **accuracy**, as implemented in Google Pay. **Neural networks** and **GANs** also show promising accuracy above 90%, especially in dynamic fraud environments. **Autoencoders**, while useful in anomaly detection, show lower standalone accuracy, indicating they may perform best when combined with ensemble methods.

Cross-Platform AI Implementation Insights

- **Google Pay** achieves **top-tier performance using LLMs**, with both high accuracy and reduced false positives.
- **Paytm's Neural Network model** is second in performance, striking a balance between accuracy and operational reliability.
- **PhonePe leverages NLP** to extract context-aware risks from transaction text, aiding fraud prediction in non-numeric contexts.

7. Conclusion

The change of India's economic ecosystem through digital payments has elaborated, where UPI will redefine the same UPI in rural and urban areas. However, this digital rejection is similar to a dangerous increase in online scams and requires advanced economic integrity. This research discovered an important role of artificial intelligence (AI) in addressing these weaknesses by analyzing technology, implementing the real world and authorities.

The introduction implied the urgent need to use AI in detecting fraud, expanding rapid transaction growth and strengthening scams as major motivators. The goals placed a concentrated path to check the systemic support through the efficiency of AI, its real world applications and politics and collaborative structure. Through a literature review of ten reliable sources, this study synthesized knowledge from academic, industrial and government prospects. These tasks provided evidence that AI models are particularly better than traditional rule-based fraud detection systems in terms of machine learning (ML), nervous networks, NLP and GANs using GANS infertility and future accuracy. The research system utilized secondary data from Scholars' database, RBI Report, Industry White Paper and AI case studies. This approach enabled a strong thematic analysis of AI use without the obstacles to primary data collection.

In discoveries and analysis, quantitative insights have shown that the large language model (LLM) distributed by platforms such as Google Pay achieved 93.33% accuracy with the highest decline in false positives (58%), which improves traditional AI techniques such as autocaine and random forests. Nerve networks and GAN also demonstrated strong performance measurements, which validate the use of the use in a high volume, real-time fraud detection system. Vizulation reinforced these patterns, which reflect each AI method and the strength of its operational reference. Government initiatives such as Digikavach and RBI and NPCI efforts as a government initiative show an increasing strategic commitment to AI-based fraud. This effort, combined with industry cooperation, points to a future where

intelligent fraud detection systems will be built into the main architecture of digital financial services.

Finally, the study confirms that AI is not just an accessory tool, but a strategic pillar to achieve India's digital payment infrastructure. Its real-time adaptability, pattern recognition capacity and scalability make it unique to fight the developed nature into economic scams. AI development, across platforms and continuous investment in regulatory adjustment will be important for maintaining consumer chairs and transactions in the digital economy.

References

- Aggarwal, A., & Bansal, R. (2021). Machine learning applications in online payment fraud detection. *Journal of Information Security and Risk Management*, 14(2), 101-117.
- Das, S., & Roy, S. (2022). AI techniques for securing UPI transactions. *Journal of Cybersecurity and FinTech*, 5(2), 45-58.
- Data Security Council of India (DSCI). (2021). *Artificial intelligence in FinTech and fraud prevention* (NASSCOM Whitepaper).
- FICO. (2022). *AI in fraud management: India insights* [Research report]. Retrieved from <https://www.fico.com>
- Google Pay. (2023). *Case study: Leveraging large language models for real-time fraud detection* [Internal report].
- Kumar, R., & Goyal, N. (2021). AI in the fintech sector: A case for fraud detection in Indian banks. *International Journal of Financial Innovations*, 12(1), 33-48.
- Ministry of Electronics and Information Technology (MeitY). (2023). *DigiKavach: National AI cybersecurity framework*. Government of India.
- Patil, V., & Joshi, R. (2019). Application of AI in financial frauds. *International Journal of Computer Applications*, 182(9), 18-22.
- Reserve Bank of India. (2022). *Annual report 2021-22*. Retrieved from <https://www.rbi.org.in>
- Sharma, M., & Saxena, S. (2020). Digital payments in India: Security and fraud. *Journal of Digital Economy*, 8(3), 66-74.

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A Study on Globalization and Its Impact on Indian Economy

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Abstract

Globalization process was started in India in 1991, when there was deep crisis in economy, foreign currency reserves had tumbled to almost \$1 billion, inflation had boomed to an annual rate of 17 percent, fiscal deficit was very high and had become unsustainable, foreign investors and NRIs had lost confidence in Indian Economy, capital was flying out of the country and we were close to defaulting on loans. Along with these bottlenecks at home, many unforeseeable changes swept the economies of nations in Western and Eastern Europe, South East Asia, Latin America and elsewhere, around the same time. Accordingly, some major measures were taken as initiatives as part of the liberalization and globalization strategy, and foreign investors were invited for foreign direct investment (FDI), non-resident Indians (NRIs) were also permitted to invest in India, and domestic investors were allowed to participate freely within and outside the country in terms of privatization policy and opening up of door for revitalizing the Indian economy with new policy measures; among others. There were many debates and consequences found to be encircling around the world as well as in the academic field due to the start of the liberalization, privatization and globalization (LPG) era. The study has coagulated on some of the major issues for healthy discourses in lamenting the cases of the Indian economy with chronological explanations. Findings are provided in appropriate places, and suggestions and recommendations are also given with concluding notes for illuminating the relevant facts with scientific temper of thought in a relativity manner.

Keywords: *Economic Growth, Foreign Trade, Industrial Licensing, Knowledge Society, Output Cost, Start Up, World Bank.*

1. Introduction

The strategic objective of Indian economy policy had experienced major changes during the early 1990s. The economic reform, commonly known as, Liberalization, Privatization and Globalization (LPG model) intended to make the Indian economy a fast moving economy and globally competitive. The main aim of changes in policy was for creation of an independent economy and the reduction of the high level of poverty that existed within a democratic political framework. The policy improvements commenced with respect to industrial sector and trade in addition to the various financial sectors, aimed at reforming the Indian economy more competently. With the beginning of reforms to liberalise in July of

1991, a new era has emerged for India and its economy. The discussion made at that time was that capital being scarce in India, it was vital to standardize the flow of the existing capital into socially projected channels. This was achieved by an extravagant system of industrial licensing, state monopoly and control over key industries. The foreign exchange had to be saved by restraining imports, as it was thought that India could not accomplish earning foreign exchange only through exports. Consequently, the policy highlighted independence and neglected foreign trade as a means of economic growth.

This period of economic changeover has had an incredible impact on the overall economic growth to practically all major sectors of the economy, and its effects over the last two decades can hardly be disregarded. In addition, it also marks the beginning of real incorporation into the global economy. Currently, that India is in the way of streamlining its economy, with ambitions of inspiring the present isolated position in the world, the need to accelerate the economic growth is especially overbearing. And also the positive and vital role that Foreign Direct Investment (FDI) has played in the speedy economic growth of most of the Southeast Asian countries and most particularly China, India has boarded on a determined plan to outdo the achievements of its neighbors to the east and is annoying to sell as a safe and profitable purpose for FDI.

“Globalization” denotes the grooming incorporation of economies around the world, particularly in terms of trade and financial flows, as though it includes labor and knowledge. Globalization has various meanings depending on the context and not only includes opening up of world trade, development of advanced means of communication, internationalization of financial markets, growing importance of MNCs, population migrations and more generally increased mobility of persons, goods, capital, data and ideas; but also infections, diseases and pollution. The term globalization also denotes the incorporation of economies of the world through immoral trade and financial flows, besides mutual exchange of technology and knowledge.

2. Objectives of the Study

Some of the objectives of this research are as follows:

1. To analyze the impact of the globalization process on the Indian economy.
2. To analyze the economic performance and growth of India due to globalization.
3. To find out the pros and cons of globalization.

3. Scope of the Study

The study has a wider scope for promoting economy in a sustainable manner in terms of scientific developmental agenda for human social progress with reform related activities, to transform society in new dimensional order. Hence, it embraces the idea of a Welfare State for collective growth and inclusive development. It will help planners, decision makers, administrators, and others in future research activities with a ‘path-goal’ relativity approach.

4. Research Methodology

The study is based on historical analysis of facts and therefore it enumerates the qualitative theoretical research and the empirical findings, for which a survey is done in a qualitative way. Secondary data and sources are taken into account for chronological study. Books, periodicals, journals, business bulletins, government reports, Reserve Bank of India (RBI) reports, Economic Survey, reports of the national and international institutes, agencies and organizations are also carefully observed for collection of data and various facts to systematize the entire study with scientific explanations of things.

5. Reasons for New Reforms

The important reform processes (steps towards liberalization privatization and globalization) were the deep crisis in July 1991, when foreign currency reserves had tumbled to almost \$1 billion, inflation had boomed to an annual rate of 17 percent; fiscal deficit was very high and had become unsustainable; foreign investors and NRIs had lost confidence in Indian economy. Capital was flying out of the country and we were close to defaulting on loans. Along with these bottlenecks at home, many unforeseeable changes swept the economies of nations in Western and Eastern Europe, South East Asia, Latin America and elsewhere, around the same time. These were the economic pressures at home and abroad that called for a complete renovating of our economic policies and programs. Major measures initiated as a part of the liberalization and globalization strategy in the early nineties were inviting foreign investors for Foreign Direct Investment (FDI), Non Resident Indians (NRIs) were permitted to invest in India, and domestic investors were allowed to participate freely within and outside the country with new policy measures; among others. Some important reasons are as follows:

- a. Devaluation of Indian currency by 18-19% against major currencies in the international foreign exchange market.
- b. Disinvestment to make the process of globalization smooth, privatization and liberalization policies are moving along as well.
- c. Dismantling of the Industrial Licensing regime mainly on accounting of environmental safety and strategic considerations.
- d. Allowing Foreign Direct Investment (FDI) across a wide spectrum of industries and encouraging non-debt flows.
- e. Allowing Non Resident Indians (NRIs) Schemes in the general policy and facilities for FDI as liberalization, privatization and globalization (LPG) for opening the Indian economy.

6. Consequences of Globalization to Indian Economy

Globalization offers both opportunities and challenges for our country in many ways. It has created significant opportunities for manufacturing, agriculture, service sectors and many others. Besides, there has been significant inflow of foreign investments into India. The

challenges of globalization lie not in stopping the expansion of the global market, but in setting rules and institutions for better governance at local, national, regional and global levels. Further, globalization is just not only a reservation to the advantages of global market and competition; but also to provide enough space for human, community and environmental resources to ensure that globalization works for people and not just for profits. Globalization has many meanings, depending on the context and on the person who is talking about this. Guy Brainbant opines that the process of globalization not only include opening up of world trade, development of advanced means of communication, internationalization of financial markets, growing importance of MNCs, population migrations and more generally increased mobility of persons, goods, capital, data and ideas but also infections, diseases and pollution. The term globalization refers to the integration of economies of the world through uninhibited trade and financial flows through mutual exchange of technology and knowledge. Ideally, it also contains free inter-country movement of labor. In the context to India, this implies opening up the economy to FDI by providing facilities to foreign companies to invest in different fields of economic activities in India, removing constraints and obstacles to the entry of MNCs in India, allowing Indian companies to enter into foreign collaborations and also encouraging them to set up joint ventures abroad; carrying out massive import liberalization programs by switching over from quantitative restrictions to tariffs and import duties, and so.

Thus, globalization has been identified with the policy reforms of 1991 in India. The Indian economy had experienced major policy changes in the early 1990s. The new economic reform, popularly known as: Liberalization, Privatization and Globalization (LPG model) aimed at making the Indian economy as the fastest growing economy and globally competitive. The series of reforms undertaken with respect to the industrial sector, trade as well as the financial sector aimed at making the economy more efficient.

6.1 Impact of Globalization on Indian Manufacturing

The reforms involved putting an end to the License Raj, reduction of high industrial tariffs, the privatization of aluminum and car manufacturing industries, telecommunication sectors and information technology companies, and consequently, the liberalization of the exchange processes. Mergers, takeovers, global alliances, joint ventures and collaborations are taking place, almost every day due to globalization and reform processes. India's telecommunication sector is exploding and all the big handset makers have set up manufacturing facilities in India; so that they can cater to the strong domestic demands. Make in India, Digital program, Stand Up, Start Up are preferred due to new reforms, keeping in mind the development agenda and fast growing of the country. Accordingly, the manufacturing capacities of our country have been expanded. As a whole, India has emerged as a global hub for investments, and a positive source for growth and progress at present as well as in future. In a nutshell, globalization has helped increase the share of Gross Domestic Product (GDP) in terms of various reform activities.

6.2 Impact of Globalization on Wages and the Income Inequalities

Research indicates that FDI tends to increase wage levels and reduce poverty. For developing countries like India, it increases income inequalities in the short-term, but decreases then with greater investment over time. For developed countries, the FDI tends to decrease income inequalities. To be specific, in the long-run, globalization impacts income inequalities among the richest and poorest nations. According to the liberals, globalization is an effective tool for eliminating want and for permitting the poor people to get hold of a steady grip of the global economy. For instance, as per the World Bank reports, within the two decades from 1980s to 2001, those people living on US\$1 or less per day, reduced from 1.5 billion to 1.1 billion. Alongside there is a rise in the total population of the world. So, it is globalization which has impacted on the Indian Welfare State by means of reduction of poverty from 40% to 20%. It is also claimed that with globalization capital can be shifted to whatever country offers the most productive investment opportunities for creating growth.

6.3 Impact of Globalization on Education

Entry of foreign universities is the best example of it. India has become a hub of information technology outsourcing, after the government decided to privatize education ten years ago. The most dramatic impact of the 21st century "Foreign Hand" is in the opening of the higher education sector to foreign institutions. Most recently, the Ministry of Human Resource Development (MHRD) is reported to have withdrawn the requirement of the prior approval clause for the Indian institutions to enter into Memorandum of Understandings (MOUs) with the foreign institutions. This is undoubtedly a pragmatic step, which reinforces the autonomy of universities and institutions. In order to integrate into the world economy, people must not only acquire the knowledge and tools of traditional knowledge, but above all, they must also be capable of acquiring new skills demanded by a knowledge society. Indeed, with the result of rapid change in technological and scientific knowledge, learning is made a permanent process (a lifelong learning process) according to the Report of the International Commission on Education for the 21st Century to UNESCO, entitled: Learning, the Treasure Within. In the present competitive world, expansion, excellence and inclusion are the three challenges of the Indian education system. The age-old system of education has to be reformed. Practical knowledge should be given more priority than theoretical knowledge.

The rapid growth of the software development and electronic communication industries is one of the few achievements of Indian industry in the post-globalization periods. Further, due to strong hold of the English language in the Multi-National Corporations (MNCs) work culture and corporate circles, the divide between rural and urban is almost complete in the field of education. In consequence, this great reservoir of skills and expertise offers the opportunity to utilize them for the spread of quality education through several technologies.

6.4 Impact of Globalization on Environment

There is no denying the fact that pollution is a reality associated with increased manufacturing shifts to developing countries. In an empirical study, Dande found that

globalization has increased CO₂ emission, which is the main culprit of global warming. A more positive view of globalization would be that it has the potential to enhance productivity and raise the living standards everywhere, since a globally integrated economy makes for a better division of labor and an environment which can be exploited by the large companies to achieve economies of scale. It is also claimed that, with globalization capital can be shifted to whatever country offers the most productive investment opportunities for creating economic growth. The concept of Corporate Social Responsibility (CSR) needs to become a globally accepted fact alongside the globalization of markets, since it will ultimately benefit the business.

6.5 Impact of Globalization on Employment and the Agricultural Sector

India is basically an agricultural country. With the advanced mode of globalization and the present cropping system through the means of the MNCs, farming has now lost its prime value in our country. Agricultural science has the least focus amongst the youngsters who consider farming as a shameful profession and look down upon the same. Employment through the MNCs has lucrative deals attracting the bulk of manpower who are working for the other countries as their customer care representatives (CCRs). We are losing our health and status and slowly getting to the age of economic slavery due to these MNCs. This is what globalization has provided Indians through their emergence. An overview of the Indian agricultural sector indicates that globalization did not yield the desired results in India. It has marginally contributed in minimizing poverty, and removing social inequalities. The desired objectives of this process have not been achieved in India¹⁰. As far as the agricultural sector is concerned, we have seen mixed results in the country. It is clear from short discourses of the study that agriculture plays a key role in boosting up our economy. In fact, agriculture employs 60% of the Indian population, but yet its contribution varies only from 15% to 20% of the GDP.

After adopting globalization in 1991, the Indian agricultural growth rate has increased; but yet, at present the economic condition of the farmers is not satisfactory because input cost is high and output cost is low. The cut-off of subsidies is hindering growth of the agricultural sector. In the words of Gamani Corea, former Secretary-General, UNCTAD, "Globalization instead of being an equalizing process, has only widened the gap between the two in terms of monopoly in science and technology, flow of capital, access to natural resources, communication and nuclear armament".

6.6 Government Reform Initiatives

The fundamental measures initiated as part of the LPG strategies in the early 1990s included scrapping of the Industrial Licensing regime, reduction in the number of areas reserved for the Public Sector Undertakings (PSUs), the Amendment of the Monopolies and Restrictive Trade Practices (MRTPs) Act, start of the privatization program, reduction in tariff rates and change over to market determined exchange rates. Over the years, there has been a steady liberalization of the current account transactions, more and more sectors opened up for FDIs and portfolio investments facilitating entry of foreign investors in telecom, roads, ports,

airports, insurance and other major sectors¹¹, Start Up programs, Stand Up facilities, Make in India initiatives are some other measures adopted with investment facilities. Finally, in the post-reform era, there has been a divergence in employment growth rates across industries, which has, in part, been related to the growth of FDI in specific sectors such as manufacturing, finance, insurance and real estate (FIRE) and communications. This makes it increasingly important for policy-makers to ensure that workers are equipped with the skills to move from low-growth industries to high-growth industries. Globalization is a complex process that is having a massive impact on living standards across both the developed and developing world. In general, the balance of evidence suggests that globalization is helping to reduce poverty and raise living standards. There is also, however, enough evidence that globalization has deleterious consequences as well. For example, in India, inter-regional inequality appears to have widened during the globalization era¹².

The challenge before India is in many ways unique. It is a country rich in knowledge and the production of technology. Historically, it has not, however, seen this knowledge as a commodity. In recent decades this has changed somewhat, and India has rapidly increased its integration with the global economy. Indeed, the World Bank recently judged India to be one of the world's 'fast globalizes'. Despite the large steps that have been taken by our country recently, the rest of the world must recognize that India's democratic tradition, and its history of diverse views, means that the reforms will continue to be implemented unevenly, and slowly. It is expected that India will get there in the end with more stringent and liberal practices and adopting new vibrant policies in all sectors for revitalizing of the overall economy in terms of "Sabka Saath, Sabka Vikas, Sabka Prayas and Sabka Biswas" ideals in coming years in terms of reform, perform and transform agenda, though the growth in the FIRE industries has been observed to be consistently higher.

7. Findings of the Study

Some of the important findings of the study are given below:

1. Globalization has intensified interdependence and competition between economies in the world market. The interdependence is observed in regard to trading in goods and services and in movement of capital.
2. Domestic economic developments are not determined entirely by domestic policies and market conditions. Rather, they are influenced by both domestic and international policies and economic conditions.
3. Globalizing the economy, while formulating and evaluating its domestic policy, cannot afford to ignore the possible actions and reactions of policies and developments in the rest of the world. This constrained the policy option available to the government which implies loss of policy autonomy to some extent, in decision-making at the national level.
4. The government should give more efforts towards export promotion, coupled with enhancement of domestic investment as this can be channeled into improving exports.

5. The government should also consider reducing export tariffs and providing incentives towards production of export goods and services. If these are implemented properly will lead to a favorable balance of payment and also economic growth of India.

8. Suggestions and Recommendations

The important suggestions of the study are as follows:

- a. From empirical findings, it is suggested that liberalization policies are required to be redrafted, keeping in mind due attention to overcome the problems of socio-economic development in short-run, along with long-run progress.
- b. Globalization of the Indian economy and trade liberalization policies were strategized with a view to creating a major shift in the momentum of export growth, and to attract large inflows of foreign capital; but these objectives could not be achieved hundred percent. Hence, it requires more stringent measures for adequate growth of the overall economy.
- c. Trade liberalization has enhanced economic growth, but has not impacted so much in employment growth. It is therefore necessary that appropriate policies are required to be framed and implemented in time to increase employment opportunities in all sectors of the economy for inclusive growth.
- d. The government should provide incentives to domestic firms for technology up-gradation, innovation programs and skill-building activities to compete in foreign markets and enhance competitive advantages, particularly in manufacturing sectors to speedy growth of the economy.
- e. Developing countries can ill-afford the large implicit subsidies, often channeled to narrow privileged interests that trade protection provides. Hence, the government should be careful and keep strict vigil to overcome such problems, to gain positive benefits to effectively boost-up the economy in terms of packages, schemes and implementation of the protective measures.
- f. For balanced development of the socio-economic parameters, all sectors should be given equal stress in bringing holistic growth. Thus, local, regional and national issues should get adequate attention from government policy resolutions from time-to-time for effective reformation, efficient performance and resurgent transformation of the Indian economy.

The major recommendations of the study are enumerated below:

- a. As a policy recommendation, the government should continue to pursue policies aimed at liberalizing the Indian economy so as to encourage free flow of trade by reducing bottlenecks to free trade.
- b. It is observed that since the adoption of trade liberalization policies in India, trade activities between India and the rest of the world have increased. Hence,

channelization of investment outlets in different sectors of the economy is the urgent need of the hour for increasing growth, through enhancement of more export production and FDI inflows.

- c. FDI was also found to have a significant positive relationship with GDP. Robust inflow of FDI can help to increase in GDP and consequently, it can boost up the overall economy in terms of employment generation, industrial development and service sector reforms in the coming days.
- d. In rural Indian communities, agriculture is a major factor that revolves around socio-economic rights and poverty, and if the paradigm changes, it may affect the existing social equity system.
- e. The government should adopt appropriate policies to mitigate problems of controversies which have volatized and have suspicious impact on many financial institutions and authorities in the financial services business to strengthen economic paradigms.
- f. Employment opportunities have certainly increased, but only for those inhabiting big towns and cities and are products of the modern professional educational system. Considering the full picture of employment in India, the situation is disastrous. Hence, the government should adopt policy issues in such a way which would increase rural employment to get the overall benefit of globalization.
- g. Although a lot has been done by Indian policy makers to restructure various laws and regulations in the light of post 1991 policy of Government of India, still a lot is to be done to meet the ever changing demands of globalization. It is a challenge for Indian policy makers to execute laws and regulations suiting the spirit of global and local business needs.

9. Conclusion

Making globalization work in a sustainable manner will not be easy. Those who benefit from the current system will resist change. However, in the case of developing countries, they must be able to use available resources well and take advantage of the new opportunities. A major determining factor on how well a country will do is the quality of the public and private institutions, which in turn is related to how decisions are made and in whose best interest, a subject broadly referred to as governance. Even if barriers are removed systematically, not everyone is equally in a position to take advantage of the new opportunities. It is easy for those in the advanced industrial countries to seize the opportunities that the opening up of the markets in the developing countries affords and they do so quickly. Globalization and sustainable development is important for green economy¹³ to protect the environment for future generations from severe degradation. It is essential to move for socio-economic development in harmonizing with natural systems to make our economies flow benignly like sailboats in the wind of ecosystem processes. But doing this requires great human creativity, tremendous knowledge, and the widespread participation of everyone. Human beings and human workers can no longer serve as cogs in

the machine of accumulation, be it capitalistic or socialistic. Ecological development requires an unleashing of human development and an extension of democracy. Social and ecological transformation should go hand-in-hand with reform, perform and transform the agenda for peace, progress and prosperity of mankind.

References

- Bureau, E. T.: "Trade Liberalization: Too Much Too Soon", *The Economic Times*, September 28, 2008.
- Diana, T. & Carlos, A.: "Economic and Social Impact of Trade Liberalization: A Developing-Country Perspective", *WTO Tariff Negotiation Paper*, 2004.
- Kumar, A.: "A Conceptual Study of Sustainable Development in the Era of Globalization", *International Journal of Scientific and Research Publications*, 3(5): 1-3, 2013.
- Ojha, A. K.: "Globalization and Liberalization – Prospects of New World Order", *Third Concept: An International Journal of Ideas*, 3(5): 4-12, 2015.
- Uma, S. et al.: "Impact of Trade Liberalization on Employment: The Experience of India's Manufacturing Industries", *Journal of Development Economics*, 59(1): 7-13, 2010.
- Neil, F. M.: "The Impact of Trade Liberalization on Economic Growth: Evidence from a Quartile Regression Analysis", *Kyklos Journal*, 6(4): 543-567, 2008.
- Ayyar, R. V. V.: "Educational Policy Planning and Globalization", *International Journal of Educational Development*, 4(2): 347-354, 1996.
- Radhakrishnan, P.: "Globalization and Exclusion: The Indian Context", *Global Asia*, 4(1): 3-7, 2009.
- Lindert, P. & Williamson, J.: "Does Globalization Make the World More Unequal?" *NBER Working Paper No. 8228*, 2001.
- Kumar, K. J. & Hans, V. B.: "Indian Agriculture in the Post-Economic Reforms Period", *Journal of Development Research*, 1(1): 29-42, 2008.
- Romain, W. & Karen, H. W.: "Trade Liberalization and Growth: New Evidence", *The World Bank Economic Review*, 22(2): 187-231, 1998.
- Ravallion, M. & Datt, G.: "When Is Growth Pro-Poor? Evidence from the Diverse Experience of India's States", *World Bank Policy Research Paper No. 2263*, 1999, pp. 23-42.
- UN: "The Green Economy: Trade and Sustainable Development Implications", *United Nations Conference on Trade and Development*, Geneva, Switzerland, 2011.

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Travel Motivation and Tourist Attracting Factors: A Case Study of Assam

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Abstract

This paper explores the underlying motivations that drive tourism and the factors that attract tourists, with a specific focus on the state of Assam. It examines tourism as an economic and social phenomenon, emphasizing its role in income generation, employment, and cultural exchange. The study highlights various categories of travel motivation – including business, physical, cultural, social, entertainment, and religious factors – and discusses how these motives shape tourist behavior and destination preferences. Through a detailed analysis of Assam's tourism infrastructure, natural and cultural endowments, and marketing practices, the paper identifies critical gaps in the state's tourism promotion strategy. It observes that while Assam's tourism initiatives primarily emphasize natural and adventure tourism, anthropological and cultural dimensions remain underrepresented. The research concludes that effective tourism development in Assam requires an integrated marketing approach that aligns local attractions and cultural assets with tourists' motivational drivers, supported by improved accessibility, hospitality, and organizational professionalism.

Keywords: *Travel motivation, Motivational tourists, recreational tourists, tourism endowment, tourists attracting factors.*

1. Introduction

Tourism as an industry is a modern concept, but it is now the second largest industry of the present super industrialized world. Its development is considered to be essential because of its anticipated economic benefits of income and employment; as statistics show that it provides jobs to one in every sixteen workers throughout the world. Tourism is defined as the sum of the relations and services connected with a temporary and voluntary change of residence for non-commercial or non-professional reasons. It is further defined as the sum total of the operations, mainly of an economic nature, which directly related to the entry, stay and movement of foreigners inside and outside a certain country, city or region.

Tourism is an industry composed of a group of firms that are engaged in the business of selling to or serving tourists. Hotels, restaurants, transportation and amusements are examples of the types of firms that collectively constitute the Tourism industry. However, development of tourism in a particular place, region or country should not be considered as

spontaneous. Tourism, like other industries, is required to be promoted properly. More specifically it can be said Tourism marketing is essential towards Tourism development of a region or country. Philip Kotler (1991:6) observed that the marketing concepts hold that the key to achieving organizational goals consists in determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors.

To understand the needs and wants of customers, we must know the motives underlying the intention of tourists. It is required to search answers to the basic questions:

Why do people travel

What do they expect to gain by traveling to a particular tourist spot?

2. Travel Motivation

The surge in tourism activities in recent decades have led scholars to seek to identify the motives that underlie peoples' intention to travel. Middleton (1995:52) has classified these inner motives of man in six different categories and these are:

1. Businesses /work related motives Pursuit of private and public sector business. Travel away from home for work related purposes.
2. Physical/ Physiological motives Participation in indoor sports and active outdoor recreations such as, golfing, walking, sailing, and skiing. Undertaking activities in pursuit of health, fitness, recuperation. Resting/ relaxing /unwinding from stress of everyday life. Finding warmth / sunshine / relaxation on a beach.
3. Cultural / psychological / personal education motive Participation in festivals, theatre, music, museums - as spectators, players or volunteers. Participation in personal interests, including intellectual, craft and other leisure-time pursuit. Visiting destinations for the sake of their cultural and natural heritage.
4. Social /interpersonal and ethnic motives Enjoying the company of friends and relatives. Undertaking social duty occasions -from wedding to funerals. Accompanying others traveling for other reasons, such as business or social duty. Visiting the place of one's birth.
5. Entertainment / amusement/ pleasure/ pastime motives. Watching sports /other spectator events. Visiting theme parks/amusement parks. Undertaking leisure shopping.
6. Religious motives Participation in pilgrimages. Undertaking retreats for meditation and study.

These motivations in the minds of the people reflect the different types of needs; and people undertake tours or travel mainly out of their urge to fulfill these needs. A tourist may go to his choicest place to satisfy his particular need. A tourist spot is developed when a significant number of tourists visit the place. In other words, a particular place can be a tourist spot, if it has any such need satisfying endowments corresponding to the motivational factor of

tourism. As the motivational factors are different, that is, as some people are motivated for pleasure, some for health and some others for business or other activities. It is natural that a particular place may be a destination for a particular type or types of tourists, not for all.

Some scholars have made a distinction between recreational tourists and motivated tourists.

A recreational tourist is one who goes on tour either for wander-lusting or to get rid of his normal routine. For him, any new place outside his normal or permanent home will be an attractive one.

For a motivated tourist, who is a tourist with some motive in mind, his need will be over only on satisfaction of this particular need.

It may be noted that such categorization of tourists is not watertight. For instance, there may be an overlap between the wanderlust type of tourism and a cultural tourism which not only takes the nature of pilgrimage but also includes cathedrals, temples in its tour itinerary. Similarly, games and sports are also forms of recreation for many, though they are professions for others. Peter Michael has drawn up an inventory of the various attractions which are of significance in tourism. The five categories of attractions listed by him are as follows:

1. Culture: Sites and areas of archaeological interest, historical buildings and monuments, places of historical importance, museum, modern culture, political and educational institutions and religious institutions.
2. Tradition: National festivals, arts and handicrafts; music, folklore, native life and customs
3. Scenic: National parks, wild life, flora and fauna, beach resorts, mountain resorts.
4. Entertainment : Participation in and viewing of sports, amusements and recreation parks, Z00S and aquariums, cinemas and theatres, night life, casino.
5. Other attractions: Climate, health resort.

Given the diverse nature of tourist motivations, a question that seems relevant is: when and how does one area or place emerge as a place of tourist attraction?

Robinson argues that the attraction of tourism is, to a large extent, geographical in their character. In this opinion, it is mainly the landscape, the climate and location, and the convenience that can satisfy the tourists' real and psychological needs. Other factors like tradition, culture and the attitude of the inhabitants to tourists are also considered important by Robinson.

In his study, Robinson has given a list of geographical components, the presence of which in a place is likely to make it a place to tourist attraction. The components as listed by him, are as follows:

1. Accessibility and location
2. Space

3. Scenery:
 - a) Land forms, e.g., mountain, coral reefs, cliff, etc.
 - b) Water, e.g., rivers, lakes, dams, waterfalls, geysers, glaciers, sea, etc.
 - c) Vegetation, e.g., forests, grasslands, pastures, desert etc.
4. Climates: Sunshine, clouds, temperature conditions, rain and snow
5. Animal life:
 - a) Wildlife, e.g., birds, game reserves, zoos.
 - b) Hunting & fishing.
6. Settlement Pattern:
 - a) Tourist cities and villages.
 - b) Historical remains and monuments
 - c) Archaeological remains.
7. Culture: Ways of life, traditions, folklore, arts and crafts.

Charles E. Gearing et al. made an attempt to rank these factors in order of priority. Their ranking was as follows:

Rank Factor

1. Natural beauty
2. Infrastructure
3. Food and Lodging
4. Climate
5. Historical prominence
6. Ancient ruins
7. Attitude towards tourist
8. Religious significance
9. Artistic and architectural factors
10. Sports facilities
11. Night time recreation
12. Shopping facilities
13. Resting and tranquillity
14. Folk festivals
15. Distinctive local features

16. Educational facilities

17. Fairs and exhibitions

To sum up, based on the studies undertaken so far by scholars, it is possible to identify the principal travel motivations which are as follows:

1. Tourism for pleasure and recreation
2. Business travel
3. Tourism for game, sports, and adventure
4. Holidaying
5. Pilgrimage
6. Nature tourism
7. Eco-tourism and tourism for culture.

To assess the potentiality of a given tourist destination, one needs to see to what extent the location is endowed with features or properties that would fulfil one or more of the given travel motivations.

However, presence of the endowments per se rarely would attract the actual travellers. Two localities or regions with the same type of tourism endowments may not experience the same kind of tourist traffic.

While tourism endowments are the first or basic ingredient of tourist attraction, but there are at least two other factors which play a decisive role in promoting a place into the tourism map. These two factors are- hospitality and accessibility of the place in question.

Hospitality stands for the offered range of facilities and services provided to a tourist visiting a particular place. It assures the tourist of the needed comfort while he comes to enjoy the attractions of tourist spot. These facilities that are relevant are the following:

- a) Hotels, inns, restaurants etc.
- b) Tourist infrastructure like road network and the transportation system.
- c) Travel agency, tour operators.
- d) Public utilities.
- e) Shopping facilities
- f) Medical facilities
- g) Communication network
- h) Entertainment and sport facilities and the like.

The other most important factor, viz, accessibility stands for time and cost involved to reach the destination by a tourist from his place of origin. Economic factors like the freight rates of the different modes of transport to cover the distance and the exchange rate between

national currencies will determine the cost of travel. In this connection, the time needed to complete the journey, the cost of inconvenience in terms of delay or waiting time are generally considered by the tourists.

3. Tourism Marketing and Travel Motivation

The definition of marketing holds good for both products and services. In both the cases, marketing is the exchange process between two individual parties: viz.

- a) Customers, who buy or use products, and
- b) Producer organizations, which supply and sell the products.

Marketing is concerned with, in terms of buyer –

- i) Understanding their needs and desires;
- ii) Which products they choose, how much, at what price, how often
- iii) Where they buy them from
- iv) How they feel after their purchases and consumption of products.

In terms of products-

- i) Which products to produce and why
- ii) How many
- iii) At what price
- iv) When and where to make them available.

As far as tourism is concerned, marketing involves systematic and co-ordinated efforts executed by the National Tourist Organizations and or the tourist enterprises at the national or local levels to optimize the satisfaction of tourists groups and individuals in a way that ultimately would lead to sustained tourism growth in the locality, area or region under its jurisdiction.

Although, principles of marketing are the same for all products, there are certain peculiarities in tourism, e.g.

- a) The 'product' in the tourism industry is a combination of products and services. No single entrepreneur can produce all these products and services and a high degree of interdependence and linkages among the different segments of the tourism industry is considered as essential for optimizing tourists' satisfaction.
- b) The tourism product cannot be transported- a customer has to reach to make use of it.
- c) The demands are created at one place (i.e., of origin the tourists) and the supply is offered at tourist destinations.
- d) The tourism products (e.g. a hotel room-hour) cannot be stored for sale at a later date. These are to be used immediately or they go to waste. This means an equilibrium between the demand for and supply of tourism products has to be achieved at both the aggregate and organizational levels through proper planning of facilitates and marketing efforts.

- e) Tourism is a very sensitive industry. Situations like, disturbance in the law and order situations, economic instability or natural calamity would immediately hurt the tourism sector making the demand dwindle.

Because of the peculiar characteristics of tourism, the supply of tourism industry products are different from others. There are six very important structural aspects of supply which strongly influence the attitudes and decisions of management in all sectors of the travel and tourism industry as they seek to respond to and influence prospective customers.

These six aspects are:

1. Inseparability.
2. Perishability.
3. Interdependence.
4. Seasonality.
5. High and fixed costs.
6. Fixed in time and place.

The larger an organization is, the more vulnerable it is likely to be of any fluctuation in demand, and hence the more emphasis it is likely put on ways to influence its customers i.e., on marketing.

Due to those peculiar characteristics associated with tourism, tourism marketing is often considered more challenging than the marketing of most industrial products and services.

There are three distinguishable but inter related factors¹⁷ which are to be marketed in tourism marketing. These are-

- a) The inherent attraction of a place.
- b) The hospitality and the range and quality of facilities and services provided, and
- c) The accessibility to the place in question.

The first factor viz. The inherent attractions of a place are the motivational factors -which are location specific. These attractions need to be communicated to the prospective tourists.

The second factor viz. hospitality stands for the offered range of facilities and services provided to a tourist while he is visiting a particular place. These facilities include: Hotels, inns, restaurants, etc., Tourist infrastructure, like, internal road network and transportation system, Public facilities, Medical facilities, Communication network, Entertainment facilities etc.

The third factor viz. accessibility stands for the time and cost undertaken by a tourist in reaching the tourist destination from his place of origin. These include:

- a) Infrastructure: roads, airways and railway line of the given place with the outside world;

- b) Equipment: size, speed and range of public transport vehicles;
- c) Operational factors: routes operated, frequency of services, prices charged; and
- d) Government regulations: the range of regulatory controls over peoples' access to the place.

In fact, the distinctiveness of tourism marketing stems from the fact that market demand (for particular tourist spots or locations) is generated in the places in which the visitors normally live (areas of origin). Whereas, product supply takes place only in the areas of destination. Given the geographical distance between the place where demand is generated and the place where products are actually supplied, it is tourism marketing that serves as a systematic link between demand and supply and hence plays the most crucial role in the ultimate selling of tourist places and products to the customers.

Tourism promotion organizations through marketing practices can develop a systematic link between market demand and product supply to ensure the flow of tourists to the tourist destination in question.

4. Anthropological Endowments and marketing practice of the state level tourism promotion organization in Assam

In India planning and promotion of tourism is organized at three different levels. At the national level the task of tourism promotion is entrusted to the Department of Tourism, assisted in its task by the tourist Development Council which is the main advisory body at the national level.

At the national level, the India Tourism Development Corporation operates mainly as a corporate and autonomous body. Its field of activity is somewhat limited, if not subsidiary to the role of Department of Tourism of the Government of India. Its functions relate more to the commercial part of promoting tourism in the country.

There are also a number of organizations operative at the state level for promotion of tourism. In the states, the focus being mainly on the domestic tourists, much of the state's efforts and resources are invested in the construction of forest houses for middle-income tourists and on development of tourist centres as well as on publicity campaigns.

Apart from these organizations or departments at the national or state levels, there are a number of other government and non-government agencies. Although not directly responsible for the development of tourism in the country, they play a very important role in promoting the tourism industry. These bodies and organizations include the Department of Archaeology, International Airport Authority, Airlines, Railways, Transport undertakings, Forest Departments, Handloom and Handicraft undertakings. Travel Agents, Private and public Sector Hotels, Booking agencies, among others.

Although the importance of promoting the tourism industry was recognized long back at the national level, it was only during the Second and Third Five Year Plans, that many of the State Governments in India came forward towards undertaking specific

initiatives towards tourism promotion and started allocating funds in favour of the tourism sector within the framework of the Five Year Plans¹⁹. An attempt is made here to provide a bird's eye view of the government initiative in the state of Assam for promotion of the tourism industry.

In Assam, the government's initiative could be noticed for the first time in 1958 when the state government set up the Directorate of Tourism. The Directorate, since then has been running under the Ministry of Transport and Tourism with the assigned duty of:

- a) promotion of tourism in the state of Assam, and
- b) development of tourism infrastructure in the state.

The Assam Tourism Development Corporation (ATDC) which was set up in 1988 has been assigned by the state government the following duties:

- i) To develop tourism in the state of Assam;
- ii) To take over and manage existing tourist lodges. Tourist Bungalows, Hotels, Huts, Motels, Guest Houses, Entertainments Projects and other places of tourist, archaeological and historic interest in Assam from the Government of State Assam
- iii) To provide entertainment to tourists by way of cultural shows, dance. music, concerts, cabarets, ballets, film shows, sports and games, and others;
- iv) To make arrangements for and organize all inclusive sight-seeing trips, guide facilities, insurance and banking facilities;
- v) To provide shopping facilities to tourists, establish and manage art galleries for the exhibition of paintings, engravings, sculptures, jewelry and other works of art;
- vi) To have co-ordination and collaboration arrangements with the Department of Tourism, Department of Cultural Affairs, Archaeological Survey of India, India Tourism Development Corporation and the tourism corporations of other states and Union Territories with a view to develop and promote tourism.

5. Organizational Structure and Marketing Orientation

Organizational structure is not conducive for changing the organizational philosophy in favour of marketing orientation. There is unanimity now among scholars and business analysis that the marketing function demands a certain degree of centrality within the organization structure.

J. H. Davidson (1975) noted that, *Marketing department is the link between the firm and the market place. It represents the views of consumers to the company, and works out with other departments how to transfer these views into profitable products.*"

Davidson further emphasized that, *"Without marketing managers to represent the customers point of view internally within the firm, there is no natural process whereby this happens automatically. In market conditions in which customer needs, attitude and expectations change very*

rapidly, as is often the case of travel and tourism, this internal function of customer representation is vital in achieving fast and effective responses on the part of general management."

The marketing aspects of an organization calls for identifying and understanding the customers, their needs, wants and demands and designing the products in such a way as to provide maximum satisfaction to the customers. In their ways of functioning the Directorate of Tourism or the Assam Tourism Development Corporation can hardly show their success identifying or understanding their prospective customers (i.e., the tourists), that is why, the The Directorate of Tourism in Assam, in performing its functions of promoting the state as tourist destination, no where highlights the anthropological endowments of the state. This is evident from the publications of the Department.

6. Tourist Spots Identified by the Directorate of Tourism

The seventeen tourist spots identified by the Department within the state are highlighted with their respective attractions in the following ways:

1. **Guwahati** → Gateway of Assam and NE region. A fast growing metropolis and principal city of Assam.
Places of interest: Kamakhya and Bhuvaneshwari Temple, Basisthashram, Nabagraha Temple, State zoo, Museum, Gandhimandap etc.
2. **Sualkuchi** → Famous for Assamese muga and pat.
3. **Hajo**
4. **Chandubi** → Where religions meet (Hinduism, Islam and Buddhism). A natural lagoon and picnic spot.
5. **Bairabhkunda** → Picnic spot at the border of Arunachal Pradesh and Bhutan.
6. **Darranga**
7. **Batadrawa**
8. **Barpeta**
9. **Tezpur** → Temples, ancient ruins and monuments.
10. **Bhalukpung** → Famous for scenic beauty, picnic and angling spot. Famous for its winter mela.
11. **Sibsagar** → Site of Ahom rule in Assam.
12. **Haflong**
13. **Jatinga** → Birthplace of Shri Shankar Deva. Vaishnava monastery of Shri Madhav Deva.
14. **Kaziranga** → Home of one-horned rhinoceros, the breeding place of the Pelican.
15. **Manas** → Only tiger reserve in Assam. Important for rarest species like Pigmy hog, golden langoor etc.

16. **Pabitora** → Wildlife Sanctuary.

17. **Majuli** → Largest river island of the world. Centre of Vaishnava culture.

7. Observations

Analysing the respective places of tourist attractions, as highlighted by the State Level Tourism Promotion Organization of Assam, it is evident that the thrust given here are on two aspects, viz.:

a) **Nature Tourism** (Flora, fauna and wild life)

b) **Adventure Tourism** (River island, river rafting, para flying)

Anthropological factors like life-styles, ways of living, ethnic traditions, folklore, diversities of culture and traditions etc. are totally ignored in their policy making and yet to derive due attention from the tourism promotion organizations of the state.

The theoretical sides of tourism are hardly addressed and this is evident from every aspect of activities undertaken by these organizations.

As focused in our study, the design of the organization structure so far has focussed primarily on construction activity. In the given set up, the need for professionalism remains thoroughly unattended.

As revealed in our study, in the case of the Assam Tourism Development Corporation, even a separate Marketing Department does not exist. The design of the organization structure so far has focussed primarily on construction activity as the organization's dominant preoccupation. In the given set up, the need for professionalism remains thoroughly unattended with the chief executive of the given organizations being often recruited from within the Civil Service Cadre.

The prevailing state of affairs in the two organizations as well as the organizational structure and hierarchy, it appeared to us, had a clear bureaucratic bias. The overall atmosphere in the organizations is generally characterized by lack of enterprise and innovation, bureaucratic style of functioning, red tapism and inordinate delays in implementation of decisions.

It could also be noticed by us that the tourism promotion scenario in Northeast India depicts, among others, a general lack of accountability for policy makers and managers, the non-availability of a sound feed-back system and the absence of any performance evaluation standard. All these, in turn, provide room for apathy and an unimaginative and bureaucratic style of functioning. For example, most of the tourism promotion organizations do not publish their annual reports regularly, which would have enabled us to assess their actual performance vis-a-vis the assigned sets of objectives. What transpired from our discussion, the State Level Tourism Promotion Organizations in Assam have failed to correlate Travel Motivation and the endowments prevailing in the state.

References

- Akhtar, J. (1990). *Tourism management in India*. Ashish Publishing House.
- Assam Tourism Development Corporation Ltd. (1998). *Memorandum of association* (pp. 1-3).
- Assam Tourism Development Corporation Ltd. (n.d.). *Official documents of ATDC*.
- Bezbaruah, M. P. (1999). *India tourism beyond the millennium*. Gyan Publishing House.
- Bhatia, A. K. (1995). *International tourism: Principles and practices* (p. 55). Starling Publishing House.
- Chattopadhyay, K. (1995). *Economic impact of tourism development: An Indian experience* (p. 14). Kanishka Publishers.
- Davidson, J. H. (1975). *Offensive marketing* (p. 79). Pelican.
- Directorate of Tourism, Government of Assam. (1997). *Many splendour in Assam*. Directorate of Tourism.
- Directorate of Tourism, Government of Assam. (n.d.). *Official documents*. Guwahati.
- Kotler, P. (2000). *Marketing management: Texts and practices* (p. 19). Prentice Hall of India.
- Middleton, V. T. C. (1995). *Marketing of travel and tourism* (p. 52). Butterworth-Heinemann.
- Middleton, V. T. C., & Medlik, S. (1973). *Tourist product and its marketing implications*. In A. J. Barkart & S. Medlik (Eds.), *Management of tourism* (p. 35). Heinemann & William.
- Peter, M. (1969). *International tourism: The economics and development of the international tourist trade* (pp. 148-149). Hutchinson.
- Sarkar, A. K. (1998). *Action plan and priorities in tourism development* (p. 3). Kanishka Publishers.
- Singh, R. (2000). *Tourism marketing: Principles, policies and strategies* (p. 116). Kanishka Publishers.
- World Travel and Tourism Council. (1998). *Travel and tourism: The largest industry in the world* (p. 2). Brussels.

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Blue Economy: In the context of Indian Maritime and its Roadmap

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Abstract

India's vast coastline has endowed the country with abundant resources and ample opportunities for maritime trade. Alongside the coast, the habitats of various communities are engaged in trade development, ocean-related technologies, discovering safer routes for navigation, and strengthening overall sea-related international relations. The development of newer ports is significantly contributing to the promotion of international and border trade with other countries. Since the inception of civilization, different nations of the world have traded through sea routes – a practice conceptualized today as the *Blue Economy* – and in the process, discovered newer nations. As the growing population exerts tremendous pressure on land, maritime navigation has emerged as a vital alternative for trade expansion. India is currently in the process of formulating and implementing a roadmap for greater and more diversified maritime trade, which requires an efficient logistic hub and support system. The management of international maritime trade is also emphasized in SDG 14, as discussed during the *Blue Economy Summit* held on 19th January 2016, Abu Dhabi, which can serve as a guiding framework for India to reshape its maritime trade policies.

Keywords: Blue Economy, Maritime, Roadmap, Logistic Hub

1. Introduction

India's vast coastline made the country endowed with different resources and ample opportunity for maritime trade. Alongside the coastal habitats of coastal communities are able to make the fullest use of ocean-related trade. Development of technologies to facilitate trade, discovery of safest routes for navigation, overall maintenance of sea-related international relations, facing pirates and effects of cyclones in the Indian ocean, newer intermediate high end technology etc. are needed. Modernized pro-oriented ports are the important aspect after defining the ocean space. Governance of economic activity in ocean space defines the country's power and strength. The geographic position in world map and strategic situation enabled India to establish itself a leading giant in the Indian ocean.

2. Indian Maritime and Roadmap

The resources of the Indian Ocean have a good potential for maritime trade. The Bay of Bengal is also rich with aquatic resources. Countries like France have taken the Blue Economy as a major concern. Governance of the ocean has led the country to sign a Roadmap on Blue Economy.

Bangladesh has also a defined ocean space very recently settled over many issues Sri Lanka has a politically defined ocean space, but tapping and full exploitation is still to be achieved. Blue Economy Summit (2016), Abu Dhabi - where North African Countries and Near East countries have joined is an indication awareness regarding oriented ports etc, are the important aspects after Blue Economy outside the periphery of India's Ocean Space/maritime. It is a time of edge formation on the part of India to reap over strategic maritime, being suitably placed in the global maritime corridor.

3. Concept of Blue Economy

A wide range of eco. activities, starting from sustainable developments renewable resources to protection and development of new ideas and innovation, inclusion of social and international organizations and governments of different countries all are defining the periphery of the Blue Economy. Blue Economy as concerned mainly with fisheries and minerals available in the sea and their trade along with of resale movement, information technology, research and innovation, security of Ocean by law enforcements by Coastal guard and other stakeholder associated with the system.

The stress on Concept of is there in the world Blue Economy because it is a newer funding term with more technological aspects and includes economic activities networking in the direction of sustainable development of the minerals, fisheries and other resources in the oceans connected rivers and coastal regions and is a deviation in concept from Ocean Economy. It ensures equal access to the ocean with innovation and newer technology to an inclusive growth of all maritime sectors.

It is a concept coined after 2012 and has become a matter of concern to the world maritime. The process of civilization started with maritime trade with the invention of newer countries by travelling through the ocean with vessels like ships, boats etc. Not a new idea but a modern and smart concept organized with technical know-how embracing all aspects of Ocean Trade. Indian Ocean and Bay of Bengal with Arabian Sea form the Indian maritime connecting outer water world. SDG 14 (Sustainable Development Goal) (life below water) also emphasizes sustainable growth of the Blue economy with the aquatic world.

4. Insights from Blue Economy Summit, 2016 (Abu Dhabi)

Blue Economy Summit, 2016 in Abu Dhabi is a clear message from FAO of the United States towards the world about the blue economy. The Union Minister of Science and Technology and Earth Science has said that the Blue Economy is the 6th Dimension of India's Vision of New India 2030.

The blue Economy in India is mainly concerned with the following stress area of National Economies Development with global leadership in trade, governance of sea as well as country's security:

- a. India's global leadership in maritime trade, sea governance, and national security.
- b. Understanding stakeholder inclusion in the growth process of the Blue Economy.
- c. Developing institutional and capacity-building systems for sustainable growth, innovation, protection of renewable resources, and technological advancement.

6. Steps taken so far by Government of India

The prominent investment areas and upgradation infrastructure requirement have been a major concern of government of India for systematic up gradation and development of maritime and Blue economy para the to attract private investments are suitable policies made for the growth of deep-sea and offshore fishing.

A. Prominent Investment Areas and Infrastructure Upgradation

Policies to encourage private investment and growth of deep-sea/offshore fishing include:

- a. Upgrading existing harbors and landing centers
- b. Setting up dedicated deep-sea fishing harbors
- c. Enhancing processing and value addition facilities
- d. Strengthening post-harvest cold chain infrastructure
- e. Promoting by-product utilization
- f. Facilitating public-private partnerships
- g. Other support Infrastructure
- h. Fleet Modernization and Skill Development
- i. Deep-sea Fishing Research Development
- j. Financing Mechanism & Subsidies.
- k. Capacity Development and Stakeholder engagement

B. Control and Monitoring

Deep-sea Surveillance is another major concern where robust management and long-term conservation of water resources are biologically in forefront for safeguarding the nation's ecosystem biodiversity to attain the Goal-14 of Sustainable development. The policies adapted are:

- a. Vessel Tracking system
- b. On-Board Observers
- c. Stock-side Monitoring
- d. Reporting and Compliance
- e. Maintenance of Security in Deep-Sea and Offshore Fishing with support to State Marine Police (SMP) for Patrolling
- f. To combat threats from Immediate Neighborhoods, etc.

C. Global Leadership

India's position in global leadership in Blue Economy for Life-under Sea is understood with its long-term policy interventions in the form of 8 years and beyond 2033 onwards policies for product development to compete internationally and technological advancement in maritime is a self-explanatory one. Policies in this regard are taken by Government of India towards:

- a. High-value product development of international standard
- b. Sustainability and conservation
- c. Trade facilitation with market access, etc.

D. Stakeholder Inclusion and Partnership: In this aspect the policy framework have oriented towards a methodically all-round inclusion

- a. Development of management framework set up community institution worker union & federations for fish worker and industry bodies
- b. Small-scale, artisanal and indigenous fisheries to be included and their representation is to be ensured
- c. Launching pilot projects in some coastal districts of Gujarat, Tamil Nadu and Maharashtra with respect to technology demonstration, skills and monitoring mechanisms
- d. Enhancing maritime co-ordination across sectors and agencies covering all coastal states and UTs and foreign partners
- e. Developing corporate mindset in the operation and value maintenance in the production process.

7. Prospects

The prospect of a Blue Economy in today's world is not easily measurable and really a cumbersome job also. The External Affairs Minister of India's. Jaishankar's three day visit to France on February (20th to 22nd) in 2022, is a remarkable step where he has signed the Roadmap of Blue Economy with his French Counterpart Jean-Yves Le Drian. The partnership will help both the countries in taking decisive roles in food and livelihood security for coastal habitats by joining in maritime trade.

As Thailand, Mauritius (Island Nation) Maldives, Sri Lanka have excelled in the tourism Industry using global marine and sea beaches, India is also ushering in tourism by tapping the potentials.

The minerals found in Indian Ocean is rich of special quality & size of nodules (govt to tennis ball size) nickel, cobalt, iron and manganese, which opens and allowed India to harness and trade through global corridor which also passes through India, Touching a large section of humanity and the 3rd largest ocean space along India can provide livelihood, security to its coastal population to the fullest extent (Singh, 2022).

Shaping the Blue Economy to facilitate organized maritime trade is a key factor nowadays. Indian Budget 2019 and 2023, have stressed on maritime To achieve sustainable

and advanced growth with food security alongside Ocean Conservation is the need of the hour. Enhancing the livelihood of the coastal population with maritime security in the Blue Economy, the role of Indian Coast Guard cannot be denied.

8. Conclusion

The road map for maritime trade is of immense importance. Maintaining maritime trade traffic development and shipping & newer port facilities to facilitate trade is a process to facilitate trade in Blue Economy which is a branch of natural economy, information system, marine research and all will organize the future roadmap for contemporary maritime management. Government of India is also changing its focus from traditional method of Blue Economy on to a O-Smart Economy. Prime Minister's Vikshit Bharat 2047 announcement is also an all embracing effort of development of Blue economy (Rijiju, 2025) and will lead the world through her maritime and under the sea invasion.

Vessels - both passenger & cargo - pose a threat to maintaining biodiversity in ocean space, adding to the attack of pirates in Indian Ocean territories both in present and in future, necessitates the all-embracing help of Indian Coast Guard. They are the maritime law enforcement authority who have almost traced all the details of the entry of Ajmal Kasav and his team for anti-terrorism attack in Mumbai and regularly preventing entry of foreign nationals through the Indian Ocean - Bay of Bengal. The research and related technology will help to attain sustainable development goals.

References

- Patel, N., et al. (2025). *India's blue economy: Strategy for harnessing deep-sea and offshore fisheries*. NITI Aayog.
- Patil, P. G., & Virdin, J., et al. (2018). *Towards a blue economy: A pathway for Bangladesh's sustainable growth*. World Bank. <https://doi.org/10.1596/30014>
- Ninawe, A., & Indulkar, S. T. (2019). Blue economy mission: India's focus. *Herald Journal of Aquaculture and Fisheries*.
- Rijiju, K. (2022). Why India will lead the blue economy. *IMW: India Podcasts*.
- Singh, M. (2022). Blue economy. *Yojana*, 29–33.
- Ministry of Earth Sciences. (2025). *Transforming India's blue economy: Investment, innovation, and sustainable growth*. Government of India.

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