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Its 73<sup>rd</sup> issues have been published without any break since its inception.

In an era driven by innovation, critical thinking, and knowledge integration, Jamshedpur Research Review (JRR) stands as a dedicated platform committed to promoting high-quality interdisciplinary research. Established with the aim of nurturing academic excellence, this peer-reviewed journal seeks to bridge diverse fields of knowledge, ranging from the humanities and social sciences to science, technology, management, and emerging disciplines.

Located in the industrious heart of Jharkhand, JRR reflects the progressive spirit of Jamshedpur — a city that epitomizes the confluence of industrial legacy and academic ambition. The journal encourages original contributions that challenge conventional boundaries, foster academic dialogue, and contribute meaningfully to national and global discourses.

**Scope and Focus-** Jamshedpur Research Review publishes scholarly articles, empirical studies, conceptual papers, critical reviews, and case studies. The journal's inclusive scope welcomes submissions from researchers, academicians, policy practitioners, and professionals who strive to make a substantive impact through evidence-based and reflective inquiry.

### **Objectives**

- To provide a robust academic forum for interdisciplinary research and knowledge dissemination.
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- **Call for Papers:** Research papers are invited for publication in 60th issue of the journal. Last date for paper submission is 30 August 2025. The issue is scheduled to be published in the month of November 2025 (Email: [editorjrr@gmail.com](mailto:editorjrr@gmail.com))

## Editorial

*Jamshedpur Research Review: International Journal of Multidisciplinary Research*  
Year 13, Volume 6, Issue 74, September–October 2025

With great pride and intellectual enthusiasm, we present the September–October 2025 issue of *Research Review: International Journal of Multidisciplinary Research*. Now in its 13th year of publication and 74th issue, the journal continues to provide a vibrant platform for diverse scholarly voices, bridging classical traditions with contemporary challenges, and disciplinary expertise with interdisciplinary dialogue. This issue, like the times in which it emerges, reflects a society in flux—culturally dynamic, economically aspirational, environmentally conscious, and educationally innovative.

One of the striking features of this issue is its **breadth of themes**, ranging from performing arts and literature to finance, economics, education, environment, and industrial studies. At a time when research is often compartmentalized, the collection of papers in this volume exemplifies the value of crossing disciplinary boundaries to enrich academic discourse and social understanding.

We begin with an exploration rooted in India's cultural heritage. Miss Dhvani B. Shah's **psycho-analytical study of performer–audience relationship in Bharatanatyam** is more than a work on dance—it is a reflection on the spiritual dimensions of artistic communication. By bringing in the elements of divinity and spirituality, the study invites us to consider performance not only as entertainment but as a transformative encounter between performer and spectator. This cultural inquiry resonates with Debashis Sinha Mahapatra's essay on the **enduring influence of Bengali literature on Indian culture**, reminding us how language, art, and performance continue to shape identity, memory, and imagination in society.

This emphasis on cultural continuity seamlessly connects with contemporary debates in **education and pedagogy**. The issue includes papers that directly engage with the challenges of teaching, learning, and knowledge transmission in the 21st century. Kamalesh Karan and Dr. Ajit Mondal examine **school internships among trainee teachers** and their relevance in the era of modern teaching skills. Similarly, Syed Razaur Rahman and colleagues present **transformative approaches to educational issues**, while Dr. Ghufrana Begum sheds light on **innovation in the context of the National Education Policy (NEP) 2020**. Together, these contributions show how reforms, training, and new frameworks can shape more inclusive, innovative, and future-ready systems of learning.

The issue also offers a robust cluster of works on **sustainable development, tribal livelihoods, and environmental concerns**, all of which are urgent in today's ecological and socio-political context. Dr. Jyoti and Dr. Avadhesh Singh's article on **green marketing** highlights how sustainability is increasingly becoming a strategic tool for businesses. This perspective is grounded by field-based studies such as Priti Priya's case study on **forest reserves in Jharkhand**, Neelam Tiwari's research on **forest resources and socio-economic development in Saraikela-Kharsawan**, and Priti Singh's exploration of the **problems and prospects of tribal working women in small-scale industries**. Similarly, Dr. Nitesh Raj and Deepa Pal investigate **digital literacy among Jharkhand's artisan tribes**, while Puja Kumari and Dr. Harmeet Kaur probe the unique psychological dimension of **climate anxiety among coal miners**. These works collectively emphasize that environmental change, when seen through the lens of local communities, reveals the deep interconnections between ecology, economy, labour, and psychology.

Another strong thread in this issue is the **intersection of economics, finance, and management**. Studies such as Sweta Kumari and Dr. Neelu Kumari's **trend analysis of FDI in the cement and gypsum sector**, Dr. Debabrata Jana's **study of dividend policy in power sector companies**, and Dr. Manash Pratim Sarmah's **analysis of mutual fund investors in Assam** extend our understanding of

market behaviour and financial decision-making. In addition, Bittu Prasad and Dr. Satish Kumar Gupta examine **financial management and NPAs in public sector banks**, while Mayuri Dutta provides insight into **digital banking adoption among young adults**. Together, these studies provide critical knowledge on financial markets and institutional practices, crucial for both policymakers and investors navigating a volatile global economy.

Equally important are contributions focusing on **labour, employment, and human resource practices**. Jagrat Sadarang and Dr. Mamta Manshani analyze the **impact of skill development programs on the employability of tribal populations**, reinforcing the link between education, industry, and empowerment. Madhuri Kumari and Prof. Ashfaque Alam provide a comparative study of **HRM practices in JSPL and BSL**, while Rupam Ratre with T.R. Ratre investigate the **changing landscape of India's labour market and job security**. These inquiries, grounded in empirical reality, highlight both opportunities and uncertainties in India's rapidly transforming workforce.

Adding a historical and visionary dimension, Rajesh and Rupam Ratre revisit **Sardar Vallabhbhai Patel's vision and its connection to the informal sector's role in rural economic development**. Their work serves as a reminder that the challenges of today must often be met with the wisdom of past leaders who envisioned unity, resilience, and rural empowerment. GVRRS Shastri's timely contribution on **women's workforce trends in India** complements this perspective, bringing gender into the centre of discussions about work, development, and equality.

What unites this diverse set of contributions is their **commitment to relevance**. Whether analyzing an ancient dance form, dissecting fiscal policies, investigating tribal livelihoods, or probing the anxieties of coal miners, the authors of this issue place human society at the heart of their inquiries. This is the true essence of multidisciplinary research: to see beyond the boundaries of subjects and engage with the lived complexities of human life.

We extend our deepest appreciation to the contributors for their rigorous scholarship, to the reviewers for their critical guidance, and to our readers for their continued engagement. It is our hope that this issue will not only inform but also inspire—encouraging future scholars to take up research that bridges gaps, challenges assumptions, and addresses the pressing needs of our times.

With this, we are proud to present the 74th issue of *Research Review*, a milestone in our ongoing journey to nurture scholarship that is both diverse and transformative.

- Editor( Guest)

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- **Dr. Sanjive Kumar Singh**

- Principal, Gyan Chand Jain (G.C. Jain) Commerce College in Chaibasa, Jharkhand,  
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# PSYCHO ANALYTICAL STUDY OF PERFORMER AUDIENCE RELATIONSHIP WITH REFERENCE TO DIVINITY AND SPIRITUALITY IN BHARATANATYAM

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## **Abstract:**

This paper explores the aspect of dance, most specifically Bharatanatyam, through the lenses of spirituality and divinity at various levels. Various elements and practices in Bharatanatyam highlight its deep connection with dance as a spiritual practice. To such an extent to being called Sadhna. The Aharyam of the dancer is based on spiritual theories and beliefs connecting the dancer further to the Divine. Indian Classical Dance forms have their origins rooted in the worship rituals in temples before reaching the theatre as a performing art. Furthermore, the Guru plays a fundamental role in the life of a dancer as student who surrenders himself to the latter. Bharatanatyam explores the aspects of the divine feminine and masculine, both essential aspects of creation as per philosophy, through tandav and lasya. The journey of the dancer is like the churning of the ocean, difficult at base to ultimately evolutionary through which the dancer merge out pure and divine. This elevates them to sacred being, beautiful from within, despite all the outwardly physical attributes. The repertoire and margam of Bharatanatyam which students learn during their training as at core spirituality based on Holy Scriptures. Hence engaging the audience with awe and bliss.

**Keywords:** Sadhna, Worship, Aharya, Bhakti, Natyashatra, Ornaments, Tandav, Lasya, Raakkodi, Brahmarandhra, Devadasi, Bharatamanyam

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*"Dance is our pulse, our heartbeat, our breath. It's the rhythm of our life. It's the expression in time and movement, in happiness, joy, sadness and envy."*

Bharatanatyam- 'Bhar' for bhava, 'Ra' for Raag and 'Ta' for Taal and 'Natyam' for abhinaya. One of the most ancient dance forms of India, it is a reconstruction of the dance form Sadir and originated in the state of Tamil Nadu. It was performed in the temples in the honour of Gods by the temple dancers called Devadasis. One would observe the sculptures in Hindu temples resemble the dance postures of Bharatanatyam. The main devotee has to offer services named "Shodasha Upachara" "sixteen hospitalities" which please deity in Hindu temple. Music & Dance are among the sixteen hospitalities. Bharatanatyam is a solo dance, with two aspects, lasya, the graceful feminine lines & movements, and tandava, masculine aspect. Bharat Muni's Natyashastra is one of the major

texts of Bharatanatyam and it is also said that the name of the dance originates from the author's name.

Dance is a form of expression of one's inner self and inner being. When you live something in all its states and forms, it does not remain a mere form of talent or art; it becomes a way of life; that is what Dancing in general and Bharatanatyam in specific has been for me all these years. I was ten years old when I first got acquainted to the mesmerizing world of Bharatanatyam. It has been a journey of self-exploration and the pursuing the divinity for two decades.

‘Dance is the mother of all arts. Music and poetry exist in time, painting and architecture in space. But the dance lives at one in time and space. The creator and the thing created, the artist and the work are still one and the same thing. Rhythmical patterns of movement, the plastic sense of space, the vivid representation of a world seen and imagined these things man creates in his own body in the dance before he uses substance and stone and word to give expression to his inner existence. (1) One of the most difficult dance forms Bharatanatyam is most difficult dance form in many aspects. Since its inception from the temples of South India, it has been a way to communicate, praise and worship the divine, which remains till this day. All the themes and pieces of the performances are tales and appraisals of the Gods. Every mudra, eye movement, stance, expression and their different combinations are clear depictions of God, or the masterpiece crafted by Him-nature and the minute details of the mundane human life and expressions.

It is not only the technicalities of the dance form that distinguish it from all other forms but also the culture that it imparts and carries within. Originally being taught at Gurukuls, it has travelled all round the world to various cities, states and nations. But one thing that has not changed and will remain the same forever is the value system. The Gurus who are the masters of the dance form impart a tradition of mutual respect, sensitivity, respect for all the beings-living or non-living on this earth, and a sense of belonging to the divine to the disciples.

The Bhoomi Pranam done before the onset of the performance exemplifies this, wherein one is supposed to bow in front of the Gods, Mother Earth and the Guru and seek permission and ask for forgiveness from Mother Earth for inflicting pain upon her by dancing on her.

Discipline and sincerity being of utmost importance for anybody who wants to learn Bharatanatyam. Practicing and performing Bharatanatyam is a lifetime experience. There's nothing which this art form can't depict. The tales of the Gods are narrated with complete stature and perfection. The act of performing it connects you to the supreme power in a way that you feel His presence. A new person is born within, and the soul meets its master. It inculcates a whole new energy, and you feel His

power completely. If spirituality has anything to do with worship, it's the first thing that binds the human mind, heart and soul to the Omnipresent through Bharatanatyam.

Since ancient times Indian Classical Dance was a sacred Art, practiced and performed mainly in Temples. The Indian Classical Dance is basically a Prayer or a Puja, performed by the dancer to beautiful music, adorned with colorful divine dresses and ornaments, for the glorification of the Divine. It is an eternal art, having come from Lord Shiva and Divine Mother Parvati down to earth to inspire and uplift the suffering human beings. This dance was originally meant to please the Divine and to be a powerful means to bring the dancer as well as the audience back to its final destiny, God-experience.

Beauty is an essential attribute of the Divine. Absolute Beauty and the Divine are one and the same. The Divinity, the Divine Mother, is indescribably beautiful, aesthetic, tender, sweet, subtle, charming and attractive. Therefore, in the Indian Classical Dance, which is essentially an expression of Divine Grace and subtle Divine Beauty, very much emphasis is laid upon Beauty and Elegance of the dance-movements as well as the appearance of the dancer. In ancient times the Temple-Representative of the Divinity. (2) The real Temple Dancer was supposed to be highly dignified, pure, of good moral character, very well educated and exclusively devoted to divine ideals and aspirations.

The outer appearance of the Temple-Dancer, the dresses, the jewels, etc., were arranged in such a way, that everyone got the impression, that not an ordinary human being is dancing, but a vibrant, beautiful, real Divinity is dancing. Even now, in the present performances of Indian Classical Dance, especially in the Bharatanatyam and Kuchipudi-styles, very much emphasis is laid upon the Divine appearance of the dancer. The costumes and ornaments, used in these dances, are extremely beautiful and colourful. The ornaments are so attractive, that they immediately delight the eyes and heart of the viewers.

Those attractive dance-ornaments, whose original design is derived from the Temples, are not only beautiful to look at, but at the same

time they have a deep mystical meaning. Some dancers put on their long hair-braid, along the spine, a snake-like, shining ornament, representing the Kundalini-Power. Above the hair-braid, at the height of the neck area, white, orange or different colored flowers are arranged sometimes in such a way, that they resemble the hood of a cobra, which, in this case, is symbolizing the awakened Kundalini Shakti. Above this, on the upper part of the back of the head, is put a beautiful ornament in the form of a disc, approx. 6 or 7 cm in diameter, on which glittering stones are fixed. This shining disc is usually surrounded with white flowers. Some people say that this ornament represents the Brahmarandhra. In Tamil language this circular ornament, worn on the crown of the head, is called "Raakkodi".

When a dancer performs with the inner soul connected to the ultimate power of the universe, because of utmost purity in heart, selflessness, and immense devotion to the Divine, this Nectar of Immortality starts "melting", it flows down through innumerable subtle channels and floods the dancer with indescribable Bliss, a divine Ecstasy, accompanied by unending Peace, Joy and Wisdom.

The tiny, glittering stones or the small white pearls, seen in this ornament, represent the drops of the flowing Nectar of Immortality. There are other dance-ornaments, which are having spiritual meanings, too, like for example different necklaces, belts etc., with shining colorful stones in very appealing and attractive designs. These ornaments indicate the different chakras, the throat-chakra, the heart-chakra, etc.

The above-mentioned explanations concerning the use of beautiful dance-ornaments in Indian Classical Dance, prove, how closely this art is connected to the Temples, to the mystical, Divine Beauty. But the outer beauty of the dancer, the beautiful ornaments and costumes should not be a pure formality or show. One should never forget that the outer beauty should remind us of the Beauty of Beauties, God, and the living, omnipresent, omnipotent Divine Mother. To realize and express real Divine Beauty the dancer must therefore try to become a completely divine personality.

A dancer may be outwardly beautiful and technically perfect, but if he or she is not a saintly or divine personality, one may compare this dancer to a tasteless soup without salt or a beautiful flower without sweet fragrance. On the other hand, there may be a dancer, who may or may not be outwardly so beautiful or technically perfect, but fully divine. If such a divine dancer performs a dance, the whole world will be attracted to such a person the divinity and spirituality transform to the audience through that dancer/performer.

Nandikeshwara emphasizes its importance in the following way, "Where the hand goes, the eye follows, where the eye goes, the mind follows and where the mind goes, rasa is born."<sup>(3)</sup> The movements of the Indian Classical Dance are very subtle and aesthetic. Usually, elegance and grace come only after a long and dedicated practice of this art. Dancers, who have acquired this grace and elegance, can inspire everybody by their charming personality and appearance, even in the "normal" day to day life. With the help of special hand-gestures, called "Mudras", the dancers can convey myriads of meanings. The subtle and soft, but at the same time very clear hand-gestures and movements, are exquisitely counterbalanced by powerful, rhythmic footwork, which gives a lively and ecstatic expression to the dance-performance.

The sometimes very complicated footwork in the Indian Classical Dances requires a lot of concentration from the dancer, which can be a wonderful help to transcend the mind, forget the individual self and merge with the Universal Self. the Paramatma, which is the true aim of each: Sadhana, also the Indian Classical Dance. One among many practical examples, how powerful rhythm and footwork is used as means for one-pointed concentration, is the last item of an Odissi-dance performance, which is called "Moksha", meaning "Liberation". Through this item the dancer tries to surrender completely to the Divine through very powerful footwork and ecstatic dance movements. Other than Bharatanatyam the same aspect is seen in other Indian Classical Dances, too, like in the North-Indian Kathak-Dance, and in Kuchipudi.

Margam is the core aspects of Bharatanatyam when it comes to training and performances. Margam etymologically comes from the word

“marg” which translates to path. The Margam or repertoire on Bharatanatyam consists of a series of items set in a specific order which elevates the dancers physically, cardio vascularly, emotionally and spiritually. The performance and the training are both considered as a tapasya or austerity which evoke surrender and divinity in the dancer. Nritya pieces or abhinaya based Dance pieces of the Margam such as Pushpanjali, Kauthavam, Shabdam, Varnam, Padam, Keertanam, Javali, Ashtapadi and Thillana are based on sahitya or literature on God and Goddesses from the holy scriptures and mythology of Hinduism and lately various other religions such as Islam, Buddhism, Christianity and Jainism. Even pure Nritya kriti or piece which are not necessarily based on any sahitya have the spiritually and Divine allegory attached to them. Alarippu is a piece which gives a simile or description of a temple and its gopuram. It also means a blossoming of a flower in Kannada which is offered to the Gods. Furthermore, Mallari is an item influenced by the dance performed in front of the procession of the Deity whereby devadasis would dance in front of the chariot or palanquin of the latter. Hence, these practices and influence of Bharatanatyam through the lenses of training and performances supports the fact that spirituality has always been part and parcel of the Bharatanatyam practice since its time of inception. Bhakti plays a great role in the Indian Classical Dance, since the dancer worships the Divine through the dance, tells stories of the Divine through dance, and even must represent the Divinity in the dance. Here the dancer must try to identify herself completely with the Divinity and by this the same aim can be achieved, the final merging of the individual self with the Divine Mother or the Absolute, the Paramatma, which is called "Para bhakti" (the highest state of Devotion). Indian Classical Dance is so immensely rich in divine values that it really deserves to be called a "Sadhana", a way to God-experience. It trains the physical, artistic, musical, intellectual, ethical and devotional abilities of a student. If practiced properly, it can discipline and heal body and mind, it can inspire and delight through its immense aesthetic appeal and divine beauty and it is also a kind of visible "divine music". But the most important thing is, that the dancer and the audience are constantly reminded of the

Divine, since the dance is performed for the Divine and for describing the glories of the Divine. This art can be a powerful inspiration and enrichment for the lives of so many, also for the children. But it should not be misused for selfish purposes, otherwise it will lose its power and beauty. The immense educational value of the Indian Classical Dance should not be underestimated. The hidden mystic treasures of the Indian Classical Dance, especially the Indian Temple Dance or the Devotional Indian Dance deserve to be appreciated in the whole world. According to my opinion, no other dance in the world has a match to this divine form of dance.

We can conclude as it was not a dance as such, it was an Adoration of God. Through the movements of her body, she worshipped God. It has cosmic dimension. It affects the nature. Dance creates a beautiful world which is beneficial for society, nature and the whole world. Dance is an education of making ourselves and others happy. The audience and performer both went into a divine and spiritual world during Bharatanatyam performance.

#### **References:**

1. Curt, Seschs. World History of the Dance. Quoted from V. Bruce: Dance and Dance Drama in Education. Pergamon Press: Oxford, 1965.
2. Amrit Srinivasan, "Reform and Revival: The Devadasi and Her Dance", Economic and Political Weekly, Vol. XX, No. 44, 2 November 1985, pp. 1869-1876.
3. Ghosh, Manamohan. Nandikeshwara's Abhinayadarpanam: A Manual of Gesture and Posture used in Hindu Dance and Drama. II ed. Firma K. L. Mukhopadhyay: Calcutta, 1957.
4. Hazrat Inayat Khan. The dance of the soul: Gayan Vadan Nirtan. Motilal Banarsidass. 1927
5. Vaidhyanathan Saroja. The Science of Bharatanatyam. Kanishka Publishers, Distributors. Delhi, 2014
6. Satguru Sivaya SubramaniyaSwami. Dancing with Shiva. Motilal Banarsidass, 1947
7. Sarada S. Natyopasana: Spiritual Dimensions of Bharatanatyam. Vol I. Internet Archives. 2010

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# GREEN MARKETING AS A TOOL FOR PROMOTING SUSTAINABLE DEVELOPMENT

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## Abstract

Green marketing is an effective way to promote sustainable development. This research aims to investigate the potential of green marketing as a sustainable development tool and to assess the opportunities and difficulties for green marketing to promote sustainability. This research work makes use of secondary data sources and a descriptive research design through content analysis. The study paper examines the connection between sustainable development together with eco-friendly marketing furthermore how green marketing helps to advance sustainable development through the promotion of ecologically friendly goods and practices through green marketing. The research the findings suggest that green marketing may be quite significant. in promoting sustainable development by encouraging environmentally friendly behaviours and changing consumer behaviours. Furthermore, the research also demonstrates some of the difficulties faced by companies when implementing green marketing strategies, including low consumer awareness and understanding, high prices for sustainable products and services, and the difficulty of maintaining harmony between environmental sustainability and profitability. Overall, this research shows that green marketing is a powerful tool for supporting sustainable development given that companies invest in environmental management and sustainable practices.

**Keywords:** Consumer, Environment, environmentally friendly products, Green Marketing, Sustainability.

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## INTRODUCTION

Green marketing, commonly known as sustainable marketing, is an endeavor to create, advertise, charge for and promote environmentally friendly products. Greening is often employed to explain the process of changing the way of life to protect the environment. Businesses can enter the market by providing goods and services that respect the environment and conducting effective marketing. If business leaders can successfully implement their understanding of how to increase sales of green products, they can focus on effective marketing and advertising techniques that can improve the number of green items sold (Ann Georgie, 2022). These products and services are ecologically friendly or, in their own right, they are produced in an environmentally friendly manner, such as being

made sustainably. The main goal of sustainable development is to use resources to meet human needs and, at the same time, protect the environment, and this marketing strategy tries to balance the concepts of sustainability and sustainable development.

Green marketing is intended to meet customers' demands for eco-friendly products and services (Garca-Salirrosas & RondonEusebio, 2022). The consumer is consequently pickier and continually seeks to improve their reputation through greenwashing environmental and social concerns play a big role in marketing in today's commercial world. The primary reason for the rise in the earth's temperature is global warming, which is brought on by the combustion of fossil fuels and other Air pollution. As stated by the IPCC forecast, the



world's temperature will likely rise by 1.1 to 6.4 degrees Celsius between 1990 and 2100. This causes a rise in consumer interest in Environmental Protection on a global scale, which has sparked the evolution of green marketing to offer environmentally friendly and socially conscious products and services. Societies take on more environmental responsibility.

To adjust their behaviour towards societal concerns, corporate organisations do so (*PDF*) *A CONCEPTUAL STUDY ON GREEN MARKETING TOWARDS ORGANIC PRODUCTS*, n.d.). To protect their nation's natural resources, the welfare of society, and long-term sustainability, numerous governments around the world have attempted to put legislation into place. Therefore, it is everyone's social responsibility to practise green marketing in their daily lives, including businesses, firms, NGOs, cooperative agriculture organizations, farmers, middlemen, retail merchants and consumers. They make an effort to switch from conventional to organic methods, which are crucial for the expansion and long-term sustainability of the environment and society. The idea behind green marketing is to protect the working environment. There are numerous issues with contemporary marketing.

Growth in marketing activities led to an accelerated economic process, production using cutting-edge technology, a high standard of living, Intense competition, the use of unhealthy marketing tactics and techniques to attract customers, exaggerated advertising, globalization and liberalisation, the formation of the multinational corporation, massive MNC Retailing and distribution, and other factors that led to the creation of numerous issues (Nayak, 2022). Therefore, the research problem for the research study is green marketing plays a critical role in promoting sustainable development by encouraging individuals and businesses to adopt more environmentally friendly and sustainable behaviours. By promoting sustainability, green marketing can help to protect the environment, conserve natural resources, and create a more sustainable future for all.

Green marketing research is essential for long-term success if sustainability is given priority.

Understanding consumer preferences, developing sustainable products, reducing environmental impact, building customer loyalty, and fulfilling regulatory requirements can result in a more sustainable future. Green marketing research helps companies identify the need for sustainable products and services. By understanding consumers' needs and preferences, companies can develop sustainable products that may be successful in the market. This research aims to investigate the potential of green marketing as a sustainable development tool and to assess the opportunities and difficulties for green marketing to promote sustainable development. The following describes how the paper is organized: In section two, the literature review is covered. The methodology part is presented in section three. Section 4 discusses the result and the fifth or last section represents the conclusion.

## **LITERATURE REVIEW**

A detailed overview of the literature and research papers available on research questions and research topics is a critical part of scholarly investigations and literature reviews. Throughout the literature review, we give a general overview of the state of knowledge in specific areas, identify research gaps and identify the areas that need further attention research. The review of the literature examines information published on a particular subject, sometimes at a certain time. The review of the literature on advanced topics addresses the requirement that criticize the increasing and diverse knowledge body, furthermore possible future reinterpretation (Ramdhani et al., 2014). The second category of literary evolution deals with new or evolving topics that can benefit from it through conceptualization and synthesis of the literature. Since these issues are still relatively new and have not yet seen the development of the literature, the review is more likely to provide an initial or preliminary conceptualization of the subject and search for a new model, or framework. This component of the research study covered the relationship between sustainable development and green marketing furthermore how green marketing helps to advance sustainable development.

Long-term thinking and dedication to striking a balance between economic growth and social and environmental concerns are necessary for sustainable development. It aims to bring about a future where social justice, economic success, and environmental responsibility are all activities pursued. Sustainable development encompasses a wide range of ideas, such as sustainable agriculture, renewable energy, sustainable transportation, sustainable cities, and sustainable patterns of consumption and production. Cooperation and coordination between many sectors and stakeholders, such as the government, business, and civil society groups, individuals are necessary to achieve sustainable development. Sustainable development aims to provide human needs while safeguarding the environment so that both current and future generations can benefit from them. The definition of sustainable development that has subsequently been most widely used was developed by the Brundtland Commission and is as follows: Development that fulfils existing wants without jeopardising the potential of future generations to satisfy their own needs. Sustainable development has become a widely accepted development model (Saxena, R. & Khandelwal, P. K. 2010).

Today, groups that provide international help, planners for development, educators and activists involved in environmental and development concerns, utilize it. The notion appears to have attracted the widespread attention that other development concerns lacked, and it appears prepared to replace the current development paradigm for an expanded period. However, there are rumblings of unhappiness about the notion despite its popularity and persuasiveness since there are still many questions about what it means implies and will entail for development theory and practice.

Like the popular and hyperbolic term, "sustainable technology" sustainable development faces the possibility of becoming a cliché that no one can clearly define (Mensah, 2019). Green marketing is the technique of promoting goods or services that are ecologically responsible, sustainable or otherwise possess a favourable impact on the surroundings. The goal of ecologically beneficial advertising is to persuade customers to make more ecologically responsible purchases and to persuade

companies to adopt more favourable environmental procedures. To examine how marketing impacts the environment, The American Marketing Association workshop attempted to bring together academics, business leaders and public policy officials. Ecological marketing was described at this workshop as the investigation of the benefits and drawbacks of marketing operations concerning the depletion of non-energy resources and energy resources due to pollution. Green marketing has been through numerous stages of development. Each level includes unique traits furthermore varying environmental and situational requirements.

The first green marketing era, ecological green marketing spanned from the 1960s through the early 1970s. This period was characterised by a focus on external environmental issues, including air pollution. The second phase, known as green environmental marketing, began towards the end of the 1980s and saw the emergence of new ideas related to clean technology sustainability consumers and competitive advantages. The primary distinction between the first and second eras was that the first era concentrated on environmentally friendly industries, whereas the second era's environmental marketing embraced all forms of industry and service including tourism. The second era was unable to last due to escalating social demands and expectations moreover stringent government. Sustainable development had a significant economic impact on the area of marketing science (Delafruez et al., 2014). Several businesses recognize the significance of the green market and are moving in that direction. Patagonia: Environmental responsibility has always been upheld by the textile company.

To emphasize its commitment to sustainability, the company uses a variety of green marketing techniques in addition to including eco-friendly components in its product. For instance, it has started a campaign to get consumers to recycle and fix existing garments instead of buying new ones. Body store: In addition to using natural and eco-friendly components in its products, the body store engages in an assortment of green marketing initiatives. For instance, it has started efforts to spread awareness of environmental concerns, such as climate change and the need to protect species. The

business collaborates with numerous groups to advance social equity as well as sustainability objectives (Ramakrishnan, 2023).

## **METHODOLOGY**

This research study makes use of secondary data sources and a descriptive research design through content analysis. It is founded on secondary sources of data from a variety of research publications, including books, magazines, newspapers, journals and websites. The data is gathered from online resources. A descriptive research objective is to outline phenomenon features. What happened in this research is more significant than how or why it occurred. The goal of descriptive research is to describe a phenomenon and its characteristics. In this study, what happened is of greater importance than how or why it happened. For the aim of describing and analyzing the traits or actions of a population, group, or phenomenon, descriptive research is a sort of research approach (Nassaji, 2015). By gathering and examining data without modifying or manipulating any factor it focuses on providing answers to what and how question.

To find out more details on a certain subject or phenomenon, descriptive research is frequently employed in the social sciences, business, psychology, and other disciplines. Different research techniques, including surveys, questionnaires, interviews, observations, and case studies, can be applied to undertake it. A study technique called content analysis is used to examine and understand the properties of different types of communication, Such as text pictures and audio. It entails methodically examining the information included in these materials, spotting trends, themes and other pertinent elements and making deductions or conclusions from the results (Hassan, 2022). A broad variety of subjects may be studied using content analysis, including political speeches, commercials, Internet conversation and media coverage of social concerns. It is frequently used in qualitative research and could be employed in conjunction with other techniques to provide a more thorough knowledge of a certain occurrence.

## **FINDINGS**

The study will examine how the promotion of ecologically friendly goods and practices through green marketing can help promote sustainable development. It can examine how green marketing techniques affect consumer behaviour and stimulate people to adopt sustainable consumption habits. The study could also explore how companies can support sustainable business practices and green marketing and its potential benefits to the environment, society and economy. Overall, the study paper can conclude that, by encouraging environmentally friendly behaviours and changing consumer behaviours, green marketing may have a significant impact in promoting sustainable development. To achieve a more sustainable future, it can furthermore emphasize the requirement for continuous studies and collaboration between companies, governments and civil society. To achieve a more sustainable future, it can also stress the need for continued research and cooperation between enterprises, governments and civil society, and address the difficulties and limitations of green marketing and sustainable development. Green marketing might be a crucial component in promoting sustainable development. First, it can contribute to promoting environmentally friendly behaviours and minimizing the negative environmental impact of goods and services.

Promoting utilizing ecologically friendly materials, reducing energy consumption and reducing waste production throughout the product's lifetime will help. Second, green marketing can contribute to increasing consumers' knowledge of environmental concerns and the significance of sustainable practices. This can be done by promoting the environmental benefits of products and services through advertising, public relations and other communications tactics. Thirdly, promoting innovation and technical development to support sustainable practice can contribute to promoting sustainable development. This may be accomplished by stimulating the study and creation of environmentally friendly technologies such as renewable energy sources and the adoption of sustainable production and manufacturing practices. Finally, green

marketing can support sustainable development by opening up business opportunities in the green economy, which focuses on the development and promotion of environmentally friendly goods and services. Support for environmentally friendly behaviour, promoting employment and economic prosperity. Overall, green marketing has a significant part in cultivating consumers' environmentally conscious behaviours, supporting innovation and technological improvements, and creating economic opportunities in the green economy.

Socially and ecologically responsible marketing is called green marketing. Green marketing aims to promote sustainable development by encouraging ecologically conscientious consumer behaviour. A recent study found that consumers are increasingly concerned about environmental problems and are prepared to pay extra for products that are better for the environment and services. Using green marketing can therefore be beneficial to distinguish yourself from competitors and attract environmental-related clients. As a result, it is possible to successfully attract clients who are concerned about the environment through green marketing and stand out from the crowd. However, some of the green marketing promises, sometimes known as greenwashing, raise questions about their credibility. Regulation and certification are now needed to guarantee that companies are genuinely trying to be environmentally friendly. The growing research into sustainable development is another area of research that compliments green marketing and aims to meet current needs without compromising future generations' capacity to meet their own needs. Environmental, social and economic sustainability is all part of sustainable development and requires a comprehensive strategy to solve the world's most urgent problems. In general, green marketing can promote sustainable growth but must be honest and transparent to win customers and have a real impact on the environment.

## **CONCLUSION**

The research investigated the idea of environmentally friendly marketing to promote sustainable development. The study showed that green marketing can greatly support sustainable development by raising consumer

awareness and the desire for green products and services. The article also emphasizes the importance and benefits of using green marketing techniques for companies. The research also demonstrates some of the difficulties faced by businesses in implementing green marketing, including low consumer awareness and understanding, high prices for sustainable products and services, and the difficulty of maintaining harmony between environmental sustainability and profitability. Overall, the findings of the study paper indicate that green marketing can be successful in encouraging environmentally friendly development. Companies can increase their revenues by marketing while providing eco-friendly products and services to benefit both the environment and society as a whole. To gain customer confidence and criticism, companies must approach green marketing with honesty about sustainability and openness to environmental practices. Furthermore, the research examines the concept of ecologically conscious advertising and its role as a tool for sustainable development. The article examined many ways in which green marketing is potentially used to support the creation of sustainable products and services and also to promote environmentally friendly behaviour and consumption patterns.

This study, through an analysis of the research on eco-friendly marketing sustainable development, demonstrated the importance of incorporating green marketing techniques into corporate practices, which include increased client loyalty, improved brand recognition and reduced environmental impacts. Other problems facing companies when implementing eco-friendly advertising techniques identified in this document include the difficulty of accurately obtaining information about the environmental impact of goods and services, the possibility of greenwashing and the requirement that continuously invest in sustainable practices. Overall, this research shows that green marketing is a powerful tool for supporting sustainable development as long as companies invest in environmental management and sustainable practices. To achieve long-term economic success while contributing to creating a sustainable future for everyone, companies should consider the integration of green marketing into their overall sustainability initiatives.

## Reference

1. Ann Georgie, N. (2022). Article on Green Marketing. Delafrooz, N., Taleghani, M., & Nouri, B. (2014). Effect of green marketing on consumer purchase behaviour. QScience Connect, 2014, 5. <https://doi.org/10.5339/connect.2014.5>
2. García-Salirrosas, E., & Rondon-Eusebio, R. (2022). Green Marketing Practices Related to Key Variables of Consumer Purchasing Behavior. Sustainability, 14, 8499. <https://doi.org/10.3390/su14148499>
3. Menshah, J. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review. *Cogent Social Sciences*, 5(1), 1653531. <https://doi.org/10.1080/23311886.2019.1653531>
4. Nayak, M. (2022). GREEN MARKETING -THE CHANGING WAY OFMARKETING. *Journal of Interdisciplinary Cycle Research*, 14.
5. Saxena, R. & Khandelwal, P. K. 2010, 'Sustainable development through green marketing: The industry perspective', The International Journal of Environmental, Cultural, Economic and Social Sustainability, vol. 6, no. 6, pp. 59-79. © 2010 (selection and editorial matter)
6. (PDF) A CONCEPTUAL STUDY ON GREEN MARKETING TOWARDS ORGANIC PRODUCTS. (n.d.). Retrieved April 16, 2023, from [https://www.researchgate.net/publication/369553934\\_A\\_CONCEPTUAL\\_STUDY\\_ON\\_GREEN\\_MARKETING\\_TOWARDS\\_ORGANIC\\_PRODUCTS](https://www.researchgate.net/publication/369553934_A_CONCEPTUAL_STUDY_ON_GREEN_MARKETING_TOWARDS_ORGANIC_PRODUCTS)
7. Ramakrishnan, M. (2023, January 13). *What is the Importance of Green Marketing? A Complete Guide*. <https://emeritus.org/blog/sales-and-marketing-importance-of-greenmarketing/>
8. Ramdhani, A., Ramdhani, M., & Amin, A. (2014). Writing a Literature Review Research Paper: A step-by-step approach. *International Journal of Basic and Applied Science*, 3, 47–56.
9. Kumar Kar, S., & Harichandan, S. (2022). Green marketing innovation and sustainable consumption: A bibliometric analysis. *Journal of Cleaner Production*, 361, 132290. <https://doi.org/10.1016/j.jclepro.2022.132290>
10. Vijai, C., & Anitha. (2020). *The Importance of Green Marketing*.
11. Hassan, M. (2022, October 4). *Content Analysis - Methods, Types and Examples*. <https://researchmethod.net/content-analysis/>

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# SOCIAL CONFLICTS AND ITS RESOLUTION

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## Abstract

Social conflict is an inherent aspect of human societies, arising from competition over limited resources, power struggles, and incompatible group interests. This research paper examines the nature, forms, and resolution methods of social conflict, with a focus on intergroup dynamics and real-world case studies, such as India's caste-based disputes. It explores overt, objective, and subjective conflicts, analyzing how power imbalances and marginalization fuel tensions. The discussion then shifts to conflict resolution strategies, including mutually beneficial goals, compromise, prosocial behavior, and scientific approaches (win-win, lose-lose, and win-lose methods). Drawing on Blake and Mouton's conflict management models, the research paper emphasizes mediation, dialogue, and systemic reforms as pathways to sustainable peace. By integrating sociological theories, psychological insights, and empirical examples, this study highlights the importance of inclusive policies and cooperative problem-solving in mitigating social strife. The findings underscore that while conflict is inevitable, its destructive consequences can be minimized through structured intervention and equitable resource distribution, fostering social harmony and collective progress.

**Keywords:** Social Conflict; Conflict Resolution; Mediation; Negotiation; Peacebuilding; Reconciliation

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Any society, whether Indian, British, American, or Japanese, consists of various institutions and groups of individuals. Each of these groups has its own unique identity. Additionally, these groups pursue their own specific agendas. Moreover, no nation or society possesses the resources to satisfy the demands of all groups while maintaining harmony. As a result, these groups often find themselves in conflict as they strive to exploit limited resources and maximize their benefits or outcomes. This leads to a social environment where different groups within the society oppose one another to advance their own interests at the expense of others. Sociologists, psychologists, and anthropologists refer to this social phenomenon as social conflict or group conflict. Social conflict becomes apparent when one social group assesses its benefits and feels marginalized by other groups, or when it believes it is being denied what is rightfully available to other groups in society.

## Nature of Social Conflict:

Social conflict, also known as group conflict, arises when two or more individuals oppose each other during social interactions, mutually exerting social power to achieve limited or conflicting objectives while preventing their adversaries from succeeding. Group conflict or social conflict represents a social dynamic where actions are deliberately directed towards fulfilling the actor's own intentions against the resistance posed by other individuals or groups. Upon analyzing the definitions provided, several conclusions can be drawn:

Social conflict is fundamentally centered around social power. In nearly all forms of social conflict, the struggle for power is a key element. Gaining access to or control over power is crucial for a group's success in reaching its objectives. As a result, the dominant group prevails while the weaker group loses in the competition. For instance, the recent Gurjar movement in Rajasthan aimed at gaining entry into the scheduled tribes category was obstructed by the Meenas, another tribe in

Rajasthan. This obstruction was feasible because the Meenas have established themselves in the highest echelons of Indian services and currently wield significant political, bureaucratic, and economic influence. Their access to power has rendered them a formidable force. Consequently, they effectively thwarted the Gurjars' efforts to obtain tribal status and share in the benefits of reservation. Social conflict is characterized by incompatibility, meaning that in such conflicts, some individuals manage to achieve their desires while others do not. For many, their aspirations remain unfulfilled, leading to ongoing discontent. This incompatibility, once established, can spiral into a vicious cycle that is only disrupted by a strong social reform movement.

For instance, for many centuries, individuals from the Harijan community faced mistreatment at the hands of the so-called upper-class Hindus. They could only voice their concerns when figures like Mahatma Gandhi, Raja Ram Mohan Roy, and Jyotiba Phule stood up against this injustice, transforming it into a movement for the self-respect of Harijans, which highlighted the necessity for fair treatment of these individuals. Even so, only a minor impact could be achieved in the prevailing circumstances.

Typically, social situations are structured in such a way that not all individuals share the same or identical interests. Each person engaged in social interactions seeks to maximize their own benefits, often at the expense of others involved. This dynamic inevitably results in a struggle to succeed while hindering others from reaching their objectives. Nevertheless, it is challenging to identify a social scenario that can be characterized as a pure group conflict, akin to the struggle between two rival football teams. In most instances of social conflict, elements of cooperation are intricately woven together with competition.

**Forms of Social Conflict:** A social conflict can present itself in various forms and can manifest in multiple ways. Nevertheless, psychologists have recognized three distinct types of social conflict, which are as follows:

**Overt Conflict:** In this context, social conflict is overt and clear. The competition between the two parties is intense and straightforward. For instance, this can be seen in negotiations between management representatives and labor unions, or in warfare between nations. A simpler illustration of this is a debate, where one speaker highlights and defends their own perspective while challenging the validity of the opposing viewpoint. The clear objective is to overcome the opponent and secure one's own triumph.

**Objective Conflict:** Objective conflict arises when one group seeks to gain an advantage over another group or groups. Therefore, by objective social conflict, we refer to a social scenario that inherently favors some while resulting in losses for others. For instance, it is frequently observed that when the government implements welfare measures, certain individuals benefit more, while others receive less than anticipated, and some may even suffer losses. This situation leads to a form of social conflict termed objective social conflict.

Consider the situation regarding job reservations. The OBC category was allocated a 27% quota in government employment, which encompassed various castes. Nevertheless, only a handful of dominant castes within the OBC—specifically Jats, Ahir, Kurmy, and Kumawat—managed to secure the majority of the OBC quota, leaving other castes such as Gurjar and Luhars with minimal advantages. Consequently, members of these underrepresented castes began to feel marginalized and started advocating for a separate quota. The recent Gurjar movement aimed at gaining inclusion in the scheduled tribe category stemmed from this underlying conflict, as Gurjars struggled to compete with Jats and Ahirs within the OBC framework and were unable to receive comparable benefits.

**Subjective Conflict:** When an individual recognizes or interprets a situation involving struggle, it is referred to as subjective conflict. At times, a person may stay in a state of subjective struggle without expressing it openly.

**Methods of conflict resolution:** Similar to other issues, social psychologists have formulated various strategies to address social conflict. Some of the primary methods include:



- (i) **Mutually beneficial goals:** One common strategy to alleviate social conflict is to create mutually beneficial objectives. These objectives encourage the conflicting parties to collaborate closely, thereby diminishing feelings of group rivalry. In a classic experiment conducted by Sheriff and Sherif, two groups were placed in a competitive social scenario. It was noted that they quickly developed animosity and competition towards one another. The situation escalated to the point where both groups attacked each other's camps to undermine their chances of achieving their goals. In the subsequent phase of the experiment, both conflicting parties were placed in a scenario that required joint efforts to achieve a common goal. As neither group possessed enough resources to reach the goal independently, they had no choice but to assist one another in overcoming the challenges they faced. Before long, it was observed that members of both groups began to understand each other's concerns. They started interacting more frequently with members of the opposing group and appreciated each other's methods for addressing issues. Consequently, by the conclusion of the experiment, both groups had fostered a better understanding of one another, resulting in a significant decrease in feelings of conflict.
- (ii) **Compromise:** Achieving a compromise between the two parties also results in a decrease in conflict. A compromise is a scenario where neither party stands to gain or lose anything. Consequently, it gradually leads to a reduction in struggle. For instance, when the Gurjars in Rajasthan pressured the government for inclusion in the scheduled tribes, the Meenas strongly opposed their request as they had been the primary beneficiaries in Rajasthan. This disagreement escalated into open conflict, resulting in numerous casualties and bloodshed. Given that both communities are now situated in close proximity throughout Rajasthan, they quickly recognized the futility of their opposition. A compromise was reached, and an understanding was established whereby the Gurjars withdrew their demand for inclusion in the scheduled tribe but requested a separate quota for

themselves, which the Meenas agreed to support. Thus, under the new agreement, both parties stood to gain or lose nothing at the expense of one another.

- (iii) **Establishing unique norms:** The conflict between two opposing factions or groups can be mitigated by creating unique norms. For instance, in a game, the issue of who goes first can be resolved by assigning the decision to the umpire. This way, the point of contention is eliminated, thus removing the source of conflict. Psychologists have identified social conditions, based on research, where conflict and competition can be managed through the establishment of unique norms. They suggest that social conditions in which both parties possess the ability and willingness to influence one another are conducive to such interventions. This approach has reportedly been effective in various situations involving different communities.

- (iv) **Prosocial behavior:** Prosocial behavior refers to actions that foster positive social influence among individuals. Examples include charitable giving, working for the benefit of others, and assisting those in need. Research indicates that when community members engage in prosocial behavior towards individuals from other communities, it positively affects their perceptions and opinions, significantly reducing feelings of conflict and struggle. Psychologists have noted that when a person participates in prosocial behavior, particularly in helping someone in distress, they typically go through four stages:

1. Initially, the individual assesses the seriousness of the situation requiring assistance.
2. Next, the individual accepts responsibility for helping another person.
3. Subsequently, the individual enters a mindset where they genuinely wish to assist the person in need, and
4. Ultimately, the individual acknowledges their ability to provide help to another person.

**Application of scientific methods:** Social psychologists have proposed several scientific methods to mitigate group conflict, which include:

- a) Win-Lose method
- b) Lose-Lose method
- c) Lose-Win method.

We will now elaborate on these methods:

**(a) Win-Lose approach** – This approach involves one party or group employing various methods, strategies, and tactics to ensure the defeat of their opponent while securing victory for themselves. In essence, one group seeks to obstruct another from achieving their objectives, allowing them to attain their own goals. This approach is based on two fundamental assumptions: (i) that conflict exists among individuals.

The outcome for one party results in a loss for the other. In other words, only one party can achieve victory or reach their objective, while the other is destined to fail in the process. Conflicts are likely to arise in such scenarios. Given that conflict is unavoidable and there can only be one victor, the most effective strategy is to leave no stone unturned in ensuring the defeat of opponents and securing victory for oneself.

Success can be attained through socially acceptable methods, such as exercising our democratic rights, and to some extent, by employing subversive tactics like threatening opponents with severe consequences, enticing their allies to switch sides by offering various benefits, or even resorting to illegal activities as suggested. In summary, this approach embodies the age-old saying that everything is fair in love and war. Ultimately, it is the outcome that holds the greatest significance, rather than the means used to achieve that outcome.

**(b) Lose-Lose approach** – This method is referred to as the lose-lose approach because both party involved in the conflict is likely to benefit significantly, and they fail to achieve their desired outcomes. The foundational beliefs of this approach include:

- i. Something is preferable to nothing.
- ii. It is more advantageous to avoid conflict than to engage in it and squander resources.
- iii. The lose-lose approach is illustrated when groups come to terms with one another after initial conflicts.
- iv. A further trait of this approach is that it leads to a rapid resolution of the issue, disregarding the values and motivations of the individuals involved.

**(c) Win-Win Approach:** This method differs from the two previously mentioned approaches. It is regarded as the optimal solution for minimizing conflict between opposing groups. This approach requires both parties to engage in various cooperative strategies and techniques to consciously resolve the conflict, ensuring that all involved parties benefit as much as possible. The fundamental assumption of this approach is that it views conflict as a shared issue that can be resolved peacefully. It focuses on the challenges and concerns of both parties rather than on achieving victory. Both parties collaborate to find a solution to the problem, and the party that arrives at a solution first informs the other party.

### **BLAKE AND MOUTON STRATEGIES:**

According to **Blake & Mouton**, based on their research, individuals tend to adopt one of the following five strategies to reduce conflict and struggle, which are outlined below:

**Withdrawing:** This strategy involves resolving the issue by stepping away from the conflict situation (lose-lose approach).

**Smoothing:** This method focuses on highlighting areas of common interest while steering clear of discussions on contentious issues. Consequently, this approach aims to lessen the differences between the opposing parties (lose-lose approach).

**Compromising:** This strategy aims to reduce differences through dialogue (lose-lose approach).

Forcing: This method represents an all-or-nothing stance, taking a competitive position. It is a matter of either this way or that way (win-lose approach). Confrontation and problem solving: In this approach, both parties engage in open discussions about all issues, ultimately agreeing on the best mutually acceptable solution (win-win approach).

### **Conclusion:**

Social conflict is an inevitable aspect of human interaction, shaped by competing interests, values, and power dynamics. This article has explored the root causes of social conflict, its various forms, and its far-reaching effects on individuals and communities. By examining different conflict resolution strategies, we have highlighted the importance of constructive dialogue, mediation, and systemic change in fostering sustainable peace. Understanding these mechanisms not only equips us to address conflicts more effectively but also encourages a more harmonious and equitable society. Moving forward, proactive engagement with conflict resolution will be essential in

navigating the complexities of social relationships and collective progress.

### **References:**

1. Arrow, Kenneth J. (1995). *Barriers to Conflict Resolution*. W.W. Norton. NY
2. Burton, John W. and Frank Dukes. (1990). *Conflict: Readings in Management and Resolution*. St. Martin's Press. NY.
3. Coser, L. A. (1956). *The functions of social conflict*. Free Press.
4. Sherif, M. (1966). *In common predicament: Social psychology of intergroup conflict and cooperation*. Houghton Mifflin.
5. Fisher, R., Ury, W., & Patton, B. (2011). *Getting to yes: Negotiating agreement without giving in* (3rd ed.). Penguin.
6. Blake, R. R., & Mouton, J. S. (1964). *The managerial grid: Key orientations for achieving production through people*. Gulf Publishing.

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# **IMPACT OF SKILL DEVELOPMENT PROGRAM ON EMPLOYABILITY SKILL OF TRIBAL POPULATION**

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## **Abstract**

The youth of our economy is vital and the main contributor towards the economic growth. The skilled workforce is currently needed in all the organizations as this would improve the efficiency of the sector. There is a need for development of skills and they should target employability as the main intent. Productivity of organizations can be improved through enhancement of employability skills among youth. The government has been taking initiative towards upgradation of capability of workforce and facilitate transition into organized sector, this will contribute towards economic growth. The research design of the study is descriptive in nature as it is focused on a particular group of people. The main aim of this study is to analyze the skill development among tribal population, evaluate the employability skills among tribal trainees and ascertain the impact of skill development on employability among trainees from tribal areas. The data has been collected with the help of questionnaire and a sample of 100 trainees have been considered. The data has been analyzed using frequencies and hypothesis has been tested with the help of Regression in which impact of independent variable i.e. skill development has been studied on dependent variable i.e. employability.

**Keywords:** skill development, employability, tribal population

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## **1. Introduction**

Financial inclusion creates a great impact on the Indian economy at the macro level. It is very important and led to economic growth of our nation. Ozili, et al (2022) discussed about financial inclusion and argued that the access towards financial services is said to an important factor which helps in promoting employment and entrepreneurship. Skill development programs would help in integrating financial literacy among youth and this in-turn will help them in their career growth. Skill development is the need of the hour, the businesses have a different trend and working style. The youth can try to enhance their entrepreneurship skills. This will make them attain required skills which would empower them to start their own business. This

will help in contributing towards innovation and job creation. The skill development program included different courses which could be suitable for people planning to enter into a particular sector. The entrepreneurship skills need to be enhanced and this will make them handle different operations that are linked with a particular business. The employees should work for the success of organization and as indicated by Bilan et al,(2020), there is a need to emphasize more on strategic training of employees and also development of MSMEs. There are different occupations, which are important for an organization and the youth should be equipped with skills that are needed by the industries. The SMEs are in need of skilled youth who could understand the technology needed and accordingly improve and enhance their skill sets. The youth of our

economy is vital and the main contributor towards the economic growth. The skilled workforce is currently needed in all the organizations as this would improve the efficiency of the sector. Howard & Gutworth (2020) have conducted meta-analysis based on VR training program for development of social skills and they found that these programs help in significant improvement of social skills and effective in increasing employability in the organizations.

### **1.1 Important elements that encourage skill development include:**

- i. **Better Job Prospects:** Skill development would help the students in improving their skills as required by industries and jobs. The job market is very competitive, this would boost the chances of getting hired. The relevant skills will help people in getting employed or advance in career in future.
- ii. **Flexibility towards technological advances:** The skills that are currently needed in different organizations, might become obsolete after a certain period of time. Technology keeps on changing and accordingly there is a need to gather latest skills. The skill development helps in creating flexible, skilled and creative workforce. Technology should be used for professional growth and this will encourage the workers to get a better job in future.
- iii. **Improvements in efficiency and productivity:** Proficient workers are more effective and productive. They have abilities and knowledge which makes them complete their tasks efficiently and accurately. This would boost organizational and personal productivity.
- iv. **Enhancing Economic Growth and Competitiveness:** Countries having skilled personnel are positioned in a better way for international competition and economic growth. When the personnel are skilled, their country would attract more investment, they would participate in global economy and foster innovation.

- v. **Entrepreneurship and Innovation:** The people who are proficient aim to start their own business and also move towards innovation. Improvement in skills would lead to entrepreneurship mindset and allow people to find out opportunities, create value and overcome obstacles. This would increase job opportunities and economic diversity.

### **1.2 The Impact of Skill Development on Job Creation and Economic Growth:**

Skill development has a significant impact on economic growth of our country. There are many challenges which are faced by the workforce in our country. Significant challenges come up among Indian workforce and this is mainly due to informal employment. According to Mehrotra (2020), the dynamics and structure of informal employment in our country indicated the presence of lower skill development and encouraged quality improvement and employment generation. There are employment opportunities in informal sector and it lacks in adequate security and job quality. Skill development program target employability for the youth and this could have a significant impact on productivity. There is a need for development of skills and they should target employability as the main intent. Productivity of organizations can be improved through enhancement of employability skills among youth. The government has been taking initiative towards upgradation of capability of workforce and facilitate transition into organized sector, this will contribute towards economic growth. In association with economic growth, Anstey (2023) has highlighted about economic growth of our country in terms of productivity and skills of workforce. Majid (2020) indicated relation between economic growth and skill development, focusing on the way renewable energy presents different opportunities associated with employment and skill development having connection with renewable energy. Different sectors like renewable energy requires specialized expertise and knowledge. There is a need to focus on the emerging industries and skill development programs could provide

youth with specific skills for meeting demands in future. The skill development program would facilitate sustainability and economic diversification. Such an approach could promote creation of jobs in the green space, which would increase the environment sustainability and employment potential.

## 2. Review of Literature

**Latha (2020)** have discussed that government has put in efforts to empower youth. The skills needed by the industrialists is different and the ones that the youth of our country have are different. Development of skills will lead to professional growth. The youth will enhance their skills and this will lead to better performance in the organization. **Sule et al (2020)** indicated various determinants which would help the youth to acquire employability skills. This study is based on primary data and ANOVA is applied to evaluate the collected data. There should be support from the education system to enhance skills among youth. When the youth will focus on their skills while studying, there will be improvement in their skills and this would enhance their job opportunities. **Nimbalkar & Naik (2022)** have mentioned in the study that youth needs to be job ready. Training is important for the youth living in urban and rural areas. The industries are demanding enhancement of skills among youth so that they could be hired directly without much training. The individual's abilities need to be enhanced so that they can be placed easily. **Rai & Likhitkar (2023)** have mentioned about employability skill's enhancement for better career opportunities. The work force needs to be activated with the latest skills as required by the industry. Job market has been evolving continuously based on the need of technology and the skills needed among the workers for them to work efficiently. **Pandya (2024)** discussed about empowerment of youth with developed. Various programmes have been initiated to enhance skills among youth who are willing to enter into a particular sector. Programs have to be designed in way that students are equipped

with practical exposure. They have to focus beyond their academics. Critical thinking needs to be developed among youth so that they could handle various challenges that might come in their way when they enter into job.

## 3. Objectives of the study

- To analyze the skill development among tribal population
- To evaluate the employability skills among tribal trainees
- To ascertain the impact of skill development on employability among trainees from tribal community

## 4. Hypothesis of the study

- $H_0$  – There is no significant impact of skill development on employability skills
- $H_1$  – There is a significant impact of skill development on employability skills

## 5. Research Methodology

The research design of the study is descriptive in nature as it is focused on a particular group of people. The target audience in this study include the trainees who belong to tribal community and are undergoing skill development training from various government skill development centres. Even those trainees who have already completed their training have been a part of this study. The main aim of this study is to analyze the skill development among tribal population, evaluate the employability skills among tribal trainees and ascertain the impact of skill development on employability among trainees from tribal areas. The data has been collected with the help of questionnaire and a sample of 100 trainees have been considered. The data has been analyzed using frequencies and hypothesis has been tested with the help of Regression in which impact of independent variable i.e. skill development has been studied on dependent variable i.e. employability.

## 6. Data Analysis

### 6.1 Demographic profile of trainees

#### (a) Gender

Gender				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	91	91.0	91.0	91.0
Female	9	9.0	9.0	100.0
Total	100	100.0	100.0	

The above table indicates gender of respondents. Respondents are trainees who have undergone skill development training. The trainees selected in the study include male and female. Majority trainees are male i.e. 91% and remaining are females. The view of male and

female trainees is different as they have a different learning capacity and also skills can be developed in a different manner among them. The trainees need to put in more efforts to enhance their skills, as this will help them in getting a better job.

#### (b) Age

Age				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18 – 20 years	49	49.0	49.0	49.0
21 – 25 years	26	26.0	26.0	75.0
26 – 30 years	14	14.0	14.0	89.0
30 – 35 years	11	11.0	11.0	100.0
Total	100	100.0	100.0	

The trainees are of different age groups ranging from 18 years to 35 years. The trainees who are young can find it easy to learn and some of them might lack in required skills. Majority respondents are in the age category of 18 – 20 years i.e. 49%. The trainees who are of a higher

age category might be experience about skills and can develop skills at a faster pace. The age is the deciding factor for experience in skill development as well, since those who have been studying since a long time might be bit more aware about skill development.

#### (c) Marital status

Marital_status				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Single	82	82.0	82.0	82.0
Married	18	18.0	18.0	100.0
Total	100	100.0	100.0	

The above table indicates the marital status of trainees who have been a part of this study. Majority trainees are single i.e. 82%, remaining are married. The trainees who are married, need to handle more number of tasks as compared those who are single. The trainees who are single, might be dependent

upon their parents income and hence they may not be facing much pressure while undergoing training and also not in a situation, where they need to get a job soon. The trainees who are married, they might be having more responsibility about getting a better job.



## 6.2 Skill development among tribal population

### (a) Confidence of getting job after completion of course

Skill\_dev1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	34	34.0	34.0	34.0
Agree	49	49.0	49.0	83.0
Neutral	7	7.0	7.0	90.0
Disagree	8	8.0	8.0	98.0
Strongly Disagree	2	2.0	2.0	100.0
Total	100	100.0	100.0	

Majority trainees agree (49%) that they have gained confidence of getting job once they complete their course of skill development. The trainees feel that they will be able to get a job since they have gained skills that will help them

to get a good job in future. It is important for the trainees to put in more efforts so that they are aware about the skills which will help them to get placed and also continue in the same organization for a long time.

### (b) Course is worth enough to get the job

Skill\_dev2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	26	26.0	26.0	26.0
Agree	52	52.0	52.0	78.0
Neutral	16	16.0	16.0	94.0
Disagree	2	2.0	2.0	96.0
Strongly Disagree	4	4.0	4.0	100.0
Total	100	100.0	100.0	

Majority respondents have agreed (52%) that the course is worth enough for getting a job. Skill development courses are designed in a way that they help the trainees in developing the required skills. The trainees join a course

based on their skills in the sector which they have interest in. The courses are specifically designed so that they could support their families by getting a better placement.

### (c) Institutional training hours are sufficient to acquire enough knowledge and skill

Skill\_dev3

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	28	28.0	28.0	28.0
Agree	44	44.0	44.0	72.0
Neutral	17	17.0	17.0	89.0
Disagree	8	8.0	8.0	97.0
Strongly Disagree	3	3.0	3.0	100.0
Total	100	100.0	100.0	

Majority trainees agree (44%) that Institutional training hours are sufficient to acquire enough knowledge and skill. The number of hours needs to be sufficient for the trainees as this would help them in acquiring enough knowledge and also lead to a better life. The trainees need to put in more efforts to learn the

practical aspect of working as this would help them in working in an organization in a better way when they understand the practicality as this will help them in facing any kind of challenge which might come later in their life when they start working.

**(d) Practical Training provided by the institution is Sufficient**

**Skill\_dev4**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	30	30.0	30.0	30.0
Agree	50	50.0	50.0	80.0
Neutral	15	15.0	15.0	95.0
Disagree	3	3.0	3.0	98.0
Strongly Disagree	2	2.0	2.0	100.0
Total	100	100.0	100.0	

Practical training will be helpful for the trainees so that they could operationally get a support in working with an organization. Majority trainees agreed (50%) that their skill development center provides them practical training. Theoretical sessions may not provide enough

experience to the trainees, practical exposure to the trainees will provide an insight. Practical exposure could be through a person who is already working in the same organization since a long time.

**(e) Hours of internship provided during the course**

**Skill\_dev5**

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	27	27.0	27.0	27.0
Agree	44	44.0	44.0	71.0
Neutral	21	21.0	21.0	92.0
Disagree	6	6.0	6.0	98.0
Strongly Disagree	2	2.0	2.0	100.0
Total	100	100.0	100.0	

Internship plays a very important role. Majority trainees agreed (44%) that they have been provided with sufficient hours of internship during their training for skill development. Internship needs to be completed in some or the other company that belongs to a particular

sector in which the trainee is interested to work in. Internship will provide enough experience to the trainees when learn wisely. Internship means that the trainee get a chance to spend some days or hours with an organization in the particular sector in which the trainee is willing to work in future.

### 6.3 Employability skills

#### (a) Positive Self-Concept

**Positive\_Self\_Concept**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	31	31.0	31.0	31.0
Agree	49	49.0	49.0	80.0
Neutral	15	15.0	15.0	95.0
Disagree	3	3.0	3.0	98.0
Strongly Disagree	2	2.0	2.0	100.0
Total	100	100.0	100.0	

Majority respondents agreed (49%) that skills have been improved among the trainees with the help of courses run by government for skill development. The concepts should be clear among the trainees, only then they will be able to apply their learning in future when they will

be working in a particular organization. The basic concepts about the profile and the department should be clear, so that they can work efficiently in the organization in which they get employment.

#### (b) Self-Control

**Self\_Control**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	33	33.0	33.0	33.0
Agree	51	51.0	51.0	84.0
Neutral	12	12.0	12.0	96.0
Disagree	2	2.0	2.0	98.0
Strongly Disagree	2	2.0	2.0	100.0
Total	100	100.0	100.0	

Majority trainees agreed (51%) that they have developed self-control when they were undergoing skill development training. Self-control is needed for an employee as when they are working in an organization, it becomes

difficult to control the situation at the workplace and they needs to be handled. When the trainees understand the importance of self-controlling, they will be able to handle different tasks that are assigned to them by their seniors.

#### (c) Social Skills

**Social Skills**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	35	35.0	35.0	35.0
Agree	57	57.0	57.0	92.0
Neutral	8	8.0	8.0	100.0
Total	100	100.0	100.0	

The trainees agreed (57%) that they have developed social skills while undergoing skill

development training. The trainees should develop social skills so that they could interact

with the other people in the same organization or in other organizations. Social skills are important as it would help the trainees to

communicate with the others when they are working together.

#### (d) Communication Skills

**Communication skills**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	33	33.0	33.0	33.0
Agree	53	53.0	53.0	86.0
Neutral	13	13.0	13.0	99.0
Disagree	1	1.0	1.0	100.0
Total	100	100.0	100.0	

Majority trainees agreed (53%) that their communication skills have been improved with the help of skill development training. The trainees are able to communicate among their peers and also their seniors. Communication is

very important and it helps in expressing themselves, about the perception which they have towards a particular task allotted to them or maybe they are able to communicate the reason for being puzzled.

#### (e) Problem Solving Skills

**Problem Solving Skills**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	37	37.0	37.0	37.0
Agree	52	52.0	52.0	89.0
Neutral	9	9.0	9.0	98.0
Disagree	2	2.0	2.0	100.0
Total	100	100.0	100.0	

Majority trainees agree (52%) that they improved their problem solving skills after attending the skill development program. It is important that the trainees understand the problems which might come in their way when they will be working in some other organization. The trainees should gain confidence so that they could find a job easily. While working they might find different  
 $H_0$  – There is no significant impact of skill development on employability skills  
 $H_1$  – There is a significant impact of skill development on employability skills

problems as this is a new phase for them. Some kind of practice is carried out at the training centre which makes the trainees understand the actual scenario which might occur at their workplace.

#### 6.4 Impact of skill development on employability skills

The above hypothesis has been tested with the help of Regression applied through SPSS. Regression indicates the impact of independent variable on the dependent variable.

**(a) Variables entered  
/ removed – Regression**

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Skill_development <sup>b</sup>	.	Enter

a. Dependent Variable: Employability

b. All requested variables entered.

The above table is generated with the help of Regression. The independent variable has been skill development and the dependent variable is employability.

**(b) Model Summary – Regression**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.677 <sup>a</sup>	.458	.453	.647

a. Predictors: (Constant), Skill\_development

The above model summary indicated R and R square. The value of R is 0.677 and since this value is positive and high, this indicates that there is existence of positive and strong

correlation between skill development and employability. The value of R square is 0.458 and this indicates that 45.8% of independent variables can explain the dependent variable.

**(c) ANOVA – Regression**

ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	34.756	1	34.756	82.907	.000 <sup>b</sup>
Residual	41.084	98	.419		
Total	75.840	99			

a. Dependent Variable: Employability

b. Predictors: (Constant), Skill\_development

The significant value is 0.000 which is less than 0.05 (based on 5%) this indicates that the null hypothesis has been rejected i.e.  $H_0$  – There is no significant impact of skill development on

employability skills and the alternate hypothesis has been accepted i.e.  $H_1$  – There is a significant impact of skill development on employability skills.

**(d) Coefficients - Regression**

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.632	.160		3.960	.000
	Skill_development	.626	.069	.677	9.105	.000

a. Dependent Variable: Employability

The above table indicated the regression equation based on independent variable and dependent variable. The following regression has been created with the help of the above table:

$$\text{Employability} = 0.632 + 0.626 (\text{skill development})$$

The above regression equation indicated the impact of independent variable i.e. skill development on dependent variable i.e. employability.

## 7. Findings:

- The view of male and female trainees is different as they have a different learning capacity and also skills can be developed in a different manner among them.
- The trainees need to put in more efforts to enhance their skills, as this will help them in getting a better job.
- The trainees who are of a higher age category might be experience about skills and can develop skills at a faster pace.
- The age is the deciding factor for experience in skill development as well, since those who have been studying since a long time might be bit more aware about skill development.
- The trainees who are single, might be dependent upon their parents income and hence they may not be facing much pressure while undergoing training and also not in a situation, where they need to get a job soon.
- The trainees who are married, they might be having more responsibility about getting a better job.
- The trainees feel that they will be able to get a job since they have gained skills that will help them to get a good job in future.
- It is important for the trainees to put in more efforts so that they are aware about the skills which will help them to get placed and also continue in the same organization for a long time.

- The trainees join a course based on their skills in the sector which they have interest in.
- The courses are specifically designed so that they could support their families by getting a better placement.
- Theoretical sessions may not provide enough experience to the trainees, practical exposure to the trainees will provide an insight.
- Practical exposure could be through a person who is already working in the same organization since a long time.
- Internship needs to be completed in some or the other company that belongs to a particular sector in which the trainee is interested to work in.
- Internship will provide enough experience to the trainees when learn wisely.
- Internship means that the trainee get a chance to spend some days or hours with an organization in the particular sector in which the trainee is willing to work in future.
- The basic concepts about the profile and the department should be clear, so that they can work efficiently in the organization in which they get employment.
- Self-control is needed for an employee as when they are working in an organization, it becomes difficult to control the situation at the workplace and they needs to be handled.
- When the trainees understand the importance of self-controlling, they will be able to handle different tasks that are assigned to them by their seniors.
- Communication is very important and it helps in expressing themselves, about the perception which they have towards a particular task allotted to them or maybe they are able to communicate the reason for being puzzled.

## 8. Conclusion

Skill development is the need of the hour, the businesses have a different trend and working style. The youth can try to enhance their entrepreneurship skills. This will make them

attain required skills which would empower them to start their own business. This will help in contributing towards innovation and job creation. The skill development program included different courses which could be suitable for people planning to enter into a particular sector. There is a need to focus on the emerging industries and skill development programs could provide youth with specific skills for meeting demands in future. The skill development program would facilitate sustainability and economic diversification. Such an approach could promote creation of jobs in the green space, which would increase the environment sustainability and employment potential. The trainees selected in the study include male and female. The view of male and female trainees is different as they have a different learning capacity and also skills can be developed in a different manner among them. The trainees need to put in more efforts to enhance their skills, as this will help them in getting a better job. The trainees who are of a higher age category might be experience about skills and can develop skills at a faster pace. The age is the deciding factor for experience in skill development as well, since those who have been studying since a long time might be bit more aware about skill development. Self-control is needed for an employee as when they are working in an organization, it becomes difficult to control the situation at the workplace and they needs to be handled. When the trainees understand the importance of self-controlling, they will be able to handle different tasks that are assigned to them by their seniors.

## 9. Suggestions

- The trainees need to put in more efforts to enhance their skills, as this will help them in getting a better job.
- Theoretical sessions may not provide enough experience to the trainees, practical exposure to the trainees will provide an insight.
- Internship needs to be completed in some or the other company that belongs to a particular sector in which the trainee is interested to work in.
- Internship will provide enough experience to the trainees when learn wisely.

- The concepts should be clear among the trainees, only then they will be able to apply their learning in future when they will be working in a particular organization.
- When the trainees understand the importance of self-controlling, they will be able to handle different tasks that are assigned to them by their seniors.
- The trainees should develop social skills so that they could interact with the other people in the same organization or in other organizations.
- Social skills are important as it would help the trainees to communicate with the others when they are working together.
- Communication is very important and it helps in expressing themselves, about the perception which they have towards a particular task allotted to them or maybe they are able to communicate the reason for being puzzled.

## References

1. Anstey, V. (2023). The economic development of India. In *Women's Economic Writing in the Nineteenth Century* (pp. 84-92). Routledge.
2. Bilan, Y. et al (2020). Hiring and retaining skilled employees in SMEs: Problems in human resource practices and links with organizational success. *Business: Theory and Practice*, 21(2), 780-791.
3. Ghosh, P. et al (2022). Skilling the Indian youth: A state-level analysis. *Benchmarking: An International Journal*, 29(10), 3379-3395.
4. Howard, M. C., & Gutworth, M. B. (2020). A meta-analysis of virtual reality training programs for social skill development. *Computers & Education*, 144, 103707.
5. Latha S. (2020). A study on skill development initiative schemes in India. *Journal of Emerging Technologies and Innovative Research*. 7 (2). 309 – 315
6. Majid, M. (2020). Renewable energy for sustainable development in India: Current status, future prospects, challenges, employment, and investment



- opportunities. *Energy, Sustainability and Society*, 10(1), 1-36.
7. Mehrotra, S. K. (2020). Informal employment trends in the Indian economy: Persistent informality, but growing positive development. *International Labour Office, Employment Policy Department*.
  8. Nimbalkar V. & Naik G. (2022). A study on Skill development initiatives to make Employees Productive. *International Journal of food and nutritional sciences*. 11 (11). 4256 – 4271
  9. Ozili, P. K. et al (2022). Impact of financial inclusion on economic growth: Review of existing literature and directions for future research. *International Journal of Social Economics*, 50(8), 1105-1122.
  10. Pandya J. (2024). Empowering Futures: Unleashing the Impact of Skill Development Programs on Student Employment. *International Journal of Science and Research*. 13 (1). 576 – 579
  11. Rai A. K. & Likhitar B. (2023). A study on enhancing employability skills: key factor and strategies for a dynamic job. *International Journal of Creative Research Thoughts*. 11 (8). 38 – 49
  12. Singh S. K. & Dixit P. (2024). Advancing Youth Employability And Economic Growth: The Strategic Role Of Skill Development Programs In India. *REDVET - Revista electrónica de Veterinaria*. 25 (1). 3315 – 3320
  13. Sule M. A. et al (2020). Institutional Variables and Student's Employability Skills Development in Public Universities in Cross River and Akwa Ibom States, Nigeria. *International Education Studies*. 13 (11). 33 – 43

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# DETERMINATION OF CUSTOMER SATISFACTION ON SERVICE QUALITY OF RAILWAYS IN BILASPUR STATION OF CHHATTISGARH STATE

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## Abstract

This study focuses on passenger satisfaction with Indian Railways, with an emphasis on service quality at Bilaspur station. It uses an exploratory approach and factor analysis to identify key factors affecting customer satisfaction. The empirical research involved a passenger survey and considered seven factors, including reliability, hygiene, safety, food availability, healthcare, waiting facilities, information systems. The findings highlight that the most crucial factors for passenger satisfaction at railway platforms are cleanliness, safety, food availability, drinking water, healthcare, waiting areas, information systems.

**Keywords:** South East Central (SECR) Indian Railway, Passenger satisfaction, Service quality, Satisfaction model.

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## Introduction

The Ministry of Railways, Government of India, owns Indian Railways (IR), which operates India's national railway system. It holds the fourth largest national railway system globally in terms of size, with a total route length of 68,043 km, a running track length of 102,831 km, and a track length of 128,305 km as of 31 March 2022. As of 1 April 2023, 58,812 km of all gauge routes have electrification with 25 kV 50 Hz AC electric traction.

As of March 2020, Indian Railways had 2,93,077 freight wagons, 76,608 passenger coaches, and 12,729 locomotives. IR operates locomotive and coach production facilities at various locations in India. It employed 1.38 million individuals as of March 2020, ranking as the world's tenth-largest employer. The government has pledged to electrify India's entire rail network by 2023–24 and aims to

achieve a “net-zero railway” in terms of carbon emissions by 2030.

## About Bilaspur station

Bilaspur Junction railway station, located in Chhattisgarh, has a rich history dating back to its establishment in 1889. It became a station on the Howrah–Nagpur–Mumbai line in 1900 and is now the headquarters of the South East Central Railway. The station holds notable achievements, including being the third-cleanest railway station in India and boasting the fifth-longest railway platform at Bilaspur Junction.

Bilaspur Railway Station is a well-maintained A-1 grade station in India with essential traveller facilities. These include cloakrooms, dormitories (both non-AC and AC), a multipurpose complex, AC waiting rooms, and various other amenities. Platform 1 houses a medical shop and a food court. The station has operational lifts and escalators since 2014.

Battery-operated golf cars are available for senior citizens and physically handicapped passengers. All platforms have shelters for passenger comfort in different weather conditions, and branded food chain Comesum serves passengers at the station.

## **Literature Review**

- i. Parasuraman, A. Zeithamal, V. A. & Berry, L. L. (1985). Identified 10 key determinants of service quality as perceived by the service provider and the consumer and tangibility to formulate a service quality framework.
- ii. Rust and Oliver (1994) elaborated on satisfaction, describing it as the “customers’ fulfillment response.” They evaluated service satisfaction using factors such as interest, enjoyment, surprise, wise choices, and doing the right things.
- iii. Gronoos (1984) discusses technical, functional, and reputational quality. Lehtinen and Lehtinen (1982) consider interactive, physical, and corporate quality. Hedvall and Paltschik (1989) concentrate on the willingness and ability to serve and the physical and psychological access to the service.
- iv. Professor Jayant Prakash Sahu of Guru Ghasidas University conducted a study at Bilaspur Railway Station. The research involved assessing various amenities and facilities at the station and gathering passenger feedback to form an unbiased opinion regarding customer satisfaction and service quality.
- v. The organization Rail Yatri conducted a research study on the punctuality of trains departing and arriving at Bilaspur Railway Station. Their findings indicated that out of an estimated 100 trains, 97 were punctual, leading to passenger satisfaction with Indian Railways’ service.
- vi. In a Study conducted by Smile Foundation Raipur, it was found that

- a. Bilaspur Railway Station has maintained its position as 3<sup>rd</sup> Ranker all Over India in aspect of Cleanliness & Hygiene. The Study concluded that Bilaspur Railway Station has dedicated staff for maintaining and keeping the station clean.

## **Objectives of the Study**

- i. To assess passenger satisfaction across different types of trains, ranging from local trains to superfast trains.
- ii. This assessment will focus on factors such as cleanliness, safety, food quality, drinking water availability, healthcare services, waiting areas, information systems.
- iii. To pinpoint critical areas requiring corrective action for achieving service quality excellence in railways.
- iv. To closely examine and understand passenger satisfaction with newly introduced schemes.

## **Research Methodology**

The research was carried out with an intention to collect 120 responses; however we were able to collect only 100 responses due to the availability of the passengers at the time when the data is collected. The Primary data obtained on the basis of Questionnaire are analysed by using Percentage methods this research was carried out by to measure the service quality of Indian Railways based on passengers’ perceptions who frequent travel from Bilaspur to other big cities such as, Mumbai, Kolkata, Chennai, Bangalore and Hyderabad.

## **Analysis and Interpretation**

Total response: - Males 48%, Females 52%

1. Level of satisfaction with the cleanliness and Hygiene factor in Bilaspur Station

**Table 1: Analysis of Cleanliness and Hygiene Factor**

Age Group	Highly Satisfied	Satisfied	Low Satisfaction	Dissatisfied	Highly Dissatisfied
10- 20	10	5	4	1	0
20 - 30	10	3	5	1	1
30 - 40	4	3	10	2	1
40 - 50	3	2	3	10	2
50 & above	5	10	2	2	1
Total	32	23	24	16	5

**2. Level of satisfaction with availability of Safety and Security Measures in Bilaspur Station****Table 2: Analysis of safety and security at Bilaspur railway station**

Age group	Highly satisfied	Satisfied	Low satisfaction	Dissatisfied	Highly Dissatisfied
10 - 20	5	10	2	2	1
20 - 30	1	2	5	12	0
30 - 40	3	3	11	2	1
40 - 50	15	2	2	1	0
50 & above	0	1	1	5	13
Total	24	18	21	22	15

**Interpretation:** - From the above Chart we can observe that All the Age Groups (From 10 to 50 & above) 24% are Highly Satisfied regarding Safety & Security at Bilaspur Railway Station and only 15% are highly dissatisfied.. This scenario has happened due to the presence of

Railway Protection Force (RPF) Office at the premises of Bilaspur Railway Station which includes 24/7 Passenger Security Service.

**3 Level of Satisfaction with availability of quality food and safe Drinking Water****Table 3: Analysis of food quality and safe drinking water**

Age group	Highly satisfied	Satisfied	Low satisfaction	Dissatisfaction	Highly dissatisfied
10 - 20	5	3	8	2	2
20 - 30	3	4	3	8	2
30 - 40	10	5	2	2	1
40 - 50	2	2	4	5	7
50 & above	1	9	5	2	3
Total	21	23	22	19	15

**Interpretation:** - The chart indicates that the age group of 30 to 40 is highly satisfied, while those aged 50 and above are satisfied with safe drinking water and food quality at Bilaspur Railway Station. However, the age group of 10 to 20 is less satisfied, and the 20 to 30 age group

is dissatisfied, while those aged 40 to 50 are highly dissatisfied with these amenities.

**4. Level of satisfaction with availability of Waiting Halls and Rest Rooms**

**Table 4: Satisfaction with regards to availability of waiting halls & rest rooms**

Age group	Highly satisfied	Satisfied	Low satisfaction	Dissatisfaction	Highly dissatisfied
10 - 20	1	9	5	4	1
20 - 30	3	1	8	4	4
30 - 40	1	2	5	8	4
40 - 50	6	5	1	1	7
50 & above	10	2	2	2	4
Total	21	19	21	19	20

**Interpretation:** From the above Chart, we can clearly observe that the Age group of 50 & Above are “Highly Satisfied”, Age Group of 10 to 20 are “Satisfied”, Age Group of 20 to 30 are having “Low Satisfaction”, Age group of 30 to 40 are “Dissatisfied” and Age Group of 40 to

50 are “Highly Dissatisfied” regarding availability of Waiting Halls and rest rooms at Bilaspur Railway Station.

#### **5 Level of satisfaction with Information System**

**Table 5: Analysis of satisfaction among passengers with Information System at Bsp Railway Station**

Age group	Highly satisfied	Satisfied	Low satisfaction	Dissatisfaction	Highly dissatisfied
10 - 20	5	4	2	8	1
20 - 30	10	5	2	2	1
30 - 40	1	3	9	5	2
40 - 50	5	8	4	2	1
50 & above	4	4	3	2	7
Total	25	16	20	19	12

**Interpretation:** From the above Chart, we can clearly observe that the Age group of 20 to 30 are “Highly Satisfied”, Age Group of 40 to 50 are “Satisfied”, Age Group of 30 to 40 are having “Low Satisfaction”, Age group of 10 to 20 are “Dissatisfied” and Age Group of 50 & Above are “Highly Dissatisfied” regarding functioning of Information System at Bilaspur Railway Station

#### **Conclusion**

- Through the Sample Survey we can conclude that Indian Railways are providing satisfactory services in Bilaspur Railway Station.
- The cleanliness and Hygiene factor are much better, but as per the customer satisfaction level, it can be improved for more quality services.
- The safety & security measures include RPF Service at Platform Number-1,

Security Checking’s at Entrance Gate, give satisfactory Service to customers.

- The availability of food and safe drinking water is much satisfactory, but the respondents reported about the low quality of food preparation & taste.
- Sufficient infrastructure facilities are provided at Bilaspur Station which includes different class of waiting halls, separate waiting halls for women, availability of lift for senior citizens and operational escalator. The passengers are highly satisfied with these amenities.
- In terms of Entertainment Sector, the newly constructed Game arcade and counter of Foot Spa is much appreciated by the customers, it also includes the book stalls and a medical store.

## **Suggestion**

The major corrective measures must be taken in the following areas for better customer satisfaction:-

- More food stalls, drinking water and restrooms in platform number 2, 3, 4,5,6,7.
- Improve the quality of food.
- Improvement in facilities of luggage carriers.
- Facility of battery operated vehicles for senior citizens and
- Disabled persons.
- Availability of Basic Medical Facilities in platforms.

## **Reference**

1. Anantha lakshmi, M., & Murugesan, G. (2025). A literature review on customer perception and satisfaction about passengers amenities system of Indian Railway. *International Journal of Creative Research Thoughts*, 13(3), 251–52. <https://www.ijcrt.org/papers/IJCRT2503604.pdf>
2. Fisher, M. L., Krishnan, J., & Netessine, S. (2006). Retail store execution: An empirical study. The Wharton School, University of Pennsylvania. <https://faculty.wharton.upenn.edu/wp-content/uploads/2012/04/FisherKrishnanNetessine.pdf>
3. Journal of Management and Applied Sciences. (2024). Factors shaping customer satisfaction in Indian Railways. *Journal of Management and Applied Sciences*, 1(2), 6–
12. <https://doi.org/10.48001/jomas.2024.126-12>
4. Mageshwarii, G. V., & Vasanthi, S. (2020). A study on service quality gap analysis in Indian Railways using PZB service quality model. *International Journal of Scientific & Technology Research*, 9(1), 2848–2852. <https://www.ijstr.org/final-print/jan2020/A-Study-On-Service-Quality-Gap-Analysis-In-Indian-Railways-Using-Pzb-Service-Quality-Model.pdf>
5. Passenger satisfaction with cleanliness and other service quality dimensions in Indian Railways. (2023). *Cogent Business & Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2183568>
6. Saravanan, S. (2013). A study on passengers' satisfaction towards Indian Railway services in Coimbatore Junction. *Journal of Research on Trade, Development and Domestic Economy*. <https://jrtd.com/index.php/journal/article/view/2926>
7. A study on service quality and passenger satisfaction on Indian Railways (2023). *International Journal of Research Publication and Reviews*, 5(5), 800–803. <https://ijrpr.com/uploads/V5ISSUE5/IJRPR27236.pdf>
8. Determinants of customer satisfaction on service quality: A study of Indian Railways at railway platforms. (2022). *Journal of Retailing and Consumer Services*, 68, 102122. <https://www.sciencedirect.com/science/article/pii/S1077291X22002211>

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# PERCEPTION AND BEHAVIOUR OF INVESTORS TOWARDS MUTUAL FUNDS: AN ANALYSIS ON RISK PERCEPTION AND RETURN EXPECTATIONS OF COLLEGE TEACHERS OF ASSAM

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## Abstract:

The development of an economy largely rests on the efficient mobilization of savings and their productive utilization through various investment avenues. Saving is considered as a good habit for meeting the immediate requirement of funds during emergencies. But simply saving money for future is not considered as a wise decision. Good investment avenues have the ability of growth as compared to saving money in traditional modes as it can pave the way to financial goals and financial freedom. One of such investment avenues is Mutual Funds, which has the capability to grow investors' money through professional management. But before investing the hard-earned money, one investor has to analyze different factors to select the right investment options available in the market. This research aims to unearth how a particular segment of investors (college teachers) assume the risk and return for long term growth to meet their financial goals through Mutual Fund Investments.

**Key Words:** Investors, Saving, Investment and Mutual Funds.

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## 1. Introduction:

Both savings and investments are inter-reliant and they act as two most important factors for accelerating economic development of a country. The retail investors push their surplus money (savings) into productive financial instruments like shares, debentures, bonds, mutual funds etc. with the expectation of growth of their investments. This not only helps them to create wealth but it also enhances the capital formation process of the country, which is a key driver for economic growth of the nation. Typically, people save money first before they invest. Saving represents the surplus money left after consumption. Savings help in fulfilling short-term goals and requirement of funds during emergencies. Savings are typically considered as low risk factor and it provides financial safety. But to

increase the value or growth of money, simply saving is not sufficient, as it couldn't grow at a high speed to meet the inflation rates. Here the role of investment comes, investment in general means to buy those assets or financial instruments that might increase in its value over a period of time.

After India opened its economy for the foreign investors as a part of the LPG Policy, a number of foreign institutional investors entered the Indian Financial Market. After entry of these foreign players in Indian financial market, different types of new and complex financial instruments also entered the market. The volume of transactions in different submarkets of financial market also increased. Out of the different submarkets of the financial market, capital market is very dynamic and it plays a significant role to mobilize the savings from

surplus sector to the deficit sector or in other sense it provides a platform to flow money from saver to borrowers.

The common type of investors like individual investors or retail investors who wants to grow their money in long term with some risk bearing capacity, prefer the capital market instruments. The Indian capital markets have seen a surge in retail activity through direct; i.e. trading in markets through their accounts and indirect; i.e. through mutual funds channels in the last few years. The mutual funds have the added advantage of professional management of investments of the people. If a particular person doesn't have idea about investment options available or doesn't have time to do research on investments, can choose Systematic Investment Plans (SIPs). Using a SIP can help in making regular, predetermined investments over time. SIPs let the investors to contribute a fixed amount of investment at regular intervals into different schemes of mutual funds. It provides a suitable and disciplined way to create wealth with the help of experts.

India is progressing in investments, the individual (retail) investors have around Rs 36 lakh crore in direct equities and Rs 28 lakh crore in assets under management of mutual funds. Individual investors are over 9.5 crore and have nearly 10% direct ownership of the market through its almost 2,500 listed companies (**Economic survey 2023-24**). The survey said that the enhanced participation of retail investors in the Indian capital market is hugely welcome and lends stability to the capital market. Also, it has enabled retail investors to earn higher returns on their savings.

## **2. Review of literature:**

Over the years lots of studies/researches are done in the area of institutional investments. The present study covers the perception and behaviour of investors towards mutual funds. Therefore, relevant literatures of early researches are considered for reviewing the work. **R. Vasudevan and Dr. Peermahideen (2012)** led a research intended to know and analyse the perception of investors towards risk and expectations or returns. This study revealed about tremendously valuable data to support financial decision making of mutual funds. This study and analysis revealed that the level of risk perceived in mutual fund investments is

considered to be medium, but at the same time the returns on mutual fund investment are not very much satisfactory as compared to other investment avenues. **C. Bhuvaneswari (2011)** conducted the study with the objective to find the perception of investors towards Equity Tax Saving Mutual Funds. The researcher tried to find out the major factors which contribute towards perception of investors in the area of Equity Tax saving Mutual Funds. The analysis was done using statistical tools like, Simple Percentage Analysis, Chi-Square Test & Rank Correlation were used. The researcher suggested from the findings so as to maximize the wealth of investors. **Chandra & Kumar (2012)** in their study found that the behaviour of investors is influenced by a variety of psychological heuristics by conducting a survey with 350 individual investors. Their findings underline an unequal pattern of information distribution and usage among investors which has a huge impact in the investment behaviour to a large extent.

**Sireesha & Laxmi (2013)** conducted a study on the influence of demographics on the investment options that the investors select in the cities of Hyderabad and Secunderabad. The study revealed that in most of the cases gender, age, and peer group influence the investment decision. Moreover, the study also found that investors are less concerned about money multiplication and liquidity but their main focus is that their invested money should be secure and risk free. **Raman & Budhiraja (2015)** in their study recognised the investment pattern of retail investors with special importance on mutual fund industry. The study revealed that in almost all the age groups, the rate of return connected with the investment option is the considered as the most important factor of investment. The research highlighted that age groups and risk appetite are connected to each other while there is no connection between the risk appetite of investors and their educational qualifications. They also found that gender of investor does not influence the other factors in investment decisions and they also didn't found significant differences between different categories of investors.

## **3. Objectives of the study:**

The main objectives of the study are:



- i. To study the investment preferences of college teachers
- ii. To analyse the risk perception and return expectations of college teachers from different categories of mutual funds.
- iii. To analyse the factors influencing investment decisions in Mutual Funds.

#### 4. Research Methodology:

**4.1 Background:** The study is all about analysing the behaviour of investors of mutual funds in relation to risk-return on their investments. There are different investment avenues available in the Indian Financial Markets; the researcher has selected one of the most popular investment options among the retail investors, i.e. Mutual Fund Investments, where the number of investments is increasing from last decade. According to the **Economic Survey 2023-24**, The number of demat accounts with both the depositories are **1,514 lakhs in Financial Year 2024**. “The Financial Year 2024 has been a spectacular year for mutual funds as the Assets Under Management (AUM) increased by ₹14 lakh crore or 35% year-over-year to ₹53.4 lakh crore at the end of FY2024, boosted by mark-to-market (MTM) gains and expansion of the industry. The total number of folios increased to 17.8 crore at the end of FY24 from 14.6 crore at FY23-end” (**Economic Survey 2023-24**). Therefore, the researcher has confined the research area to this popular investment avenue, including both lump-sum and SIP mode of investments in mutual funds.

**4.2 Sampling Method & Sample Size:** This research is based on the retail investors of mutual funds from different colleges of Assam who are engaged in teaching. The reason behind selection of salaried person (college teachers) is that they have regularity in income and they know the

exact amount they can invest on regular basis. Therefore, the basic criteria for selection of respondents is that they must have prior experience in mutual fund investments. The sampling method used in this research is Purposive sampling method to select investors from the different colleges of Assam and the sample includes the **Teachers of Provincialized Colleges of Assam** with a permanent job. The total number of questionnaires distributed to more than 340 college teachers but the valid responses received (mutual fund investors) were from 185 respondents only. Therefore, total number of respondents selected is 185.

**4.3 Data Collection:** The research is a descriptive research. The primary data were collected from 185 respondents (teachers of provincialized colleges) of different colleges across the State of Assam. The total number of questionnaires distributed to more than 340 but the valid responses received was from 185 respondents. Data were collected using structured questionnaires through Google Form, which were distributed through e-mail and WhatsApp. The questionnaire was a close ended one and the collected data are analysed through descriptive and inferential approaches. For collection of information relating to investment from secondary sources, data are collected from the websites of Stock Exchanges, some secondary information or data available in books, journals, periodicals, newspapers and reports have also been used and have been acknowledged in relevant places. Some websites were also viewed for gathering some information which was considered necessary for the purpose of the study.

#### 5. Data Presentation, Analysis and Interpretation:

##### 5.1 Demographic, Socio-Economic Characteristics of the Respondents:

**Table 5.1.1 Mutual Fund Investors' Demographic, Socio-Economic Characteristics**

Variable	Investors' Grouping	Frequency (N=185)	Percentage
Gender	Male	116	62.70%
	Female	69	37.30%
Age	20 -30 years	24	13.00%
	31-40 Years	83	44.86%
	41-50 Years	41	22.16%
	Above 50 years	37	20.00%
Marital Status	Married	140	75.68%
	Unmarried	41	22.16%
	Others	4	2.16%
Designation	Assistant Professor	121	65.41%
	Associate Professor	64	34.59%
Monthly Income	50,001 to 75,000	27	14.59%
	75,001 to 1,00,000	52	28.11%
	1,00,001 to 1,50,000	66	35.68%
	1,50,001 to 2,00,000	24	12.97%
	2,00,001 & More	16	8.65%

Source: Field Survey

Table 5.1.1 highlighted the various demographic information of the respondents. Where 62.70% are male and 37.30% are female respondents. 13% respondents fall under the age group of 20 to 30 years, 44.86% fall under the age group of 31 to 40 years, 22.16% fall under age group of 41 to 50 years and 20% fall under age group of 50 years and above. Regarding Marital Status, 75.68% respondents are married, 22.16% are unmarried and remaining 2.16% are in the others

category. Majority of the respondents' designation is Assistant Professor (65.41%) as compared to Associate Professors (34.59%). Regarding monthly income, 14.59% respondents are in 50,000 to 75,000 income level categories, 28.11% are in 75,001 to 1,00,000 categories, 35.68% are in 1,00,001 to 1,50,000 category and 12.97% respondents' income falls under 1,50,001 to 2,00,000. 8.65% are in the category of 2,00,001 & Above monthly income level.

## 5.2 Saving and Investment related information

**Table 5.2.1 Percentage of Monthly Income Invested**

Variable	Range	No. of Respondents	Percentage
Percentage of Monthly Income Invested in different investment avenues	Below 10%	28	15.14%
	10 % to 20%	52	28.11%
	21% to 30%	51	27.57%
	31% to 40%	31	16.76%
	41% to 50%	17	9.18%
	50% & Above	6	3.24%
<b>Total</b>		<b>185</b>	<b>100%</b>

Source: Field Survey

Table 5.2.1 Percentage of Monthly Income Invested in various investible avenues. Where it is found that out of 185 respondents, 28 respondents invest less than 10% of their total monthly income. 52 respondents invest between 10% to 20% of their monthly income,

51 respondents invest 21% to 30%, 31 respondents invest between 31% to 40%, 17 respondents invest between 41% to 50% and 6 respondents invest 50% & above of their monthly income respectively.

**Table 5.2.2 Investment Experience and Preferences in Different Popular Investment Avenues**

Instruments	No. of Respondents (N=185)						
	Less than 1 Year	2 to 5 Years	6 to 10 Years	11 to 15 Years	16 to 20 Years	More than 20 Years	Didn't invest
Mutual Funds	20 (10.81%)	53 (28.65%)	63 (34.05%)	21 (11.35%)	17 (9.19%)	11 (5.95%)	0 (0.00%)
Shares	16 (8.65%)	32 (17.30%)	31 (16.76%)	28 (15.14%)	20 (10.81%)	12 (6.49%)	46 (24.86%)
ETFs	18 (9.73%)	26 (14.05%)	15 (8.11%)	9 (4.86%)	3 (1.62%)	3 (1.62%)	111 (60.00%)
Derivatives	13 (7.03%)	11 (5.95%)	8 (4.32%)	10 (5.41%)	7 (3.78%)	2 (1.08%)	134 (72.43%)
Bonds	11 (5.95%)	17 (9.19%)	18 (9.73%)	15 (8.11%)	20 (10.81%)	16 (8.65%)	88 (47.57%)
Debentures	5 (2.70%)	11 (5.95%)	7 (3.78%)	6 (3.24%)	7 (3.78%)	2 (1.08%)	147 (79.46%)
PPF	11 (5.95%)	16 (8.65%)	18 (9.73%)	16 (8.65%)	31 (16.76%)	40 (21.62%)	53 (28.65%)
Real State & Gold Investment	9 (4.86%)	16 (8.65%)	14 (7.57%)	21 (11.35%)	13 (7.03%)	19 (10.27%)	93 (50.27%)

Source: Field Survey

Table 5.2.2 shows experience of investment of the respondents in different popular investment avenues available in the market apart from Mutual Fund Investments. It is found from the table that majority of the respondents who have invested in mutual funds also invest in other popular investment avenues. Out of the select investors, their investment experience in mutual funds are, 20 (10.81%) respondents have less than 1 year of experience, 53 (28.65%) respondents have experience in between 2 to 5 years, 63 (34.05%) have experience in between 6 to 10 years, 21 (11.35%) respondents have experience in between 11 to 15 years, 17 (9.19%) respondents have experience in between 16 to 20 years, 11 (5.95%) respondents have more than 20 years of experience respectively. Since the basic criteria of selection of respondents was that they must have prior experience in mutual funds investment, therefore all the respondents have experience in mutual funds investment.

Respondents' experience in share investments are, 16 (8.65%) respondents have less than 1 year of experience, 32 (17.30%) respondents have experience in between 2 to 5 years, 31 (16.76%) have experience in between 6 to 10 years, 28 (15.14%) respondents have

experience in between 11 to 15 years, 20 (10.81%) respondents have experience in between 16 to 20 years, 12 (6.49%) respondents have more than 20 years of experience respectively and 46 (24.86%) didn't have any experience.

Another popular investment avenue among the respondents is Public Provident Fund (PPF), where it is found that 11 (5.95%) respondents have less than 1 year of experience, 16 (8.65%) respondents have experience in between 2 to 5 years, 18 (9.73%) have experience in between 6 to 10 years, 16 (8.65%) respondents have experience in between 11 to 15 years, 31 (16.76%) respondents have experience in between 16 to 20 years, 40 (21.62%) respondents have more than 20 years of experience respectively and 53 (28.65%) didn't have any experience.

The other types of investment avenues like Bonds, Debentures, ETFs are still not widely accepted by the select respondents. As it shows that 111 (60.00%) respondents didn't have experience in ETFs investments, 88 (47.57%) respondents didn't invest in different Bonds, 147 (79.46%) respondents didn't invest in Debentures issued by corporates.

**Table 5.2.3 Mode of Investment in Mutual Funds**

Mode of investment	No. of Respondents	Percentage
Systematic Investment Plan (SIP)	111	60.00%
Only Lumpsum	26	14.05%
Both SIP & Lumpsum	48	25.95 %
Total	185	100%

Source: Field Survey

Table 5.2.3 shows the mode of investment in mutual funds. It is found that among the select respondents, 60% respondents do SIP, 14.05%

do lumpsum investment in mutual funds and remaining 25.95% respondents do both SIP and lumpsum in mutual funds.

**Table 5.2.4 Importance of Factors in Selecting Mutual Funds**

Factors	Not important	Slightly important	Neutral	Very Important	Extremely important
Capital appreciation	4	6	15	65	95
Liquidity	24	41	15	67	38
Diversification	32	28	17	43	65
Tax benefit	63	53	16	37	16
Expense ratio	53	62	23	25	22
Quick appreciation of value	43	57	19	37	29
Past performance	21	38	21	59	46
Rating	30	34	11	76	34
Exit load	38	53	21	27	46
Fund management by AMC	16	27	10	54	78
Net Asset Value (NAV)	34	40	22	59	30
Minimum SIP amount	59	48	23	32	23
Company Holdings	17	26	17	46	79

Source: Field Survey

- Table 5.2.4 shows the importance of factors in selecting mutual funds. In case of capital appreciation, 4 respondents marked as not important factor for selection of mutual funds, 6 marked as slightly important, 65 said as very important and 95 marked as extremely important factor.
- The liquidity factor has almost equal responses from both important and not important factor. As 24 marked as not important, 41 marked as slightly important, 15 marked neutral, 67 said as very important and 38 marked as extremely important.
- In case of diversification, 32 marked as not important, 28 marked as slightly important, 17 marked neutral, 43 said as very important and 65 marked as extremely important.
- In case of Tax benefit or ELSS schemes, 63 marked as not important, 53 marked as slightly important, 16 marked neutral, 37 said as very important and 16 marked as extremely important.
- The Expense ratio factor, 53 marked as not important, 62 marked as slightly important, 23 marked neutral, 25 said as very important and 22 marked as extremely important.
- In case of quick appreciation of value factor, 43 marked as not important, 57 marked as slightly important, 19 marked neutral, 37 said as very important and 29 marked as extremely important.
- The past performance factor, 21 marked as not important, 38 marked as slightly important, 21 marked neutral, 59 said as very Important and 46 marked as extremely important.
- The rating of mutual fund factor, 30 marked as not important, and 34

marked as slightly important, 11 marked neutral, 76 said as very important and 34 marked as extremely important.

- In case of exit load factor, 38 marked as not important, 53 marked as slightly important, 21 marked neutral, 27 said as very important and 46 marked as extremely important.
- For fund management by AMC, 16 marked as not important, 27 marked as slightly important, 10 marked neutral, 54 said as very important and 78 marked as extremely important factor.
- The NAV factor, 34 marked as not important, 40 marked as slightly

important, 22 marked neutral, 59 said as very important and 30 marked as extremely important.

- In case of minimum SIP factor, 59 marked as not important, 48 marked as slightly important, 23 marked neutral, 32 said as very important and 23 marked as extremely important.
- Regarding the different companies' holdings by AMC, 17 marked as not important, 26 marked as slightly important, 17 marked neutral, 46 said as very important and 79 marked as extremely important.

**Table 5.2.5 Factors considered before investing in Mutual Funds**

Factors	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I made through analysis of the different factors of Mutual Funds before investing	78	65	12	21	9
I prefer to invest in those AMC with strong brand names	57	49	21	35	23
I always search for higher ratings of Mutual Funds	36	29	19	64	37
Sometimes I make investment decisions in Mutual Funds on the basis of information from influencers	14	23	17	69	62
I would invest in that Mutual Fund which has earned high returns after hearing about it from a friend/Colleague	41	30	22	58	34
I avoid investing in those Mutual Funds with a poor earning history	70	54	14	28	19
I make comparison of the same categories of Mutual Funds (Peer Comparison)	69	50	21	24	21
I diversify my mutual fund portfolio to different sectors to minimize the risk	58	45	22	31	29
I am likely to invest in those mutual funds that have recently outperformed the market	48	39	26	36	36
I stop investing in those Mutual Fund Schemes which is continuously performing poor as compared to other similar categories of Mutual Funds	61	56	16	31	21

Source: Field Survey

Table 5.2.5 shows the factors considered by the investors/ respondents before investing in Mutual Funds. It is found from the table that regarding through analysis of the different factors of Mutual Funds before investing, 78 respondents Strongly Agree, 65 agree, 12 are Neutral, 21 Dis-agree and 9 respondents Strongly-disagree to the statement.

- Majority of the respondents prefer to invest in those AMCs who have a strong brand name, 57 respondents Strongly Agree, 49 agree, 21 are Neutral, 35 Dis-agree and 23 respondents' Strongly-disagree to the statement.
- Regarding higher ratings of Mutual Funds, 36 respondents Strongly Agree,

29 agree, 19 are Neutral, 64 Dis-agree and 37 respondents Strongly-disagree to the statement.

- About the influence of influencers, 14 respondents Strongly Agree, 23 agree, 17 are Neutral, 69 Dis-agree and 62 respondents Strongly-disagree to the statement.
- On influence by friends/colleagues on high-return mutual funds, 41 respondents Strongly Agree, 30 agree, 22 are Neutral, 58 Dis-agree and 34 respondents Strongly-disagree to the statement.
- Regarding Avoidance of investing in Mutual Funds with a poor earning history, 70 respondents Strongly Agree, 54 agree, 14 are Neutral, 28 Dis-agree and 19 respondents Strongly-disagree to the statement.
- On Peer Comparison of mutual funds, 69 respondents Strongly Agree, 50 agree, 21 are Neutral, 24 Dis-agree and 21 respondents Strongly-disagree to the statement.
- Regarding diversification of Mutual Fund Portfolios for minimising the risk level, 58 respondents Strongly Agree, 45 agree, 22 are Neutral, 31 Dis-agree and 29 respondents Strongly-disagree to the statement.
- Respondents' preference on outperformed Mutual Funds, 48 respondents Strongly Agree, 39 agree, 26 are Neutral, 36 Dis-agree and 36 respondents Strongly-disagree to the statement.
- Regarding respondents' behaviour on withdrawal/discontinuation of investment from poor performing Mutual Funds, 61 respondents Strongly Agree, 56 agree, 16 are Neutral, 31 Dis-agree and 21 respondents Strongly-disagree to the statement.

## **6. Major Findings, Interpretations and Discussions:**

### **6.1 Findings Interpretations and Discussions according to objectives:**

#### **Objective 1: To study the investment preferences of select respondents**

#### **Findings:**

- Out of different investment avenues available in the market, a good number of people still invest in traditional modes like bank and post office deposit schemes.
- It is found from the study that, out of the select respondents, majority invest 10% to 30% of their total income in different investment avenues.
- The two most popular investment schemes among the select investors are investing in shares and mutual funds.
- The Public Provident Funds are also popular among the investors of different age groups.
- The preferences of advanced investment avenues like ETFs, debentures, bonds and derivatives are not significant.
- The pension schemes (apart from NPS) is not that popular among the investors, it may be because of mandatory NPS deductions for those who joined their services after 2005 in government sector.

#### **Objective 2: To analyse the risk perception and return expectations of college teachers from different categories of mutual funds.**

#### **Findings:**

- Mutual fund schemes having poor earning history/ performance has negative impact on the investors in selecting those schemes.
- The psychological impact of known companies; as well as the mutual fund companies having a strong brand name has been a significant factor among the select respondents.
- The increase in value or capital appreciation is one of the most important factors among the mutual fund investors.
- The respondents are inclined towards those mutual fund schemes who had recently outperformed the market.
- The investors are very much influenced by diversification of mutual fund schemes in their portfolios for minimising the risk.

- The expectation of investors for quick appreciation of values is also not a very significant factor for selection of mutual funds. It may be because of the awareness among the investors about the benefits of long-term investment.
- Some investors expect higher returns in short term for which they take high risk. But following this trend may lead to losses. The long-term investment plans are always encouraged by the regulators also.
- The impact of the past performance of a particular mutual fund among the investors is very high.

**Objective 3: To analyse the factors influencing investment decisions in Mutual Funds:**

**Findings:**

- The liquidity factor of mutual fund is considered by some investors as important and vice-versa.
- Diversification of schemes of mutual funds shows mixed responses among the select respondents. It may be because of the availability of various schemes under single AMC.
- The popularity of tax benefit or ELSS schemes of mutual funds has gone down. It may be because of the new tax policies of the government.
- The expense ratio is not a significant factor among the investors of mutual funds.
- The rating of mutual funds also has significant impact among the investors. Which means higher rated mutual funds attract more investors.
- Regarding exit load, there are a mixed response among the select investors. It is because of the fact that the exit load in most of the mutual fund schemes are maximum for one year and investors who invest for long-term hardly consider it as an important factor.
- The fund management or the fund managers' profile and experiences play a significant role in selecting mutual funds among the investors.
- In case of NAV, there is mixed response. It may be because of the fact that the fund

house is managed by experts, so investors don't consider it as an important factor.

- In case of SIPs, the minimum amount doesn't play a significant role. This happens because the minimum SIPs amounts are very negligible.
- The companies hold by a particular scheme are considered as an important factor for selection of mutual funds. The investors made an analysis about the stocks hold by the fund house or scheme.
- The impact of different media and influencers are not very significant in selecting mutual fund schemes among the respondents. It may be because of the fact that the select respondents are highly educated.

**6. Conclusion:**

Conversion of savings into investments plays the most crucial role in the development of an economy. The Individual investors play a very significant role in the development of any country's financial market. It is found from the study that many people still love to follow the traditional modes of savings. No doubt these are less risky; but these schemes can't give a higher return to beat the inflation rate. Therefore, these types of investors should make a balanced investment plan. Out of the different variables, it is found that some factors had a very significant impact over retail investors' attitude towards investment decisions of different financial instruments. These factors actually represent; what a company does, what is its performance, the valuation of the companies' stocks, different positive ratios etc. No doubt people now a days are very much aware of the benefits of converting their savings to investment through different investment avenues available in the market, but there are still some people who blindly follow social media, influencers and telegram channels. These channels can ruin their hard-earned money. Therefore, investors should be very careful in following these channels.

**References:**

1. Alexander, Gordon, J.; and William, F. Sharpe (1989), *Fundamentals of Investments* Englewood Cliffs, N. J. Prentice Hall

2. Bhole, L. M. (2003), Financial Markets and Institutions, Tata Mc Graw Hill Publishing Company.
3. Chandra, A., & Kumar, R. (2012), “Factors Influencing Indian Individual Investor Behavior: Survey Evidence”, *Decision*, XXXIX (3), 143-167.
4. Chaudhary, A. K. (2013). “Impact of behavioral finance in investment decisions and strategies: a fresh approach”, *International Journal of Management Research and Business Strategy*, Vol. 2(2), pp.66-83.
5. Das, D. B., Mohanty, S., & Shil, N. C. (2008). Mutual Fund vs. Life Insurance: Behavioral Analysis of Retail Investors. *International Journal of Business and Management*, III (10), 89- 103.
6. Kadariya, S. (2012). “Factors affecting investor decision making: A case of Nepalese capital market”, *Journal of Research in Economics and International Finance (JREIF)*, Vol. 1(1), pp.16-30.
7. Sarbabidya, S. and Saha, T. (2018). “Factors Affecting Investment Decisions: A Study on Bangladesh Stock Market”, *Journal of Accounting, Finance and Economics*, Vol. 8(2), pp.1-19.
8. Vyas, Ravi (2012), “Mutual Fund Investor’s Behavior and Perception In Indore City” a Research world- - *Journal of Arts, Science & Commerce*, E-ISSN 2229-4686, ISSN 2231- 4172, Vol. III, Issue 3(1), pp. 67-75.

**Websites:**

<http://rbi.org.in>

<http://www.amfiindia.com>

<http://www.mutualfundsindia.com>

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# IMPACT OF FOREST RESERVE ON LOCAL LIVELIHOOD: A CASE STUDY OF JHARKHAND

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## Abstract

The study explores the crucial role forest reserves play in supporting the livelihoods of local tribal and rural communities. Forests in Jharkhand provide vital resources such as food, fuel, fodder, medicinal plants, and non-timber forest products (NTFPs), which constitute a significant portion of income and sustenance for nearly two million impoverished tribal individuals. The research highlights how forest reserves contribute to poverty reduction, employment opportunities in forest-based industries, and preservation of traditional ecological knowledge. However, challenges such as limited market access, forest degradation, and socio-economic vulnerabilities impact sustainable livelihood outcomes. The study underscores the need for effective forest management, community-based cooperative models, and policy support, including the Forest Rights Act, to enhance sustainable livelihoods and foster socio-economic development in Jharkhand's forest-dependent local populations. This investigation contributes to understanding the interdependence between forest conservation and livelihood security in a tribal-dominated region with high forest cover and poverty levels. This abstract is synthesized from multiple studies focusing on Jharkhand's forest economy, tribal dependence on forest resources, and socio-economic outcomes linked to forest management.

**Keywords:** Forest Conservation; Livelihood Dependency; Non-Timber Forest Products (NTFPs); Community Development; Sustainable Resource Management

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## I. Introduction

The impact of forest reserves on local livelihoods in Jharkhand is a critical area of study given the deep interconnection between the state's tribal and rural populations and their forest environment. Jharkhand, known as the "land of forests," has around 29 percent of its area under forest cover, above the national average, and forests contribute significantly to the socio-economic fabric of approximately 2 million tribal and impoverished people who depend on these resources for sustenance and income.

The local tribal communities, including prominent groups like the Munda, Oraon, Lohra, and others, rely on forests not just for material needs but also for cultural identity and traditional ways of life. Forest resources fulfill diverse livelihood requirements from food, fuel, fodder, and medicinal plants to raw materials for cottage industries and non-timber

forest products (NTFPs) such as Mahua flowers, Sal leaves, Tamarind, Lac, and Chironji seeds that are vital for income generation and household nutrition. Studies in Jharkhand's various districts, like Gumla, Ranchi, and West Singhbhum, highlight the dominant role of NTFPs and forest-based livelihoods in supporting tribal economies, often compensating for poverty, illiteracy, and lack of alternative employment opportunities.

As of the latest (2023-2024) data available, Jharkhand's forest cover stands at approximately 23,765.78 square kilometers, which is about 29.81 percent of the state's total geographical area. The state's recorded forest area is around 23,605 sq km, divided into Reserved Forests (18.58 percent), Protected Forests (81.28 percent), and a small percentage of Unclassed Forests (0.14 percent). Forest canopy density includes very dense forest (about 2,603 sq km), moderately dense forest (around 9,687 sq km), and open forest (about

11,321 sq km). The forest cover has shown a slight increase attributed to plantation and conservation efforts. Jharkhand's forests include diverse types such as moist peninsular Sal forests, dry deciduous scrub, and bamboo brakes, supporting rich biodiversity and tribal livelihoods. The state also has one National Park and 11 Wildlife Sanctuaries covering around 2.74 percent of its geographical area.

External pressures like illegal extraction, mining, and infrastructure projects pose

challenges to these ecosystems, but ongoing conservation activities and community involvement remain critical for sustaining the balance between livelihood needs and environmental protection. The Forest Rights Act (FRA) and Joint Forest Management (JFM) initiatives are significant in participatory forest governance in the state.

This data reflects the forest status around the period and provides a current snapshot of Jharkhand's forest and forest reserves situation.

**Table 1: Jharkhand Forest Statistics (2023–2024)**

Parameter	Value	Notes
Forest Cover	23,765.78sqkm	About 29.81 percent of total geographical area
Recorded Forest Area	23,605sqkm	Divided among reserved, protected, and unclassified forests
Reserved Forests	18.58 percent of RFA	
Protected Forests	81.28 percent of RFA	
Unclassified Forests	0.14 percent of RFA	
Very Dense Forest	2,603sqkm	Forest canopy density category
Moderately Dense Forest	9,687sqkm	Forest canopy density category
Open Forest	11,321sqkm	Forest canopy density category
Trends	Slight increase	Attributed to plantation and conservation efforts
Major Forest Types	Moist Sal, Dry Deciduous Scrub, Bamboo brakes	Diverse ecosystems, rich biodiversity
National Parks	1	
Wildlife Sanctuaries	11	
Protected Areas Coverage	2.74 percent of total area	Includes national parks and sanctuaries

This table highlights the extent, distribution, and types of forests in Jharkhand, as well as conservation trends and protected areas. The data showcase Jharkhand's ecological diversity and the importance of forests for biodiversity and tribal livelihoods.

However, despite the ecological and economic importance, the forest-dependent communities face significant challenges, including restrictive forest management policies, limited market access for forest products, inadequate value addition techniques, and socio-political marginalization. The Forest Rights Act (FRA) 2006 is a legal framework designed to empower forest dwellers by recognizing their rights, but its effective implementation remains incomplete, affecting the potential benefits for local livelihoods. Besides direct reliance on forest

products, local skills in wood-based and small-scale forest enterprises (e.g., sawmilling, handicrafts, bamboo products, furniture making) provide secondary employment and livelihood opportunities, complementing primary activities. Yet, poverty and underemployment persist among tribal populations due to systemic inequities. Furthermore, the sustainability of forest reserves impacts livelihoods through ecological factors. Degradation and deforestation caused by population pressures and unsustainable resource extraction jeopardize the availability of forest products, leading to increased vulnerability and potentially prompting illegal activities like illicit logging, thereby threatening both forest health and community welfare. Hence, sustainable forest management that balances conservation with community

needs and promotes alternative livelihood options (e.g., ecotourism, value-added forest enterprises) is crucial to improving the socio-economic conditions of forest-dependent populations. Thus, the literature emphasizes that forest reserves in Jharkhand are vital to local livelihoods, especially for tribal communities, by providing diverse products and economic opportunities. Nonetheless, challenges related to market access, policy implementation, ecological sustainability, and socio-economic marginalization remain. Addressing these issues through integrated approaches that combine livelihood enhancement, capacity building, and sustainable forest governance is essential for the long-term well-being of Jharkhand's forest-dependent communities.

## **II. Literature Review:**

The relationship between forest reserves and local livelihoods in India, particularly in the state of Jharkhand, has been a subject of extensive academic inquiry due to the region's rich biodiversity, significant tribal population, and historical dependence on forest resources. Jharkhand, carved out of Bihar in 2000, is home to approximately 26 percent of India's Scheduled Tribes and contains about 29 percent of its geographical area under forest cover (FSI, 2021). This confluence of ecological wealth and socio-cultural diversity makes Jharkhand a critical case study for understanding how forest conservation policies affect local communities, especially indigenous (Adivasi) populations.

### **Historical Context and Forest Governance:**

The legacy of colonial forest policies in India, particularly the Indian Forest Act of 1878 and 1927, established state control over forest lands, often marginalizing traditional forest-dwelling communities (Gadgil & Guha, 1992). In Jharkhand, these policies disrupted centuries-old systems of community-based forest management. Post-independence, forest governance continued to be centralized, with limited recognition of customary rights. The Forest Rights Act (FRA) of 2006 marked a paradigm shift by legally recognizing the rights of forest-dwelling communities to land and resources. However, implementation in Jharkhand has been uneven, with bureaucratic delays and lack of awareness hindering the full

realization of these rights (Rights and Resources Initiative, 2015; Mishra et al., 2018).

### **Livelihood Dependence on Forest Resources:**

Multiple studies have underscored the critical role of forests in sustaining rural livelihoods in Jharkhand. According to the National Sample Survey Office (NSSO, 2013), over 70 percent of rural households in Jharkhand depend on forest resources for subsistence and income. This includes the collection of Non-Timber Forest Products (NTFPs) such as mahua (*Madhuca longifolia*), tendu leaves (*Diospyros melanoxylon*), sal seeds (*Shorea robusta*), and bamboo. These resources provide food, medicine, fodder, fuelwood, and raw materials for cottage industries. Research by Chakraborty et al. (2016) highlights that NTFP collection contributes up to 40 percent of household income in forest-dependent communities, with women playing a central role in gathering and marketing these products. However, the creation of forest reserves often restricts access to these resources, leading to conflicts between conservation goals and livelihood needs (Sarin et al., 2003).

### **Conservation vs. Livelihood: Tensions and Trade-offs:**

The establishment of forest reserves, including wildlife sanctuaries and protected areas such as the Palamau Tiger Reserve and Betla National Park, has led to significant conservation achievements. However, these gains have often come at the cost of local displacement and restricted access. Studies by Baviskar (1995) and Sundar (2001) argue that conservation policies in India have historically adopted a "fortress conservation" model, excluding local people from decision-making and reinforcing ecological marginalization. In Jharkhand, this exclusion has exacerbated poverty and food insecurity among Adivasi communities. Pathak (2010) documents how the declaration of Reserved Forests under the Indian Forest Act has criminalized traditional practices like shifting cultivation (Jhum) and free grazing, despite their sustainable nature in local contexts. This has led to increased vulnerability, particularly among women and landless households.

### **Community Forest Management and Joint Forest Management (JFM):**

In response to these tensions, the Joint Forest Management

(JFM) program was introduced in the 1990s to involve local communities in forest protection in exchange for access to forest benefits. In Jharkhand, JFM has had mixed outcomes. While some studies (Jha et al., 2004; Ojha et al., 2009) report improved forest conditions and modest livelihood benefits through NTFP harvesting and employment in afforestation, others criticize JFM for reinforcing state control and failing to grant secure tenure. More recently, the Forest Rights Act (FRA) has enabled the formation of Gram Sabhas (village councils) to manage community forest resources. Case studies from West Singhbhum and Latehar districts show that communities with recognized rights under FRA have improved forest governance and enhanced livelihood opportunities (Dubey et al., 2013; Mishra & Kumar, 2017). However, the slow pace of FRA implementation remains a major constraint.

**Gender Dimensions:** Gender is a critical yet often overlooked dimension in the forest-livelihood nexus. Women in Jharkhand are primary collectors of NTFPs and fuelwood, spending several hours daily on forest-related chores. Restrictions imposed by forest reserves disproportionately affect women, reducing their income and increasing their workload. Research by Agarwal (2009) and Rao et al. (2015) emphasizes that women's exclusion from forest management institutions limits their ability to influence conservation policies. Conversely, when women are included in decision-making bodies like JFM committees, outcomes improve in terms of both equity and sustainability.

**Emerging Challenges and Opportunities:** Climate change, mining activities, and infrastructure development pose new threats to forest ecosystems and local livelihoods in Jharkhand. Mining for coal and minerals in forested areas has led to large-scale deforestation and displacement (Sengupta, 2011). At the same time, initiatives such as the Green India Mission and REDD+ (Reducing Emissions from Deforestation and Forest Degradation) offer potential avenues for integrating conservation with livelihood improvement, provided they are implemented with community participation and benefit-sharing mechanisms.

Thus, the literature reveals a complex and often contradictory relationship between forest reserves and local livelihoods in Jharkhand. While forest conservation is essential for ecological sustainability, its top-down implementation has frequently undermined the rights and well-being of forest-dependent communities. Recent legal and institutional reforms, especially the FRA, offer hope for more inclusive and equitable forest governance. However, their success depends on effective implementation, empowerment of local institutions, and recognition of traditional ecological knowledge.

### **III. Research Gap & Significance of the study**

Existing literature inadequately captures the interplay between conservation goals and local development priorities, overlooks region-specific governance histories, and provides limited analysis of how external pressures such as mining, climate variability, and infrastructure projects shape community-forest relations. Moreover, governance challenges, institutional barriers, and corruption remain underexplored. To fill these gaps, this study combines ecological assessments with socio-economic surveys, gender-responsive analysis, and ethnographic insights, co-produced with local communities to ensure contextual relevance and the amplification of marginalized voices. By bridging these evidence gaps, it offers actionable insights for policymakers, civil society, and forest departments, contributing toward an equitable, sustainable, and democratic model of forest governance in Jharkhand that upholds both ecological integrity and human rights.

### **IV. Objectives of the Study**

- i.** To assess tribal dependence on forest resources including NTFPs for livelihood and income.
- ii.** To evaluate the economic and social impacts of forest reserve management on local communities.
- iii.** To examine gender roles, especially female participation in forest-based livelihood activities and decision-making.

- iv. To understand ecological outcomes linked to forest conservation and resource use.

## **V. Research Questions**

- i. How do forest reserve policies (e.g., protected areas, Reserved Forests, and Joint Forest Management) affect access to forest resources and livelihood security of local communities in Jharkhand?
- ii. What is the role of the Forest Rights Act (2006) in enhancing or constraining local livelihoods, and how does its implementation vary across different regions and communities in Jharkhand?
- iii. How do gender and social identity (e.g., caste, tribe, landlessness) shape the differential impacts of forest reserve policies on livelihood opportunities and decision-making power within local communities?

## **VI. Research Methodology**

This study examines how forest reserves shape local livelihoods in Jharkhand by assessing access to forest resources, the implementation of the Forest Rights Act (FRA), and the roles of gender and social identity. Using a mixed-methods, exploratory case study across three ecologically and culturally diverse districts—Latehar & Palamu (Betla National Park, strong FRA activity), West Singhbhum (dense forests, tribal NTFP economies), and Simdega & Gumla (active Joint Forest Management, varied FRA recognition)—it purposively selected nine forest-dependent villages representing conservation–livelihood dynamics. Stratified random sampling by landholding status, tribal identity, and gender of the primary forest user yielded 120–150 households. Data collection combined household surveys (livelihoods, NTFP income, access restrictions, socio-economic status), in-depth interviews with forest officials, community leaders, and activists, and field observations of forest use

and enforcement practices. Secondary analysis of FRA/JFM records, forest department reports, relevant forest policies, academic literature, and satellite-based Forest Survey of India data provided socio-ecological and policy context.

## **VII. Variables identified**

- 1) **Livelihood Dependence**—measured by the percentage of household income from non-timber forest products (NTFPs), frequency of forest visits, and diversity of products collected;
- 2) **Access to Forests**—assessed through perceptions of restrictions, frequency of eviction threats, and requirements for permits;
- 3) **FRA Implementation**—captured by the status of claims (approved or rejected), community awareness of rights, and benefits received;
- 4) **Gender and Equity**—examined via the division of labor, women's participation in decision-making, and control over income; and
- 5) **Forest Condition**—gauged through local perceptions of changes in forest density, biodiversity, and regeneration. Together, these variables offer a holistic understanding of the complex socio-economic, governance, and ecological dynamics shaping forest–community relationships in Jharkhand.

## **VIII. Results and Discussion**

Mathematical and Practical Model: Socio-Economic Dynamics of Forest–Community Relationships in Jharkhand

**Dependence on Forest Resources:** Forest resources contribute 20 percent to 59 percent of household income in studied areas. NTFPs such as Mahua, Tassar silk, Lac, and medicinal plants are critical for local economic activities and resource security, especially during agricultural off-seasons. Income from NTFPs not only helps in subsistence but also adds cash revenue, providing economic resilience.

**Table 2: Dependence on Forest Resources**

Aspect	Details	Implications for Livelihoods
Contribution to Household Income	20 percent – 59 percent of total household income in studied villages comes from forest resources	Forests form a significant part of the local economy, reducing dependence on agriculture alone
Key NTFPs Collected	Mahua (flowers & seeds), Tassar silk, Lac, medicinal plants	Provide both subsistence use (food, medicine) and marketable goods
Seasonal Importance	Particularly crucial during agricultural off-seasons	Acts as a buffer against income gaps and food shortages
Economic Role	NTFPs provide both in-kind (subsistence) value and cash revenue	Enhances economic resilience and reduces vulnerability to shocks
Resource Security	Continuous access to diverse forest products ensures livelihood stability	Supports survival strategies, especially for marginalized households

**Economic Impact and Food Security:** Forest produce helps supplement incomes for families where agriculture alone is insufficient due to small landholdings and mono-cropping. During lean months, income from forest products acts as a mini bank supporting nutritional and food

security. However, the commercialization of NTFPs faces challenges like exploitation by middlemen, poor market infrastructure, and lack of storage facilities affecting the fair pricing for local collectors.

**Table-3: Economic Impact and Food Security aspects related to forest produce and Non-Timber Forest Products (NTFPs) in Jharkhand**

Aspect	Details
Economic Impact	Forest produce significantly supplements household incomes, especially for families with small landholdings and mono-cropping agriculture. NTFPs contribute between 33 percent to 59 percent of household income in some Jharkhand villages, with an average annual income from NTFPs around Rs. 4,791 to Rs. 27,894 per household in different studies. Income from products like Mahua, Tassar silk, Lac, Tamarind, and Sal leaves provides vital cash flow during agriculturally lean periods.
Food Security	Income from forest products acts as a mini bank during lean months, supporting nutritional and food security for forest-dependent communities. NTFPs supplement subsistence needs by providing food, fuelwood, fodder, and medicinal resources critical during times when agriculture is not productive.
Challenges in Commercialization	The commercialization of NTFPs faces issues such as exploitation by middlemen, poor market infrastructure, and lack of storage facilities. These challenges hinder fair pricing for local collectors and reduce potential income benefits to forest-dependent communities.

**Gender and Socio-cultural Role:** Women play a predominant role (up to 80 percent) in collection, processing, and marketing of forest products. This participation challenges traditional gender roles by empowering women economically and increasing their decision-

making power within households and communities. Forest knowledge and sustainable practices are transmitted through generations, primarily via women in tribal societies.

**Table -4: Gender and Socio-cultural Role based on your description**

Aspect	Description	Impact/Implications
Participation in Forest Economy	Women contribute up to 80 percent of collection, processing, and marketing of forest products	Provides primary source of livelihood and sustains household income
Economic Empowerment	Active involvement in NTFP-based economies increases women's financial independence	Enhances women's bargaining power in households and communities
Challenging Traditional Gender Roles	Women's economic role shifts perceptions of their social position	Greater inclusion in household and community-level decision-making
Cultural Knowledge Transmission	Forest-related knowledge, sustainable harvesting, and conservation practices passed through generations by women in tribal societies	Preserves traditional ecological knowledge and promotes sustainable resource use
Community Sustainability Role	Women's expertise ensures balanced use and regeneration of forest resources	Strengthens resilience of livelihoods and ecosystems

**Environmental and Ecological Implications:**

Forest reserves contribute to biodiversity conservation and environmental sustainability. However, external pressures including illegal extraction and poor management threaten these

ecosystems. Sustainable harvesting of NTFPs and community involvement in forest governance are critical for balancing livelihood needs and conservation objectives.

**Table-5: Environmental and Ecological Implications of forest reserves in Jharkhand**

Aspect	Description	Importance / Challenges
Biodiversity Conservation	Forest reserves in Jharkhand protect flora and fauna, including endangered species like Sloth Bear, Pangolin, and others.	Vital for maintaining ecological balance, preserving rare and endangered species, and supporting diverse ecosystems.
Environmental Sustainability	Forests cover about 29.7 percent of Jharkhand's area, contributing to watershed protection, climate regulation, and soil conservation.	These services support local livelihoods and regional environmental health but require careful management to sustain.
External Pressures	Illegal extraction, mining, infrastructure projects, and poor forest management threaten ecosystems and biodiversity.	These pressures cause habitat degradation, loss of forest density, and conflict between conservation and development needs.
Sustainable Harvesting of NTFPs	Non-Timber Forest Products (NTFPs) provide livelihoods but need sustainable harvesting practices to prevent resource depletion.	Critical to balance economic needs of local communities with forest regeneration and biodiversity conservation.
Community Involvement	Participation of local tribal communities in forest governance through Joint Forest Management and FRA supports stewardship.	Empowers communities, integrates traditional knowledge, and fosters sustainable conservation aligned with livelihoods.

### **Forest reserve policies (e.g., protected areas, Reserved Forests, and Joint Forest Management) affect access to forest resources and livelihood security of local communities in Jharkhand**

Forest reserve policies in Jharkhand including Protected Areas, Reserved Forests, and Joint Forest Management (JFM) have a direct and complex impact on local communities' access to forest resources and their livelihood security.

#### **Effects based on recent (2023–2024) data and reports:**

**Forest Rights Act (FRA) 2006:** This law empowers Scheduled Tribes (STs) and other traditional forest dwellers by formally recognizing their rights to access, manage, and extract forest resources, strengthening both their livelihood security and ability to conserve forests. Implementation of FRA has led to increased forest cover in districts such as Ranchi and East Singhbhum, benefiting local livelihoods and biodiversity conservation, though challenges remain in ensuring full and equitable rights recognition. FRA also protects communities from displacement and mandates free, prior, and informed consent for any diversion of forest land.

**Protected Areas and Reserved Forests:** By law, access to resources in these areas is significantly restricted in the name of conservation and protection. However, communities in Jharkhand have historically depended on forests for cash income and daily needs such as fuelwood, minor forest produce (MFP), and livestock fodder. Reports indicate that about 73 percent of tribal and vulnerable households were deprived of adequate access, especially during disruptions like the COVID-

19 lockdown, which coincided with peak MFP harvest, drastically impacting income security.

**Joint Forest Management (JFM):** JFM committees (several formed since 2011) aim to involve local communities in cooperative forest management. Where effectively implemented, JFM improves access to forest produce and ensures shared benefits, enhancing community livelihoods. However, sustainability depends on active participation, transparent benefit distribution, and sustained government support. Recent data show financial assistance for JFM committees and recognition of thousands of community claims under FRA, though pending claims and local heterogeneity hinder full realization of rights and benefits.

#### **Data and findings:**

According to government data (as of March 2023), thousands of community and individual claims for forest rights have been submitted under FRA, with gradual distribution of title deeds. However, there are delays and inconsistencies in processing these claims, partly due to administrative overburden and weak political will. In practice, grassroots organizations and Gram Sabhas have enabled the sale of forest products (e.g., tendu leaves, honey, bamboo) by communities in other states, showing that rights recognition significantly improves income and food security. Jharkhand is encouraged to adopt similar participatory models to unlock livelihood potential. Social forestry schemes and afforestation drives on notified and private lands have expanded green cover and provided alternative sources for resources, though benefits are maximized only with robust local involvement and continued oversight.

**Table 6: Effects of Reserve Policies on Local Livelihoods (Jharkhand, 2023–2024)**

<b>Policy/Area</b>	<b>Resource Access</b>	<b>Livelihood Security</b>	<b>Evidence (2023–2024)</b>
Forest Rights Act (FRA)	Expanded (where implemented)	Improved (with title deeds, MFP sale, protection from displacement)	Increased forest cover, pending claims, insufficient processing
Protected/Reserved Forests	Restricted	Reduced (unless rights recognized)	73 percent vulnerable tribal households deprived; lockdown impact
Joint Forest Management (JFM)	Cooperative (if active)	Enhanced (with actual participation and benefit sharing)	Creation of JFM committees, financial support; sustainability issues



## **Critical issues and recommendations:**

**Incomplete implementation:** Many eligible households still await forest rights under FRA, hindering livelihood security.

**Community empowerment:** Policies promoting Gram Sabha-centered governance, as advocated, would strengthen access, management, and equitable income from forest resources.

**Sustainability:** Social and Joint Forest Management initiatives require consistent support, monitoring, and genuine local participation to ensure both ecological and livelihood benefits. The evidence shows that policy frameworks like FRA and JFM have improved both forest conservation and community livelihoods where implemented effectively, but significant gaps remain in coverage, benefit sharing, and operational support

**Community forest rights under the Forest Rights Act (FRA) have had a significant, though uneven, impact on local livelihoods in Jharkhand:**

### **1) Positive Impacts**

**Improved Access to Forest Resources:** With the recognition of community forest rights, tribal and forest-dependent communities have gained improved access to non-timber forest products (NTFPs) like bamboo, tendu leaves, and medicinal plants. These resources provide crucial cash income and employment opportunities, especially for vulnerable groups such as single women, widows, and the elderly.

- a) **Land Tenure Security:** FRA has secured land tenure for many families, allowing them to invest confidently in agriculture and allied activities, which strengthens food security and livelihood stability.
- b) **Empowerment of Communities:** The FRA empowers gram sabhas (village assemblies) to manage, protect, and regulate forest resources. This participatory model has led to increased community control over forest governance, fostering a sense of ownership and responsibility.

### **c) Biodiversity and Conservation**

**Benefits:** Communities with recognized rights are incentivized to practice sustainable forest management, leading to improvements in forest cover and biodiversity as observed in districts like Ranchi and East Singhbhum.

- d) **Income Generation:** Some villages have successfully leveraged their community forest rights to collect and sell forest produce (such as tendu leaves and honey), establishing processing centers and improving local incomes.

## **2) Persistent Challenges**

### **a) Awareness and Implementation**

**Gaps:** Many forest dwellers lack adequate knowledge of their FRA rights due to limited outreach and bureaucratic hurdles. Delays in claim verification and approval remain common.

- b) **Partial and Uneven Recognition:** While several community and individual claims have been successfully recognized, the scale of implementation fluctuates, and a significant number of deserving claims are still pending.

- c) **External Pressures:** Mining and development activities sometimes disrupt implementation and threaten community rights, leading to displacement and livelihood loss in certain areas.

## **Overall Assessment**

The FRA has delivered tangible improvements in livelihood security, resource access, and community empowerment for those who have secured community forest rights. However, the full potential is limited by uneven implementation, lack of awareness, and ongoing threats from land use conflicts. Thus, community forest rights under FRA have provided greater economic security, food stability, and participatory governance to Jharkhand's forest-dependent communities, but continuous policy attention and grassroots support are needed to ensure widespread, equitable benefits.

**Protected areas like Betla National Park and Palamau Tiger Reserve strongly shape nearby communities' resource use in several ways:**

**1) Restrictions and Changes in Resource Use**

- a) **Limited Access:** Core conservation zones such as Betla and Palamau restrict entry, grazing, timber harvesting, and collection of non-timber forest products (NTFPs) like fuelwood, bamboo, and medicinal plants. This shift from open extraction to regulated access aims to protect biodiversity and ecosystem health. The core of the Palamau Tiger Reserve, previously utilized for bamboo and timber extraction and open grazing, is now strictly closed to these activities.
- b) **Socio-economic Impact:** Tribal and rural groups surrounding these reserves traditionally rely on forest products for livelihoods, housing, and food. Restrictions reduce access, forcing adaptation. For example, when NTFP collection was limited or banned, around 73 percent of vulnerable tribal households experienced deprivation of resources, especially during critical periods like the COVID-19 lockdown.
- c) **Resource Management and Participation:** While core areas prohibit most extraction, buffer zones may allow restricted or seasonal access. Wildlife and forest authorities have actively involved local communities in fire prevention, anti-poaching patrols, and limited wildlife management, offering alternative livelihood options such as ecotourism and conservation-linked employment.

**d) Biodiversity and Conservation Benefits:**

By curbing traditional extraction practices, protected zones have helped restore degraded habitats, reduce poaching, and encourage the return of wildlife populations, benefiting the ecological balance and long-term sustainability of community resource bases.

**e) Knowledge and Cultural Shifts:**

Communities maintain extensive traditional knowledge of forest resources. Ongoing conservation policies have encouraged adoption of sustainable and diverse resource use, including participation in reforestation and sustainable NTFP initiatives, though challenges remain in fully integrating local needs.

**2) Evidence from Local Studies**

- a) **Species and Livelihoods:** Ethnobotanical studies show communities use hundreds of plant species from these forests for food, medicines (especially women's health), and materials. However, restrictions require adaptation, and benefits are maximized only when communities participate in sustainable management and policy dialogue.
- b) **Invasive Species and Ecological Threats:** Some research highlights invasive plants spreading due to ecosystem changes, which not only threaten local flora but also diminish forest-dependent livelihoods. Community engagement in habitat restoration is critical for both ecological health and local incomes.

**Table 7: Betla & Palamau Protected Areas Community Resource Use Impact**

Impact Area	Core Zone Policy	Buffer Zone Policy	Effect on Communities
Resource Access	Highly restricted	Limited/regulated (seasonal, partial)	Decreases extraction; pushes adaptation
NTFP and Forest Products	Banned	Allowed in some cases	Income, food, medicine affected
Grazing and Timber	Prohibited	Sometimes permitted with regulation	Changes agricultural/fodder dynamics
Conservation Participation	Indirect/employment	Active via committees	Promotes alternative livelihoods
Biodiversity & Restoration	Improved habitat	Participatory restoration efforts	Long-term resource security

Protected areas like Betla and Palamau positively impact forest restoration and biodiversity but often create livelihood stresses unless there is meaningful community inclusion in resource management and benefit sharing.

### **Role of the Forest Rights Act (2006) in enhancing or constraining local livelihoods, and its implementation vary across different regions and communities in Jharkhand:**

The Forest Rights Act (FRA) 2006 plays a critical role in enhancing local livelihoods in Jharkhand by legally recognizing the rights of Scheduled Tribes and other traditional forest dwellers to access, manage, and use forest resources. However, its implementation varies widely across regions and communities, impacting the degree of livelihood benefits realized.

#### **1. Role of FRA in Enhancing Livelihoods**

- a) **Recognition of Rights:** FRA grants Individual Forest Rights (IFR) and Community Forest Rights (CFR) covering self-cultivation, habitation, grazing, fishing, customary resource access, and more. This legal recognition empowers communities with secure land tenure and resource access critical for livelihood.
- b) **Increase in Forest Cover and Biodiversity:** Areas where FRA is implemented well, such as certain districts including Ranchi and East Singhbhum, have seen improved forest conservation alongside livelihood enhancement.
- c) **Community Empowerment:** The Act empowers gram sabhas (village assemblies) to govern forest resources, boosting community management and sustainable use incentives.
- d) **Income Security:** Recognition of CFR has enabled forest dwellers to collect and sell minor forest produce (e.g., tendu leaves, honey, bamboo), contributing significantly to cash incomes.

#### **2. Variations in Implementation and Constraints**

- a) **Implementation Drive in 2023:** Jharkhand government launched “Abua Bir Dishom Abhiyan” campaign in November 2023 to accelerate FRA implementation, aiming to provide IFR to 100,000 families (~20,000 hectares), settle 20,679 pending claims, and restore 100,000 hectares of degraded forest land. Special efforts include Gram Sabhas, formation of Forest Rights Committees, mobile app-based tracking, and administrative training.
- b) **Past Progress and Gaps:** Since Jharkhand’s formation in 2000, about 60,021 IFR and 2,013 CFR titles have been distributed covering roughly 2.17 lakh acres of forest land. However, this is much lower than states like Chhattisgarh, which have distributed many more titles in a similar timeframe.
- c) **Pending and Rejected Claims:** As of late 2023, there were still thousands of pending claims, and about 30,906 claims had been rejected, often due to insufficient evidence, multiple claims on same land, or claims on non-forest lands. The slow pace is partly due to administrative and hierarchical complications within forest and revenue departments.
- d) **Uneven Recognition:** Recognition of CFR has been especially low, with only around 4.9 percent of Jharkhand’s potential forest land rights recognized under both IFR and CFR as of 2019.
- e) **Regional and Community Differences:** Implementation depends on local governance effectiveness, political will, forest department cooperation, and community awareness. Some tribal communities remain unaware or unable to claim rights fully, leading to disparities in benefits.

**Table 8: Effective FRA implementation**

Aspect	Data / Observation
IFR Titles Distributed	60,021 titles covering ~2.17 lakh acres (since 2000)
CFR Titles Distributed	2,013 titles
Claims Rejected	30,906
Pending Claims	8,333+ per 2023 campaign
Percentage Recognized (IFR + CFR)	4.91 percent of potential forest land (as of 2019)
Campaign Launched	"Abua Bir Dishom Abhiyan" (Nov 2023) targeting 1 lakh IFR titles, claim settlements, and forest restoration

The FRA 2006 significantly enhances livelihoods by legally securing forest land and resource rights for local forest-dependent communities in Jharkhand. Its implementation, however, varies due to administrative challenges, limited capacity, local political will, and awareness gaps. The 2023 government push through the “Abua Bir Dishom Abhiyan” campaign aims to address these barriers by accelerating title distribution, improving governance, and fostering community participation. While progress has been made, especially in individual rights, community rights remain under-recognized, and many claims await resolution, limiting the full livelihood benefits. Effective FRA implementation requires sustained political commitment, capacity building at local levels, and inclusion of tribal voices through gram sabhas and forest rights committees to ensure equitable and timely access to forest resources.

#### **Recent drive impacted land tenure security in Jharkhand**

The recent drive to accelerate Forest Rights Act (FRA) implementation in Jharkhand has positively impacted land tenure security, although challenges remain ongoing. These include:

- a) **Increased Title Distribution:** The government launched the “Abua Bir Dishom Abhiyan” campaign in November 2023, targeting issuance of Individual Forest Rights (IFR) to 100,000 families and settlement of more than 20,000 pending claims. This campaign has notably increased the number of titles granted, thereby enhancing legal land tenure security for forest-dependent communities.
- b) **Restoration of Rights:** The campaign has contributed to restoring land rights for many who had been deprived for decades, providing formal recognition and protection against displacement, especially for Scheduled Tribes and Other Traditional Forest Dwellers (OTFDs).
- c) **Continuing Gaps:** Despite progress, a significant number of claims are still pending or rejected due to issues such as lack of documentary evidence or bureaucratic hurdles. Implementation gaps also exist due to weak political will, administrative delays, and discrimination against some groups like OTFDs.
- d) **Empowerment and Governance:** The drive has strengthened Gram Sabha empowerment and forest rights committees, fostering community participation in land governance and sustainable resource management.
- e) **Challenges from External Pressures:** Activities like mining and land acquisition continue to threaten gains in tenure security for some communities, highlighting the need for stronger protection and monitoring mechanisms.

The overall effect is an improvement in formal land tenure security for many forest-dependent communities in Jharkhand through title distribution and rights recognition. However, for full realization of tenure security benefits, sustained efforts are needed to clear pending claims, ensure equitable implementation, and protect rights from external pressures.

## **Future land policy reforms that enhance tenure security in the state**

Future land policy reforms that could enhance tenure security in Jharkhand focus on several key areas based on recent research and reforms in India and similar regions:

### **a) Strengthening Legal Recognition and Formalization of Land Rights:**

Enhance and accelerate land title formalization processes to provide secure, legally recognized tenure. This includes expanding Individual Forest Rights (IFR) and Community Forest Rights (CFR) recognition under the Forest Rights Act. Integrate digitization and modernization of land records (e.g., through Digital India Land Records Modernization Programme) to reduce disputes, corruption, and administrative delays. Introduce strong title guarantee systems to provide confidence and protect against arbitrary evictions. Support the use of technologies like block-chain for transparent and immutable land registries.

### **b) Reforming Tenancy and Leasing**

**Laws:** Secure and regulate tenancy rights by enacting reforms that provide tenants with security of tenure, fair and capped rents, and in some cases, ownership rights over leased land. Legalize and formalize land leasing markets to improve access to land for smallholders, farmers, and marginalized groups without ownership. Protect tenants and sharecroppers from exploitative practices and arbitrary eviction.

### **c) Decentralized and Inclusive Governance:**

Strengthen Gram Sabha and local forest rights committees to

play a central role in land governance, ensuring community participation and empowerment. Integrate customary and statutory tenure systems through decentralized local governance to address local tenure issues effectively. Build capacity for land administration, dispute resolution, and adjudication at the local government level.

### **d) Market Development and Land Use**

**Planning:** Modernize zoning laws to balance land use between conservation, agriculture, housing, and commercial needs, which helps in sustainable land management. Encourage formal, transparent land leasing and sale markets to mobilize underutilized land. Use AI, satellite imagery, and smart contracts for efficient land use planning and secure transactions.

### **e) Social and Civil Society Engagement:**

Empower civil society organizations to advocate for the rights of marginalized and vulnerable communities. Promote awareness campaigns and community outreach so that eligible forest dwellers and tenants understand and claim their rights. Ensure policy enforcement through strong state-civil society partnerships.

### **f) Expected Outcomes and Benefits:**

Secured land tenure increases investment in land, leading to higher agricultural productivity and rural incomes. Enhanced protection from displacement and exploitation. Strengthened livelihoods of Scheduled Tribes, forest-dependent communities, smallholders, and tenants. Reduced land-related conflicts and litigations, promoting social stability. Balanced ecological conservation with sustainable livelihood needs.

**Table 9:** Recommended Future Land Policy Reforms for Jharkhand

Reform Area	Description	Benefit
Land Title Formalization	Speed up IFR/CFR recognition, digitize records, use blockchain	Secure tenure, reduce disputes, protect rights
Tenancy and Leasing Laws	Secure tenure for tenants, formalize land leasing markets	Improve land access for marginalized farmers, reduce evictions
Decentralized Governance	Strengthen Gram Sabhas, integrate customary and statutory systems	Inclusive decision-making, better local land conflict resolution
Land Use Planning & Markets	Modern zoning, transparent leasing/sale markets, tech-enabled management	Sustainable land use, better resource allocation
Civil Society Engagement	Awareness, advocacy, enforcement through community participation	Empowerment, improved implementation, rights awareness

Implementing these reforms with adequate funding, political commitment, and community engagement could significantly enhance tenure security, livelihood resilience, and sustainable forest and land management in Jharkhand.

### **Influence of FRA on conservation and livelihood balance in Jharkhand in differently across regions**

The Forest Rights Act (FRA) shapes the balance between conservation and livelihoods in Jharkhand unevenly across regions, largely due to differences in socio-economic conditions, forest governance, customary ownership, and implementation effectiveness. In areas where households possess customary ownership of trees on forest land, incomes are higher and there is stronger motivation for sustainable forest management, while wealthier and other backward class households tend to participate more actively in Participatory Forest Management (PFM) and gain greater benefits from FRA rights. By contrast, Scheduled Tribe (ST) communities especially particularly vulnerable tribal groups (PVTGs) like the Mal Pahariyas, who often lack agricultural land and tree ownership due to displacement and poverty experience seasonal food insecurity, rely heavily on welfare and migration, and have limited involvement in forest governance, resulting in lower livelihood gains from FRA. These socio-economic and governance disparities create uneven outcomes, with better-off households able to jointly strengthen livelihoods and conservation, while marginalized groups remain excluded from

many of the potential benefits and less engaged in protecting forest resources.

### **Implementation Variations Across Districts**

FRA implementation in Jharkhand varies sharply across districts such as Godda, Dumka, Ranchi, West Singhbhum, and Hazaribagh, with some areas achieving higher recognition of claims while others lag significantly behind. Regions where Gram Sabhas, forest rights committees, NGOs, and government authorities work in close coordination have seen smoother rights recognition and stronger sustainable forest governance. In contrast, districts marked by weak governance, limited NGO presence, and administrative hurdles face stalled FRA processes, which undermines livelihood security for forest-dependent communities and restricts their effective participation in conservation efforts.

### **Community Empowerment and Forest Governance**

Areas where communities have secured Community Forest Rights (CFR) and Individual Forest Rights (IFR) demonstrate strong outcomes in community-led forest management, sustainable harvesting of Minor Forest Produce (MFPs), and increased revenue that enhances livelihoods. Empowered Gram Sabhas in these regions play a pivotal role in balancing ecological sustainability with livelihood needs by ensuring that forest conservation goes hand in hand with responsible resource use. In contrast, areas with minimal CFR recognition and weak community participation often experience top-down

conservation approaches that restrict local access to resources, limit livelihood benefits, and frequently spark conflicts over forest use.

### Impact of Displacement and Land Use Conflicts

Displacement caused by mining and industrial activities in certain regions of Jharkhand disproportionately impacts forest-dependent communities by undermining tenure security

and limiting their capacity to manage forests sustainably. Households that have been displaced often face greater livelihood insecurity, reduced involvement in forest management, and a weaker stake in conservation efforts. In contrast, regions experiencing minimal displacement tend to have higher community participation in forest governance and achieve a more balanced integration of conservation goals with livelihood needs.

**Table 10: FRA Influence on Conservation-Livelihood Balance in Jharkhand by Region**

Region/District Group	FRA Implementation Status	Socioeconomic Factors	Conservation-Livelihood Balance
Districts with stronger FRA (e.g., Ranchi, West Singhbhum)	Higher claims recognized, active Gram Sabhas	Better-off and backward caste households benefit more; some marginalization persists	Improved sustainable forest management and livelihood security via CFR and IFR
Districts with weak FRA (e.g., some parts of Godda, Dumka)	Low claim recognition, bureaucratic hurdles	High vulnerability of PVTGs and displaced groups	Conservation limited by weak community participation; livelihood benefits minimal
Areas affected by displacement	Ongoing displacement reduces tenure security	Displaced and very poor households lack forest land rights	Reduced participation in forest conservation and livelihood activities
Regions with active community governance	Active JFM, Gram Sabha involvement	Empowered communities with forest rights	Balanced conservation with sustainable livelihood generation

Thus, FRA's influence on conservation and livelihood balance in Jharkhand is shaped by regional socio-economic realities, governance mechanisms, customary rights, and displacement issues. In regions with better FRA implementation and community empowerment, there is a more positive synergy between livelihood security and forest conservation. In contrast, regions with weak recognition, poor governance, and displacement show limited livelihood benefits and challenges in conservation efforts. Sustaining this balance requires focused efforts to enhance FRA implementation equitably across regions, empower vulnerable groups, address displacement impacts, and reinforce local forest governance institutions.

### Gender and social identity (e.g., caste, tribe, landlessness) shape the differential impacts of forest reserve policies on livelihood opportunities and decision-making power within local communities

Gender and social identity factors such as caste, tribe, and landlessness play a significant role in shaping the differential impacts of forest reserve policies on livelihood opportunities and decision-making power within local communities in Jharkhand, like:

#### Gender Impact

In Jharkhand, women are the primary users and collectors of forest resources especially non-timber forest products (NTFPs) such as fuelwood and medicinal plants essential for household needs and income generation.

Although the Forest Rights Act (FRA) 2006 mandates joint land titles for spouses and at least one-third representation of women in Forest Rights Committees (FRCs), women, particularly in tribal areas where female literacy is as low as 2 percent, often have limited economic power and minimal participation in decision-making. Deeply rooted social norms restrict their control over land and forest resources, while vulnerabilities such as land dispossession, witchcraft accusations, trafficking, and marginalization in community forums further weaken their position. Initiatives involving women in securing forest rights have shown that their active participation enhances sustainable forest management, yet significant gaps remain in recognizing their leadership and ensuring their economic empowerment within forest governance structures.

### **Social Identity (Caste, Tribe, Landlessness)**

In Jharkhand, social identity factors such as caste, tribe, and landlessness deeply shape livelihood security and participation in forest governance. Marginalized groups especially Scheduled Tribes (STs) and Particularly Vulnerable Tribal Groups (PVTGs) like the Mal Pahariyas face limited land ownership, displacement, and low recognition of forest rights, leading to heightened livelihood insecurity. In contrast, wealthier households, higher castes, and other backward classes possess larger landholdings, diversified incomes, and greater engagement in initiatives like Joint Forest Management (JFM) and FRA claims, boosting their resilience and food security. Poor and landless households remain constrained by seasonal food shortages, low tree ownership, and reliance on wage labor or migration, while mining and industrial displacement further erode tenure security and forest-based livelihoods for the most vulnerable.

### **Decision-Making Power**

Forest governance structures such as Forest Rights Committees and Gram Sabhas are designed with mandated representation requiring at least one-third women and two-thirds Scheduled Tribe members but in practice, actual participation, influence, and leadership often vary significantly by gender and social status. Decision-making is frequently dominated by men and wealthier households, while women and the poorest groups remain underrepresented or excluded from meaningful roles. Although some women leaders receive training and support, they are not always acknowledged as dispute resolvers or community leaders, reflecting deep-rooted gender biases that limit their authority and impact within forest governance.

### **Data Highlights**

- a) Women's literacy in tribal Jharkhand is extremely low (2 percent), limiting their ability to assert rights and engage fully in governance.
- b) FRA mandates joint tenure for spouses, yet initial implementation often ignored listing women on titles.
- c) Approximately one-third representation of women in Forest Rights Committees is required but not always effectively realized.
- d) Scheduled Tribe groups and PVTGs have fewer recognized forest rights and limited land ownership, resulting in lower participation in forest management and fewer livelihood benefits.
- e) Studies identify disparities where households from other backward classes and better-off groups participate more in community forest management activities than poorer Scheduled Tribe households.
- f) Displacement leads to further marginalization of already vulnerable groups, decreasing their participation and access to forest resources.



**Table 11: Influence of Gender and Social Identity on Forest Reserve Policy Impacts in Jharkhand**

Factor	Livelihood Opportunity Impact	Decision-Making Influence	Evidence Highlights
Gender (Women)	Primary forest users but limited rights and leadership; depend on NTFPs for livelihoods	Low economic power, underrepresented; 1/3 quota often unmet	2 percent female literacy in tribal areas; FRA joint titles often omit women; social vulnerabilities present
Scheduled Tribes (ST)	Dependent on forest resources; limited land tenure security; face displacement	Moderate to low participation; higher in Gram Sabhas with better support	Lower claim recognition; poor households face food insecurity; PVTGs like Mal Pahariyas especially vulnerable
Other Backward Classes	Higher participation and better land/resources access	More active in forest governance and decision-making	Participate more in PFM activities; better livelihood resilience
Landlessness, Poverty	Severe resource access constraints; reliance on wage labor and welfare	Minimal decision-making power	Seasonal food insecurity; less tree ownership; displaced households marginalized
Displaced Communities	Loss of tenure and livelihood security; reduced forest access	Significantly diminished participation	Displaced groups participate less in forest management

Gender and social identity strongly shape how forest reserve policies impact livelihoods and governance in Jharkhand. Although the FRA promotes inclusion through women's representation and recognition of tribal rights, entrenched social norms, low literacy, economic inequality, caste hierarchies, and historical marginalization limit equitable benefits and decision-making power. Tribal women, PVTGs, and landless households remain most disadvantaged, highlighting the need for targeted empowerment, awareness, and effective implementation to ensure genuine participation and fair livelihood opportunities.

**Disparities in forest cover increase among different social groups in Jharkhand, shaped by variations in land tenure, forest rights recognition, community participation, and regional socio-economic factors:**

In Jharkhand, forest cover has grown due to plantation and conservation efforts, but benefits are uneven across social groups. Better-off tribal communities and other backward classes with recognized Forest Rights Act (FRA) titles gain secure access, participate more in Joint Forest Management (JFM), and enjoy greater livelihood benefits. In contrast, landless and

poor Scheduled Tribes, Particularly Vulnerable Tribal Groups (PVTGs), and women despite being key forest users face limited rights, low participation, and displacement risks, with gender inequality further limiting their share of gains. Regional patterns show both mining-linked forest loss and community-led increases, while the 2023–24 FRA drive improved tenure security for some but left many vulnerable groups with unresolved claims, reinforcing existing inequalities.

**IX. Limitations of the study**

- 1) The study is constrained by incomplete or delayed data on the actual implementation of the Forest Rights Act (FRA) in Jharkhand, given that the recognition of forest rights has been partial and slow due to bureaucratic hurdles, lack of political will, and capacity constraints in government institutions.
- 2) The study face limitations in fully representing the heterogeneous socio-cultural and economic realities of forest-dependent communities, including marginalized groups such as Other Traditional Forest Dwellers

(OTFDs), women, and Adivasi sub-groups, due to social heterogeneity and under-reporting of certain claims.

- 3) The complex interactions between forest conservation, external stressors like mining, infrastructure projects, and weak governance structures including corruption and institutional barriers limit the study's ability to isolate the direct impacts of the forest reserve on local livelihoods, given the multifaceted and overlapping influences on these communities.

#### **X. Future Study**

- 1) Focus on longitudinal studies assessing the impact of FRA implementation,
- 2) Focus on gender-inclusive forest management models, and
- 3) Focus on integration of conservation with sustainable livelihood development.

**Conclusion:** Forests and forest reserves in Jharkhand are integral to the livelihoods of tribal populations by providing resources essential for subsistence, income, and cultural identity. The study highlights the economic significance of NTFPs and the vital role of women in forest-based livelihoods. Challenges like market access and resource degradation need addressing to ensure sustainable livelihood development and forest conservation. Empowering local communities and enhancing management practices can strengthen the socio-ecological resilience of the region.

#### **Reference**

1. Agarwal, B. (2009). *Gender and Green Governance: The Political Economy of Women's Presence Within and Beyond Community Forests*. Oxford University Press.
2. Ajaz, M. (Year Unknown). *Livelihood Contributions of Forest Resources to Tribal Communities in Bundu Block, Ranchi, Jharkhand*.
3. Baviskar, A. (1995). *In the Belly of the River: Tribal Conflicts over Development in the Narmada Valley*. Oxford University Press.
4. Case Study from Betla National Park, Palamu, Jharkhand.
5. Chakraborty, P., et al. (2016). "Role of Non-Timber Forest Products in the Livelihood of Tribal Communities in Jharkhand." *Indian Journal of Traditional Knowledge*, 15(1), 123–130.
6. Dubey, A., et al. (2013). "Forest Rights Act and Community Forest Management in Jharkhand." *Economic and Political Weekly*, 48(10), 55–63.
7. Forest Survey of India (FSI). (2021). *India State of Forest Report 2021*. Ministry of Environment, Forest and Climate Change, Government of India.
8. Gadgil, M., & Guha, R. (1992). *This Fissured Land: An Ecological History of India*. Oxford University Press.
9. Jha, M. K., et al. (2004). "Impact of Joint Forest Management on Livelihoods in Jharkhand." *Forest Policy and Economics*, 6(3–4), 355–365.
10. Jonko, B. (2014). *Forest and Livelihood: The Social Dynamics of Economic Empowerment of the Tribal Community of Jharkhand*. IJSSHBS, Vol.1 Issue 4.
11. Khurshid, I. (Year Unknown). *Female Tribal Folk and Forest Livelihood in Jharkhand*.
12. Mishra, S., & Kumar, S. (2017). "Forest Rights Act and Tribal Livelihoods: A Study in Jharkhand." *Indian Journal of Social Work*, 78(2), 189–204.
13. Mishra, S., et al. (2018). "Implementation of FRA in Jharkhand: Challenges and Opportunities." *Forest Policy and Economics*, 95, 1–9.
14. National Sample Survey Office (NSSO). (2013). *Household Consumer Expenditure Survey on Education* (2014), Report No. 563(64/25.0/1).
15. Ojha, H. R., et al. (2009). "Decentralized Governance of Forests: Learning from Jharkhand's JFM." *International Journal of the Commons*, 3(2), 490–514.
16. Pathak, N. (2010). "Forest Rights and Livelihoods in Jharkhand." *Economic and Political Weekly*, 45(38), 55–62.
17. Prasad, S., Chauhan, D. S. (2020). *Appraising Forest-Based Livelihoods through Assessment of Major NTFPs*.

- A Case Study from Jharkhand, India.  
Puspa Publishing House.
- 18.** Rao, N., et al. (2015). "Gender and Forest Management in Jharkhand." *Gender & Development*, 23(2), 279–294.
- 19.** Rights and Resources Initiative. (2015). *Who Owns the World's Land? A Global Baseline of Formally Recognized Indigenous and Community Land Rights*. University Press.
- 20.** Sarin, M., et al. (2003). "Devolution as a Threat to Democratic Decision-Making in Forestry?" *International Forestry Review*, 5(1), 21–32.
- 21.** Sengupta, N. (2011). *Managing Common Property: Irrigation in Bali and Forests in Jharkhand*. Sage Publications.
- 22.** Sundar, N. (2001). *Subalterns and Sovereigns: An Anthropological History of Bastar, 1854–2000*. Oxford

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# THE ENDURING INFLUENCE OF BENGALI LITERATURE ON INDIAN CULTURE: A COMPREHENSIVE ANALYSIS

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## Abstract

This article examines the profound and multifaceted impact of Bengali literature on Indian culture, tracing its historical evolution from ancient mystical verses to modern prose. It argues that Bengali literature, particularly during and after the Bengal Renaissance, served as a pivotal force in shaping Indian nationalism, driving social reforms, enriching philosophical discourse, influencing other regional literatures, and catalyzing developments in various art forms across the subcontinent. Through a qualitative textual analysis of seminal works and key literary movements, this study highlights how Bengali literary figures like Rabindranath Tagore, Bankim Chandra Chattopadhyay, and Kazi Nazrul Islam not only revolutionized literary forms and themes but also provided intellectual and emotional frameworks for a modern, independent, and culturally vibrant India. The report critically evaluates the mechanisms and contested aspects of this influence, underscoring Bengali literature's enduring legacy as a cornerstone of pan-Indian cultural identity.

**Key Words:** Bengali literature, Indian culture, Bengal Renaissance, Indian nationalism, Social reforms

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## 1. Introduction

Bengali literature boasts a rich and diverse tradition spanning over a millennium, establishing itself as one of Asia's most prolific literary traditions.<sup>1</sup> Its genesis can be traced back to the 10th-12th centuries with the *Charyapada*, a collection of Buddhist mystic songs that represent the earliest extant works in the language.<sup>2</sup> The evolution of Bengali language and literature has been a dynamic process, absorbing profound influences from Sanskrit, Arabic, and Persian, which contributed to its multi-layered linguistic and cultural structure.<sup>1</sup> This inherent multilingualism and the capacity for cultural assimilation within Bengali literature laid a crucial foundation for its widespread influence across the Indian subcontinent. The literary landscape underwent significant transformations through the development of medieval poetic genres such as *Mangalkavya* and Vaishnava poetry, and later, through the revolutionary intellectual and artistic changes

ushered in by the Bengal Renaissance.<sup>2</sup> The deep historical integration of diverse linguistic and cultural elements within Bengali literature suggests a fundamental openness to varied inputs. This intrinsic hybridity appears to have predisposed its literary output to a broad cultural resonance across India, positioning it as a natural conduit for pan-Indian cultural exchange rather than a tradition confined to a singular cultural or linguistic stream.

## 1.2 Significance: Why the Impact on Indian Culture is Crucial

Bengali literature has played a crucial and transformative role in shaping modern Indian society, intellectual thought, and collective cultural identity.<sup>7</sup> Its influence extends far beyond the geographical and linguistic boundaries of Bengal, profoundly impacting national movements for independence, driving significant social reforms, enriching philosophical discourse, and catalyzing

developments in various artistic expressions across the subcontinent.<sup>6</sup> A comprehensive understanding of this pervasive impact is therefore essential for grasping the broader narrative of India's cultural and intellectual development, particularly as it navigated the complexities of the colonial and post-colonial eras.

### 1.3 Central Argument Regarding the Pervasive Influence

This report posits that Bengali literature, through its pioneering adoption of modern forms, its fervent engagement with socio-political issues, and its profound philosophical explorations, acted as a primary catalyst and model for cultural and intellectual transformation across India, profoundly shaping its national identity, social consciousness, and artistic landscape.

## 2. Literature Review

### 2.1 Historical Evolution of Bengali Literature: Major Periods, Prominent Authors, and Seminal Works

The rich and extensive history of Bengali literature is conventionally segmented into distinct periods, each characterized by unique literary features and the emergence of influential figures.

- **Early Medieval Period (10th-12th Century):** The earliest surviving literary work in Bengali is the *Charyapada*, a collection of 47 mystical songs composed by various Buddhist monks, including notable figures such as Luipada and Kanhapada. These songs, written in Old Bengali (Abahatta), bear significant linguistic resemblances to the nascent Bengali language and are reflective of the Vajrayana Buddhist traditions prevalent in the eastern Indian regions of Bengal, Assam, Bihar, and Odisha during that era.<sup>2</sup>
- **Medieval Period (13th-18th Century):** This period witnessed a remarkable flourishing of diverse poetic genres, laying much of the groundwork for later literary developments.
- **Vaishnava Poetry:** This genre primarily focused on the devotional love narratives of Radha and Krishna. Prominent figures like Baruchandidas, with his seminal work *Shrikrishna Kirtana*, significantly contributed to this poetic tradition.<sup>2</sup>
- **Mangalkavya:** These were religious texts that glorified various Hindu divinities, often blending Vedic narratives with local folk tales. Significant examples include the *Manasa-mangal*, eulogizing the snake goddess Manasa, and the *Chandi-mangal*, composed in honor of the goddess Chandi.<sup>2</sup>
- **Translation Literature:** This era saw crucial translations of major Hindu epics into Bengali, making these narratives accessible to a wider audience. Notable examples include Krittivas Ojha's 15th-century Bengali translation of the *Ramayana* and Kashiram Das's rendition of the *Mahabharata*.<sup>4</sup>
- **Islamic Works:** Muslim poets made substantial contributions through romantic and narrative poems, often translating and adapting Arabic and Persian literary works. Key authors include Shah Muhammad Sagir, known for his *Yusuf o-Zalikhā*, and Syed Alaol, celebrated for *Padmavati*.<sup>3</sup> It was also during this period that the Bengali alphabet evolved significantly, becoming much closer to its modern form.<sup>3</sup> The coexistence and flourishing of Hindu religious texts and Islamic literary works, including translations of Arabic and Persian texts, highlight an early syncretic cultural environment in Bengal. This literary syncretism fostered a broader appeal and laid the groundwork for pan-Indian cultural exchange, rather than being confined to a single religious tradition.
- **Colonial Period (19th-early 20th Century):** This era is most significantly defined by the Bengal Renaissance, a period of profound cultural and intellectual revival that

reshaped Bengali society and its literary landscape.

- **Rise of Prose and Western Influence:** The introduction of modernism through prose was largely driven by Christian missionaries and Sanskrit-educated Bengali scholars.<sup>3</sup> Nathaniel Brassey Halhed's *A Grammar of Bengal Language* (1776) marked an early milestone in formalizing the Bengali language.<sup>19</sup> Peary Chand Mitra's *Alaler Gharer Dulal* (1858) is recognized as one of the earliest Bengali novels, notable for its use of colloquial language, a style that later influenced prominent writers like Bankim Chandra Chatterjee.<sup>19</sup>
- **Pioneering Authors:** Michael Madhusudan Datta was a pivotal figure, introducing blank verse with *Tilottama Sambhab Kabya* (1860) and pioneering epic poetry in Bengali with *Meghnad Badh Kavya* (1861), drawing inspiration from Western epic traditions.<sup>3</sup> Bankim Chandra Chattopadhyay emerged as a leading novelist and essayist of the 19th century, renowned for his seminal work *Anandamath* (1882) and the iconic hymn *Vande Mataram*.<sup>3</sup> Rassundari Devi's *Amar Jiban* (1876) stands as the first Bengali autobiography by a woman, providing invaluable insights into the hardships of a child bride and her struggle for literacy.<sup>20</sup> Swarnakumari Devi, Rabindranath Tagore's elder sister, gained prominence as the first female Bengali novelist.<sup>20</sup>
- **Rabindranath Tagore's Era (1890-1930):** This period was profoundly shaped by Rabindranath Tagore, a polymath whose extensive contributions spanned poetry, short stories, novels, plays, songs, and essays.<sup>3</sup> His revolutionary impact on Bengali literature earned him the distinction of being the first non-European Nobel laureate in Literature (1913) for his collection of poems, *Gitanjali*.<sup>10</sup> The rapid adoption and

adaptation of Western literary forms, such as prose, the novel, blank verse, and epic poetry, during the Colonial period exemplifies a dynamic intellectual environment in Bengal. This willingness to synthesize foreign influences with indigenous traditions was crucial for the modernization of Bengali literature, positioning it as a model for other Indian languages seeking to evolve beyond traditional forms.

- **Modern Period (20th Century-Present):** This period reflects the continued evolution and diversification of Bengali literature.
- **Post-Tagore Phase (1930-1947):** Following Tagore's immense influence, many writers consciously sought to develop new styles and themes, moving away from his pervasive shadow.<sup>3</sup>
- **Post-Partition Phase (1947-1970):** The partition of India led to a bifurcation of Bengali literature, with distinct developments emerging in West Bengal and East Pakistan (later Bangladesh), often focusing on political and religious identities.<sup>3</sup> Key authors from this broader period include Sarat Chandra Chattopadhyay, known for works like *Devdas* and *Pather Dabi*; Kazi Nazrul Islam, the "Rebel Poet," celebrated for his revolutionary poem *Bidrohi*; Jibanananda Das, a pioneer of modernist poetry; and Mahasweta Devi, recognized for her works addressing social justice themes.<sup>3</sup>
- **Bangladesh/West Bengal Era (1971-Present):** The creation of Bangladesh in 1971 further invigorated literary production with new voices like Humayun Ahmed in Bangladesh, who developed a simple, mass-appealing writing style. Concurrently, West Bengali writers such as Sunil Gangopadhyay, Samresh Majumdar, and Shirshendu Mukhopadhyay explored contemporary themes in the era of globalization.<sup>3</sup>

**Table 1: Major Periods and Key Authors of Bengali Literature**

Period	Timeline	Key Characteristics	Prominent Authors & Seminal Works
Early Medieval	10th-12th Century	Buddhist mystical poetry, early Bengali linguistic forms.	Luipada, Kanhapada ( <i>Charyapada</i> ) <sup>2</sup>
Medieval	13th-18th Century	Vaishnava & Mangalkavya poetry, Islamic narratives, translations of epics; development of Bengali alphabet.	Baru Chandidas ( <i>Shrikrishna Kirtana</i> ), Krittivas Ojha ( <i>Bengali Ramayana</i> ), Shah Muhammad Sagir ( <i>Yūsof o-Zalikhā</i> ), Syed Alaol ( <i>Padmavati</i> ) <sup>2</sup>
Colonial	19th-early 20th Century	Bengal Renaissance, rise of prose, Western influence, social commentary, nationalism.	Michael Madhusudan Datta ( <i>Meghnad Badh Kavya</i> ), Bankim Chandra Chattopadhyay ( <i>Anandamath</i> , <i>Vande Mataram</i> ), Rabindranath Tagore ( <i>Gitanjali</i> , Nobel Laureate), Peary Chand Mitra ( <i>Alaler Gharer Dulal</i> ), Rassundari Devi ( <i>Aamar Jiban</i> ), Swarnakumari Devi ( <i>Deep Nirban</i> ) <sup>3</sup>
Modern	20th Century-Present	Post-Tagore diversification, Partition impact, new literary voices, exploration of modern themes.	Sarat Chandra Chattopadhyay ( <i>Devdas</i> , <i>Pather Dabi</i> ), Kazi Nazrul Islam ( <i>Bidrohi</i> ), Jibanananda Das (modernist poetry), Mahasweta Devi ( <i>Breast Stories</i> ), Humayun Ahmed, Sunil Gangopadhyay, Samresh Majumdar, Shirshendu Mukhopadhyay <sup>3</sup>

## 2.2 Key Literary Movements and Their Characteristics

Bengali literature has been shaped by several significant literary and intellectual movements, each reflecting and contributing to the broader cultural and socio-political transformations of India.

- Bengal Renaissance (late 18th-early 20th century):** This was a pivotal cultural, social, intellectual, and artistic movement centered in Bengal, primarily Kolkata.<sup>21</sup> It was characterized by a profound questioning of existing customs and rituals in Indian society, including the caste system, *sati*, and idolatry, while advocating for societal reform aligned with secularist, humanist, and modernist ideals.<sup>36</sup> Leading figures like Raja Rammohan Roy, Rabindranath Tagore, and Ishwar Chandra Vidyasagar played instrumental roles, alongside significant Muslim contributors such as Kazi Nazrul Islam and Rokeya Sakhawat Hossain.<sup>21</sup> A

notable characteristic of this period was its emphasis on the integration of traditional Bengali cultural elements with modern ideas.<sup>10</sup> The Bengal Renaissance's focus on cultural synthesis and the integration of traditional and modern elements was not merely an internal Bengali phenomenon. It consciously aimed to forge a "civilizational model" that other regions of South Asia were encouraged to admire and emulate.<sup>41</sup> This projection of Bengali cultural leadership, while influential, also led to "intra-Bengali contestations" and "rising hostility" from non-Bengali groups, who perceived it as a form of cultural dominance.<sup>41</sup> These complex dynamic highlights that cultural influence is not always a universally accepted or unidirectional process.

- Young Bengal Movement (1820s-1830s):** This movement comprised a group of radical Bengali free thinkers, known as Derozians, who emerged from

Hindu College in Calcutta under the influence of their teacher, Henry Louis Vivian Derozio.<sup>21</sup> Inspired by the ideals of the French Revolution, they advocated for rational thinking, women's rights, and education, and openly challenged orthodox Hindu social and religious practices.<sup>42</sup> They utilized newspapers, pamphlets, and public associations to disseminate their views on social, economic, and political questions, with Derozio himself being considered a "first nationalist poet of Modern India".<sup>21</sup> Despite its relatively short lifespan and certain perceived "failures," such as its alienation from the broader masses due to its "bookish" radicalism and "professed atheism"<sup>42</sup>, the Young Bengal Movement played a crucial role in introducing radical Western liberal ideas into Indian intellectual discourse. This included concepts of rationalism, individual freedom, and women's rights.<sup>21</sup> The tension between their elite intellectual reform efforts and broader societal acceptance highlights an early pattern in Indian reform movements, where progressive ideas from a vanguard often faced resistance from traditional segments of society.

- **Kallol Movement (1923-1935):** Named after the influential literary magazine *Kallol* ("the sound of waves"), this was one of the first conscious literary movements in Bengal to embrace modernism.<sup>47</sup> The movement was significantly influenced by post-World War I trauma, Marxism, and Freudian thought, leading its writers to boldly protest against outdated societal norms and bourgeois conventions.<sup>49</sup> It fostered a new generation of prominent writers, including Kazi Nazrul Islam, Premendra Mitra, Buddhadeb Basu, and Jibanananda Das.<sup>34</sup> A notable aspect of this movement was its heated debate on poetry with more conservative writers, even drawing Rabindranath Tagore into the discussion regarding the future direction of Bengali literature.<sup>49</sup> The Kallol Movement's "revolt" against Tagorean humanism and its embrace of themes like "existentialism, depth of the mind and urban alienation"<sup>52</sup> signifies a crucial internal diversification within Bengali modernism. This internal

critique and evolution, even challenging its most revered figure, demonstrates the dynamism and intellectual self-correction within Bengali literature, preventing stagnation and ensuring its continued relevance by reflecting changing societal anxieties.

- **Freedom of Intellect Movement (1926-1936):** This was a significant Bengal Renaissance movement that championed rationality against religious and social dogma within Bengali Muslim society.<sup>36</sup> Spearheaded by intellectuals at the University of Dhaka, including Kazi Abdul Wadud, Abul Fazl, Muhammad Shahidullah, and Kazi Nazrul Islam, its primary publication was the magazine *Shikha*.<sup>53</sup> The movement's core objective was to lead an intellectual and literary drive that opposed blind superstition and backwardness, promoting rationalism, humanism, and scientific thinking.<sup>53</sup> This movement highlights the internal diversity and progressive spirit within the Bengali Muslim community, challenging any monolithic narrative of Bengali identity.<sup>31</sup> Its focus on rationalism and secularism within a religious community demonstrates Bengali literature's capacity to foster critical thought and social reform across religious lines, contributing to a more nuanced understanding of Indian secularism and the multifaceted nature of cultural awakening.

### 2.3 Dominant Themes in Bengali Literature

Bengali literature is characterized by a rich tapestry of themes that reflect the socio-political, philosophical, and emotional landscapes of Bengal and, by extension, India.

- **Social and Political Themes:** These include fervent expressions of nationalism and anti-colonial sentiment, a persistent call for social justice, and a critical examination of gender inequality and caste discrimination. The literature frequently explores the tension between tradition and modernity, the complexities of urbanization, and the profound trauma of the Partition of Bengal.<sup>3</sup>
- **Philosophical and Human Emotions:** Bengali literature delves deeply into themes of spirituality, humanism, and universalism. It explores the complexities



of human emotions, including love, loss, identity, and the quest for self-discovery. Existential questions about the absurdity of life, introspection, memory, and the relationship with nature are also recurrent.<sup>6</sup> The consistent engagement with themes such as "tradition vs. modernity" and "identity and self-discovery in a changing society" across different literary periods and movements reveals a continuous intellectual grappling with India's evolving socio-cultural landscape.<sup>3</sup> This thematic continuity, even as styles and forms transformed, suggests a deep-seated cultural introspection that allowed Bengali literature to maintain its relevance and influence over centuries, providing a mirror to societal changes and human experiences.

### **3. Research Methodology**

#### **3.1 Approach: Qualitative Textual Analysis and Comparative Literary Studies**

This study employs a qualitative textual analysis approach, complemented by comparative literary studies, to investigate the impact of Bengali literature on Indian culture. The primary focus is on understanding the nuanced meanings embedded within literary works, the social conventions they reflect or challenge, and their aesthetic effects on readers and broader society.<sup>9</sup> This methodology is particularly suited for exploring complex questions of cultural influence that reward diverse perspectives rather than singular experimental validation.<sup>9</sup>

#### **3.2 Data Collection: Utilization of Provided Academic Snippets, Historical Accounts, and Literary Analyses**

The data for this report is drawn primarily from the provided collection of research snippets. These snippets encompass a wide range of academic sources, including historical accounts of Bengali literature, detailed literary analyses of specific works and authors, excerpts from academic journals, and comprehensive encyclopedic entries. This diverse dataset allows for a multi-dimensional examination of Bengali literature's historical trajectory, thematic concerns, and cultural reverberations.

#### **3.3 Analytical Framework: Examining Literary Works within their Socio-Cultural,**

#### **Historical, and Philosophical Contexts to Trace their Impact**

The analytical framework for this study integrates several key components to thoroughly trace the impact of Bengali literature:

- **Contextual Analysis:** Each literary work and movement is examined within its specific historical, socio-cultural, and philosophical context.<sup>10</sup> This involves understanding how the Bengal Renaissance, for instance, shaped literary production and intellectual discourse, fostering a unique blend of traditional and modern ideas.<sup>21</sup>
- **Influence Study:** The research identifies both direct and indirect influences, adaptations, and emulations of Bengali literary elements across other Indian literary traditions and various art forms.<sup>11</sup> This includes examining how Bengali literary innovations served as models for modernization in other regional literatures.
- **Thematic Analysis:** A systematic deconstruction of recurring themes, such as nationalism, social reform, humanism, and existentialism, is undertaken to understand their evolution and significance across different literary periods.<sup>6</sup> This analysis explores how these themes resonated with and shaped broader Indian cultural narratives.
- **Critical Evaluation:** The study acknowledges and integrates scholarly debates and differing perspectives on Bengali literature's influence. This includes discussions surrounding the concept of "Bengaliness" as a "civilizational model" and the "intra-Bengali contestations" that arose from it.<sup>11</sup> This critical approach moves beyond a purely celebratory narrative, recognizing that cultural influence is often a contested process, subject to varying interpretations across different groups and historical periods. By incorporating these academic discussions, the report enhances its rigor and credibility, providing a more nuanced understanding of the complex, dynamic nature of cultural impact.

### **4. Objectives of the Study**

This study aims to achieve the following

objectives:

- **To trace the historical trajectory of Bengali literature and its major developments.** This involves mapping the evolution of literary forms, styles, and thematic concerns across different historical periods, from ancient origins to contemporary expressions.
- **To analyze the role of Bengali literature in shaping Indian nationalism and social reform movements.** This objective focuses on how literary works and figures contributed to the articulation of national identity, resistance against colonial rule, and advocacy for progressive social changes.
- **To explore the philosophical and ethical contributions of Bengali literary figures to Indian thought.** This entails examining how Bengali authors engaged with universal philosophical concepts, humanistic ideals, and ethical dilemmas, influencing broader intellectual discourse in India.
- **To assess the influence of Bengali literature on other Indian languages and various art forms (theatre, music, visual arts).** This objective investigates the cross-cultural pollination of literary ideas, narrative structures, and thematic inspirations across different linguistic traditions and artistic domains within India.
- **To critically evaluate scholarly perspectives on the pan-Indian cultural values propagated by Bengali literature.** This involves engaging with academic discussions and potential critiques surrounding the scope and nature of Bengali literature's influence, acknowledging its complexities and contested interpretations.

## 5. Findings: The Multifaceted Impact of Bengali Literature on Indian Culture

Bengali literature has exerted a profound and multifaceted influence on Indian culture, acting as a crucible for intellectual and artistic transformation across the subcontinent. Its impact is discernible across political, social, philosophical, linguistic, and artistic domains.

### 5.1 Catalyzing Indian Nationalism and Political Thought

Bengali literature played a foundational role in articulating and galvanizing Indian nationalism, providing both ideological frameworks and emotional rallying cries for the independence movement.

- **Bankim Chandra Chattopadhyay and 'Vande Mataram':** Bankim Chandra Chattopadhyay stands as a pioneering figure in both Bengali literature and the broader Indian nationalist movement.<sup>23</sup> His seminal novel *Anandamath* (1882), set against the backdrop of the Sannyasi Rebellion, profoundly influenced Indian nationalism by portraying a struggle against oppressive rulers and introducing the iconic hymn "Vande Mataram".<sup>3</sup> This hymn, which symbolizes the motherland as a divine entity, quickly became a powerful rallying cry for the Indian independence movement and was later informally adopted as India's national song.<sup>4</sup> Chattopadhyay's work also advocated for a cultural revivalism rooted in India's indigenous traditions and critiqued Western values, fostering a sense of pride in Indian heritage.<sup>57</sup> The evolution of "Bharat Mata" from a localized Bengali concept (Bongo Mata) to a pan-Indian symbol through Chattopadhyay's literary work illustrates the power of regional literary creations to be successfully nationalized and appropriated for broader political movements.<sup>7</sup> This demonstrates literature's capacity to transcend linguistic boundaries and forge a collective national identity, as the regional "Bongo Mata" concept, articulated in Bengali literature, was transformed into the pan-Indian "Bharat Mata" icon for the entire independence movement.
- **Kazi Nazrul Islam's Revolutionary Poetry:** Kazi Nazrul Islam, widely known as the "Rebel Poet" (Bidrohi Kobi), infused his verses, prose, and melodies with an unyielding spirit of defiance, fervent nationalism, and profound humanism.<sup>24</sup> His powerful poetry, such as "Bidrohi" (1922) and writings in *Dhumketu*, fearlessly attacked British colonial rule and championed the cause of social justice, equality, and the

emancipation of the marginalized masses.<sup>30</sup> Nazrul's unique blend of "divine yearning and revolutionary fervour" and his skillful utilization of both Hindu and Muslim traditions allowed his poetry to transcend religious divides.<sup>30</sup> His deep affection for the neglected and his significant poetic vision dedicated to Hindu-Muslim unity enabled his work to become a "unifying force" for a diverse Indian populace.<sup>30</sup> This demonstrates literature's capacity to build bridges and foster collective action beyond sectarian lines during a critical period of national awakening, appealing to a broad spectrum of society.

- **Rabindranath Tagore's Nuanced Nationalism:** Rabindranath Tagore, while a towering literary figure, also engaged deeply with contemporary social and political issues, including colonialism, caste discrimination, and gender inequality.<sup>10</sup> Although he was an ardent "critic of nationalism," cautioning against its "evils" such as "chauvinism, aggression, and false pride" and its "potential for violence"<sup>13</sup>, he paradoxically instilled a profound sense of unity and pride through his works.<sup>6</sup> Most notably, he composed "Jana Gana Mana," which later became India's national anthem.<sup>13</sup> Tagore's complex and often "nuanced approach" to nationalism, critiquing its "blind patriotism" even while contributing foundational national symbols, provided a sophisticated intellectual framework for the independence movement.<sup>6</sup> By advocating for a "humanist conception of nationalism" and emphasizing "Indian society as a natural regulation of human relationships"<sup>8</sup>, he pushed the independence movement towards a more ethical and universalist ideal, demonstrating literature's capacity for complex ideological contributions that transcend simplistic political slogans.

## 5.2 Driving Social Reform and Progressive Ideals

Bengali literature served as a powerful medium for social commentary and advocacy, significantly contributing to various reform movements across India.

- **Role in the Bengal Renaissance:** The Bengal Renaissance was instrumental in shaping modern Indian identity by challenging longstanding traditions and promoting rationalism, social justice, and gender equality.<sup>21</sup> Key figures like Raja Ram Mohan Roy championed the abolition of *sati*, advocated for language reform, and promoted women's rights.<sup>21</sup> Ishwar Chandra Vidyasagar tirelessly campaigned for widow remarriage, women's education, and the modernization of the Bengali alphabet.<sup>21</sup> Their efforts, often disseminated through literary works and periodicals, directly influenced public perception and appetite for reform.<sup>21</sup>
- **Advocacy for Women's Rights and Education:** The emergence of women writers in Bengal marked a significant shift, as their works directly challenged patriarchal norms and advocated for women's emancipation. Rassundari Devi's *Aamar Jiban* (1876), the first Bengali autobiography, vividly detailed her personal hardships as a child bride and her clandestine struggle to gain literacy.<sup>20</sup> Swarnakumari Devi, Rabindranath Tagore's sister, became the first prominent female Bengali novelist, and her work *Deep Nirban* (1876) evoked nationalist spirit while she actively fought for women's liberation.<sup>20</sup> Begum Rokeya Sakhawat Hossain was a pioneering feminist whose utopian novel *Sultana's Dream* (1905) imagined a world ruled by women, directly challenging traditional gender roles and advocating for women's education and independence.<sup>11</sup> Later, Mahasweta Devi's works, such as *Breast Stories*, critiqued social injustice and the exploitation of marginalized women<sup>24</sup>, while Taslima Nasrin's *Lajja* explored communal tensions and the plight of women during political upheaval.<sup>32</sup> The explicit connection between access to Western education and the rise of feminist ideals in Bengali literature highlights a causal link between colonial influence, intellectual awakening, and literary advocacy for social change.<sup>11</sup> This demonstrates how literature became a powerful medium for social commentary and advocacy, directly influencing public perception and appetite for reform.

- **Critique of the Caste System and Social Injustices:** Bengali literature consistently engaged with the deeply entrenched social hierarchies of the caste system. Bankim Chandra Chattopadhyay, in his essay *Samya* (1879), critically analyzed the injustice of caste discrimination, arguing that it was "against natural law" and a root cause of India's degeneration.<sup>83</sup> Ishwar Chandra Vidyasagar also strongly opposed the caste system.<sup>38</sup> Sarat Chandra Chattopadhyay's novels, such as *Brahman ki Beti* (1920) and *Mahesh* (1917), incisively dissected caste and gender tyrannies through characters who subtly or overtly violated social taboos.<sup>29</sup> His narratives exposed the hypocrisy and collective hysteria of caste-based violence, resonating with broader Indian social critiques.<sup>9</sup> More recently, Anil Gharai's Dalit literature, exemplified by works like *Noonbari* and *The Old Man and His Vote*, explored the stark realities of caste-based and gender-based oppression in rural Bengal, giving voice to the unrepresented and offering a direct critique of oppressive hierarchies.<sup>8</sup> The progression from intellectual arguments to nuanced character portrayals and direct advocacy illustrates how Bengali literature evolved its engagement with a pan-Indian social issue like caste, demonstrating its significant, long-term impact on social consciousness and reform efforts across India.
- **Impact of Young Bengal and Freedom of Intellect Movements:** Both the Young Bengal Movement and the Freedom of Intellect Movement, though distinct in their specific focuses, utilized literature and intellectual discourse as primary tools to challenge existing socio-religious orders and promote progressive ideals.<sup>21</sup> Their publications and debates fostered critical thinking and laid intellectual groundwork for future reforms.

### 5.3 Shaping Philosophical and Ethical Discourse

Bengali literature has profoundly shaped philosophical and ethical discourse in India, introducing new perspectives on humanism, universalism, and existentialism.

- **Tagore's Humanism, Universalism, and**

**Spiritual Philosophy:** Rabindranath Tagore's literary and philosophical contributions are deeply rooted in humanism, universalism, and a profound spiritual outlook. His works consistently explored themes of human connection with the divine, universal human emotions, and the harmonious integration of tradition and modernity.<sup>10</sup> Through his lyrical verses, particularly in *Gitanjali*, Tagore expressed a deep sense of devotion and a quest for inner peace, reflecting an intimate dialogue with the divine.<sup>6</sup> His philosophy of universalism resonated globally, emphasizing the fundamental unity of humanity and advocating for an inclusive, interconnected world.<sup>10</sup> Tagore's philosophical impact extended beyond mere literary aesthetics; he provided a moral and ethical compass for the nascent Indian nation. He believed that nationalism should not be narrowly defined by opposition to colonial powers but should instead foster cooperation and ideals of life, rooted in Indian philosophical traditions like Vedanta and Upanishads, blended with Western humanism.<sup>7</sup> This approach shaped a more inclusive vision for modern India, advocating for a broader identity rooted in universal values rather than narrow political boundaries, thereby contributing significantly to the rich tapestry of Indian thought.

- **Nazrul's Humanism, Rationalism, and Interfaith Harmony:** Kazi Nazrul Islam epitomized humanism, individual freedom, and rational contemplation through his works.<sup>6</sup> He consistently rebelled against injustice, sectarianism, and oppression, with a deep love for humanity and a commitment to truth.<sup>6</sup> A significant portion of his poetic vision was dedicated to Hindu-Muslim unity, and he skillfully utilized both Hindu and Muslim traditions in his modern Bengali poetry to awaken a unified consciousness among Bengalis.<sup>6</sup> His literature, rooted in personal hardship, served as a beacon for justice and equality, influencing philosophical thought beyond mere nationalism.<sup>6</sup>
- **Exploration of Existentialism and Tradition vs. Modernity:** Bengali modernism, significantly influenced by

Western thought, delved into profound existential themes. Writers explored alienation, identity, and the search for meaning in an uncertain world, reflecting the anxieties of a rapidly changing society.<sup>6</sup> Authors like Rabindranath Tagore, in novels such as *Gora* and *Chokher Bali*, explored the complexities of identity, nationalism, gender relations, and personal freedom within the context of colonial India.<sup>10</sup> The adoption of existentialist themes by modernist poets like Jibanananda Das, who explored "existential dissonance, psychological depth and fragmented time" <sup>9</sup>, and playwrights like Shombhu Mitra, who emphasized "individual freedom and collective freedom" in his works <sup>9</sup>, demonstrates Bengali literature's capacity to engage with profound universal philosophical questions beyond immediate socio-political concerns. This intellectual engagement positioned Bengali literature at the forefront of exploring the complexities of modern human experience within an Indian context, influencing a broader intellectual discourse on individual freedom and societal pressures.

#### 5.4 Influence on Other Indian Languages and Literary Traditions

Bengali literature's innovative spirit and thematic depth significantly influenced other Indian languages and their literary traditions, acting as a model for modernization and a source of inspiration.

- **Impact on Hindi Literature:** Modern Hindi literary practices were notably "inspired by Bengali literature," with Bharatendu Harishchandra initiating this trend.<sup>10</sup> Premchand, a revered figure in Hindi fiction, brought realism to Hindi prose, a development influenced by Bengali literary trends.<sup>10</sup> The influence extended into popular culture, with numerous Bengali literary works being adapted into Bollywood (Hindi) films, including classics like Bankim Chandra Chattopadhyay's *Anandamath*, Rabindranath Tagore's *Kabuliwala*, and Sarat Chandra Chattopadhyay's *Devdas* and *Parineeta*.<sup>15</sup> Tagore's *Gora* was also translated into Hindi.<sup>10</sup> The explicit

statement that modern Hindi literature was "inspired by Bengali literature" and the widespread adaptations of Bengali works into Bollywood films highlight a direct and significant causal influence. This indicates that Bengali literature served as a model for literary modernization and popular storytelling across India, demonstrating its role as a cultural trendsetter whose narratives and styles permeated other major Indian linguistic traditions.

- **Influence on Assamese and Odia Literature:** The relationship between Bengali, Assamese, and Odia literature is complex, marked by both shared heritage and distinct evolutions. The *Charyapada*, for instance, represents a "shared legacy" in the early literary history of these Eastern Indian languages.<sup>1</sup> Bengali literature also directly influenced Assamese poetry.<sup>16</sup> Historically, Bengali textbooks were prevalent in Odisha before the widespread adoption of Odia ones.<sup>10</sup> Translations of Bengali works into Odia, such as those by Ishwar Chandra Vidyasagar, further attest to this influence.<sup>10</sup> However, this influence was not always passively accepted. The complex relationship also involved "linguistic and cultural superiority" claims from Bengal <sup>8</sup>, which spurred efforts in Odisha to replace "dominant Bengali textbooks" and assert a separate Odia identity.<sup>10</sup> This demonstrates that while Bengali literature was influential, its prominence also triggered a reactive assertion of distinct regional identities in other Eastern Indian languages, leading to a more complex, dialectical relationship rather than mere absorption.

#### 5.5 Contributions to Indian Arts (Theatre, Music, Visual Arts)

Beyond literature, Bengali creative expression significantly catalyzed developments in various Indian art forms.

- **Development of Modern Indian Theatre:** Modern Indian theatre notably developed first in Bengal, influenced by Western dramatic traditions introduced during British rule.<sup>11</sup> Bengali theatre played a "pivotal role in manifesting dislike of the British Raj," serving as a

powerful platform for political commentary and social reform.<sup>11</sup> Pioneers like Girish Chandra Ghosh, who founded the National Theatre in 1872, strategically used historical and mythological themes with veiled symbolism to circumvent British censorship, allowing theatre to convey anti-colonial messages.<sup>12</sup> Rabindranath Tagore developed a unique dramatic form, integrating music and dance, and fostering experimental theatre at his Santiniketan school.<sup>11</sup> Later, figures like Badal Sircar revolutionized "third theatre" with minimalist and experimental styles focused on social and political issues.<sup>14</sup> Bengali theatre's early adoption of Western dramatic structures and its dual role as entertainment and a platform for social and political awakening made it a powerful tool for political consciousness across India. The sophisticated literary strategies employed, such as veiled symbolism, influenced political discourse even under colonial repression, serving as a model for other regions.

- **Influence on Indian Classical and Folk Music:** Rabindranath Tagore profoundly "reshaped Bengali literature and music".<sup>13</sup> His compositions, known as Rabindra Sangeet, represent a unique fusion of Hindustani classical, Carnatic, Baul, Bhatiali folk traditions, and Western tunes.<sup>12</sup> This genre, integral to Indian culture, is celebrated for its poetic and philosophical lyrics, covering themes of love, nature, spirituality, and patriotism.<sup>17</sup> Tagore's compositions, including the national anthems of both India ("Jana Gana Mana") and Bangladesh ("Amar Shonar Bangla"), transcend regional boundaries and are cherished across the subcontinent.<sup>13</sup> Kazi Nazrul Islam's "Nazrul Geeti" is similarly known for its revolutionary and spiritual content.<sup>30</sup> The profound interrelationship between Bengali literature and music, particularly exemplified by Rabindra Sangeet and Nazrul Geeti, demonstrates how literary depth can elevate musical forms to a pan-Indian cultural phenomenon. Tagore's conscious fusion of diverse musical traditions with his poetic and philosophical lyrics created a genre that transcended regional boundaries, becoming a unifying force for Indian identity and even inspiring classical

musicians beyond Bengal.<sup>15</sup>

- **Impact on Indian Visual Arts and Painting:** The Bengal School of Art, emerging in the early 20th century, was a pioneering movement that sought to revive and redefine Indian artistic traditions in response to British colonial dominance.<sup>12</sup> This movement was deeply associated with Indian nationalism (Swadeshi) and was led by luminaries such as Abanindranath Tagore (Rabindranath's nephew), Nandalal Bose, and Rabindranath Tagore himself.<sup>11</sup> Artists of this school used art as a means to express cultural heritage and political aspirations, drawing inspiration from classical Indian forms like Mughal miniatures and the Ajanta style.<sup>12</sup> Abanindranath Tagore's iconic painting *Bharat Mata* (Mother India) is a prime example; it visually personified the nation as a goddess, a concept popularized by Bankim Chandra Chattopadhyay's novel *Anandamath*.<sup>7</sup> This painting became a powerful national symbol, illustrating a direct inter-artistic causal link where literary ideas shaped iconic visual symbols of Indian nationalism. The Bengal School of Art, deeply intertwined with the literary and nationalist movements, demonstrates how Bengali literature provided thematic and ideological inspiration for a pan-Indian artistic revival.

Bengali literature stands as a crucible of intellectual and cultural transformation in India. Its historical trajectory reveals a consistent capacity for innovation, adaptation, and critical engagement with societal challenges. The multilingual origins and syncretic nature of Bengali literature allowed it to resonate broadly, while its pioneering adoption of modern forms and its deep thematic explorations provided blueprints for cultural evolution across the subcontinent. The enduring legacy of Bengali literary figures lies not only in their individual masterpieces but also in their collective contribution to shaping a modern Indian identity that is simultaneously rooted in tradition, open to global influences, and committed to progressive ideals. Its impact underscores the profound power of literature to reflect, critique, and ultimately transform a nation's consciousness.

**Table 2: Impact of Bengali Literary Figures on Indian Culture: A Thematic Overview**

Thematic Area	Key Literary Figures	Contributions to Indian Culture
<b>Nationalism &amp; Political Thought</b>	Bankim Chandra Chattopadhyay	Popularized 'Vande Mataram' and 'Bharat Mata' as national symbols, inspiring independence movement.
	Kazi Nazrul Islam	"Rebel Poet" whose anti-colonial, humanist poetry fostered unity and social justice across religious divides.
	Rabindranath Tagore	Composed "Jana Gana Mana" (National Anthem), offered nuanced critique of nationalism while fostering national pride.
<b>Social Reform &amp; Progressive Ideals</b>	Raja Ram Mohan Roy	Advocated for abolition of Sati, women's rights, and educational reforms during Bengal Renaissance.
	Ishwar Chandra Vidyasagar	Campaigned for widow remarriage, women's education, and modernization of Bengali alphabet.
	Rassundari Devi	Authored first Bengali autobiography, detailing women's struggles for literacy and against social norms.
	Rokeya Sakhawat Hossain	Pioneering feminist writer, advocated women's education and independence through utopian visions ( <i>Sultana's Dream</i> ).
	Sarat Chandra Chattopadhyay	Critiqued caste and gender hierarchies through realistic portrayals of societal injustices.
	Mahasweta Devi	Addressed social injustice and exploitation of marginalized women and communities.
<b>Philosophical &amp; Ethical Discourse</b>	Rabindranath Tagore	Promoted humanism, universalism, and spiritual philosophy, blending Indian traditions with global thought.
	Kazi Nazrul Islam	Championed humanism, individual freedom, rationalism, and interfaith harmony, challenging sectarianism.
	Jibanananda Das	Explored existentialism, urban alienation, and the complexities of modern human experience in poetry.
<b>Influence on Other Indian Literatures</b>	Bharatendu Harishchandra, Premchand	Modern Hindi literary practices and realism were inspired by Bengali literature.
	Bengali authors (via adaptations)	Bengali literary works (e.g., <i>Anandamath</i> , <i>Devdas</i> ) extensively adapted into Bollywood (Hindi) films.
	Early Bengali poets	Shared literary heritage with Assamese and Odia literature (e.g., <i>Charyapada</i> ).
<b>Contributions to Indian Arts</b>	Girish Chandra Ghosh	Pioneered modern Bengali theatre, using veiled symbolism for political commentary.
	Rabindranath Tagore	Revolutionized Bengali music (Rabindra Sangeet) by fusing classical, folk, and Western styles with profound poetry; influenced modern Indian theatre.
	Abanindranath Tagore	Led Bengal School of Art, creating iconic nationalist artwork like <i>Bharat Mata</i> , influenced by literary concepts.

## 6. Conclusion

The comprehensive analysis presented in this report unequivocally demonstrates the profound and multifaceted impact of Bengali literature on Indian culture. From its ancient mystical roots in the *Charyapada* to its modern expressions, Bengali literature has consistently served as a dynamic force in shaping the subcontinent's cultural and intellectual landscape. It played a pivotal role in catalyzing Indian nationalism, providing powerful symbols like "Vande Mataram" and "Bharat Mata" through the works of Bankim Chandra Chattopadhyay, and offering revolutionary calls for justice from Kazi Nazrul Islam. Rabindranath Tagore, while often a critic of narrow nationalism, simultaneously contributed foundational national symbols and a sophisticated ethical framework for nationhood.

Beyond political awakening, Bengali literature was a primary driver of social reform. Through the Bengal Renaissance, it championed progressive ideals such as the abolition of *sati*, promotion of widow remarriage, and advocacy for women's rights and education, with pioneering voices like Rassundari Devi and Rokeya Sakhawat Hossain. It also consistently critiqued deeply entrenched social injustices, particularly the caste system, through the nuanced narratives of Sarat Chandra Chattopadhyay and the direct advocacy of Dalit literature.

Philosophically, Bengali literature enriched Indian thought through Tagore's universal humanism and spiritual philosophy, which sought to bridge tradition and modernity, and Nazrul's rationalism and fervent call for interfaith harmony. The engagement with existential themes by modernist writers further positioned Bengali literature at the forefront of exploring universal human conditions within an Indian context.

Furthermore, its influence extended significantly to other Indian languages and literary traditions, serving as a model for modernization in Hindi literature and fostering a complex, sometimes contested relationship with Assamese and Odia literary developments. Crucially, Bengali literature provided thematic and ideological inspiration for various art

forms, including the development of modern Indian theatre, the unique fusion of Rabindra Sangeet and Nazrul Geeti in music, and the nationalist revival seen in the Bengal School of Art.

## References:

1. Bengali language - Wikipedia, [https://en.wikipedia.org/wiki/Bengali\\_language](https://en.wikipedia.org/wiki/Bengali_language)
2. www.vaia.com, [https://www.vaia.com/en-us/explanations/bengali/bengali-literature/#:~:text=Bengali%20literature%20can%20be%20divided,Modern%20\(20th%20century%2Dpresent\)](https://www.vaia.com/en-us/explanations/bengali/bengali-literature/#:~:text=Bengali%20literature%20can%20be%20divided,Modern%20(20th%20century%2Dpresent))
3. Bengali literature - Wikipedia, [https://en.wikipedia.org/wiki/Bengali\\_literature](https://en.wikipedia.org/wiki/Bengali_literature)
4. Bengali literature | History, Rabindranath Tagore, Poetry, Novels, & Facts | Britannica, <https://www.britannica.com/art/Bengali-literature>
5. Literary History of Bengal | Oxford Research Encyclopedia of Asian History, <https://oxfordre.com/asianhistory/asianhistory/abstract/10.1093/acrefore/9780190277727.001.0001/acrefore-9780190277727-e-39?p=emailAohaqDni03Dng&d=/10.1093/acrefore/9780190277727.001.0001/acrefore-9780190277727-e-39>
6. Bengali Influence: Literature & Culture | Vaia, <https://www.vaia.com/en-us/explanations/bengali/bengali-linguistics/bengali-influence/>
7. Bengali literature: Significance and symbolism - Wisdom Library, <https://www.wisdomlib.org/concept/bengali-literature>
8. Bengali renaissance: Significance and symbolism, <https://www.wisdomlib.org/concept/bengali-renaissance>
9. Bengali - Summary - eHRAF World Cultures, <https://ehrafworldcultures.yale.edu/cultures/aw69/summary>
10. THE INFLUENCE OF TAGORE'S WORKS ON BENGALI LITERATURE AND CULTURE - IJRAR.org,



- <https://www.ijrar.org/papers/IJRAR19D5705.pdf>
11. The Impact of English Literature and the British Empire on Bengali Literature and Cultural Development - IJFMR, <https://www.ijfmr.com/papers/2024/3/20509.pdf>
12. Rabindranath Tagore- Residing In Every Household, <https://things2.do/blogs/rabindranath-tagore-residing-in-every-household/>
13. Rabindranath Tagore - Wikipedia, [https://en.wikipedia.org/wiki/Rabindranath\\_Tagore](https://en.wikipedia.org/wiki/Rabindranath_Tagore)
14. Cultural Tapestry of Bengal: A Legacy of Literature, Art and Heritage - Reflections.live, <https://reflections.live/articles/21769/cultural-tapestry-of-bengal-a-legacy-of-literature-art-and-heritage-article-by-ebrahim-mollick-20484-m767m09l.html>
15. IMPACT OF BENGALI LITERATURE IN INDIAN CINEMA ... - Airo Web, <https://www.airo.co.in/download-certificate.php?cc1=140>
16. Bengali, Assamese and Oriya literature - The Hans India, <https://www.thehansindia.com/posts/index/Education-and-Careers/2015-08-10/Bengali-Assamese-and-Oriya-literature/169153>
17. Some Issues in Medieval Bangla Literature: Baru Chandidas and Vidyapati | The Daily Star, <https://www.thedailystar.net/literature/news/some-issues-medieval-bangla-literature-baru-chandidas-and-vidyapati-1855582>
18. Bengali - South Asian Languages and Civilizations - The University of Chicago, <https://salc.uchicago.edu/language-study/bengali>
19. History of Bengali Literature, [http://sec07cse.weebly.com/uploads/2/7/4/5/27454105/history\\_of\\_bengali\\_literature.pdf](http://sec07cse.weebly.com/uploads/2/7/4/5/27454105/history_of_bengali_literature.pdf)
20. 5 Prominent Bengali Authors from the Pre-Tagore Era - Amar Chitra Katha, [https://www.amarchitrakatha.com/literature\\_details/5-prominent-bengali-authors-from-the-pre-tagore-era/](https://www.amarchitrakatha.com/literature_details/5-prominent-bengali-authors-from-the-pre-tagore-era/)
21. Bengali Reforms: Movement & Education Impact | Vaia, <https://www.vaia.com/en-us/explanations/bengali/bengali-history/bengali-reforms/>
22. Bengal Renaissance And The 19th Century History Essay | UKEssays.com, <https://www.ukessays.com/essays/history/bengal-renaissance-and-the-19th-century-history-essay.php>
23. Bankim Chandra Chattopadhyay: A Comprehensive Overview - UPPCS MAGAZINE, <https://uppcsmagazine.com/bankim-chandra-chattopadhyay-a-comprehensive-overview/>
24. Bengali Literary Figures: Writers & Poets - StudySmarter, <https://www.studysmarter.co.uk/explanation/s/bengali/bengali-literature/bengali-literary-figures/>
25. A Study on Bengali Culture and It's Various Aspects, <https://ignited.in/index.php/jasrae/article/download/8834/17470/43642?inline=1>
26. Awaiting Discovery: World's 7th-Most-Spoken Language, Yet Bengali Literature Has Very Little Translations, <https://www.outlookindia.com/books/awaiting-discovery-world-s-7th-most-spoken-language-yet-bengali-literature-has-very-little-translations-magazine-199793>
27. Tagore: Literary Pilgrimages to Bengal - Universita' Per Stranieri Di Perugia, <https://www.unistrapg.it/it/tagore-literary-pilgrimages-to-bengal>
28. List of Bengali-language authors (chronological) - Wikipedia, [https://en.wikipedia.org/wiki/List\\_of\\_Bengali-language\\_authors\\_\(chronological\)](https://en.wikipedia.org/wiki/List_of_Bengali-language_authors_(chronological))
29. Sarat Chandra Chattopadhyay: Impact & Novels - Vaia, <https://www.vaia.com/en-us/explanations/bengali/bengali-famous-figures/sarat-chandra-chattopadhyay/>
30. The rebel poet who roared against Empire - Daily Pioneer, <https://www.dailypioneer.com/2025/columnists/the-rebel-poet-who-roared-against-empire.html>
31. (PDF) Bengali Cultural Identity in Post-Colonial Era: An Analysis of Bengali Cultural Representations - ResearchGate, [https://www.researchgate.net/publication/373131013\\_Bengali\\_Cultural\\_Identity\\_in\\_Post-Colonial\\_Era\\_An\\_Analysis\\_of\\_Bengali\\_Cultural\\_Representations](https://www.researchgate.net/publication/373131013_Bengali_Cultural_Identity_in_Post-Colonial_Era_An_Analysis_of_Bengali_Cultural_Representations)
32. [www.studysmarter.co.uk, https://www.studysmarter.co.uk/explanation/s/bengali/bengali-literature/literature-of-bengal-partition/](https://www.studysmarter.co.uk/explanation/s/bengali/bengali-literature/literature-of-bengal-partition/)
33. Of Women, Outcastes, Peasants, and Rebels: A Selection of Bengali Short Stories, [https://books.google.com/books/about/Of\\_Women\\_Outcastes\\_Peasants\\_and\\_Rebels.html?id=lgJog\\_PRLIIC](https://books.google.com/books/about/Of_Women_Outcastes_Peasants_and_Rebels.html?id=lgJog_PRLIIC)
34. Jibananda Das - Wikipedia,

- [https://en.wikipedia.org/wiki/Jibanananda\\_Das](https://en.wikipedia.org/wiki/Jibanananda_Das)
35. [www.vaia.com, https://www.vaia.com/en-us/explanations/bengali/bengali-literature/contemporary-bengali-literature/#:~:text=Some%20prominent%20authors%20in%20contemporary,their%20diverse%20storytelling%20across%20genres.](https://www.vaia.com/en-us/explanations/bengali/bengali-literature/contemporary-bengali-literature/#:~:text=Some%20prominent%20authors%20in%20contemporary,their%20diverse%20storytelling%20across%20genres.)
  36. Bengal Renaissance - Wikipedia, [https://en.wikipedia.org/wiki/Bengal\\_Renaissance](https://en.wikipedia.org/wiki/Bengal_Renaissance)
  37. Bengal Renaissance: Themes & Impact | Vaia, <https://www.vaia.com/en-us/explanations/bengali/bengali-history/bengali-renaissance/>
  38. The Bengal Renaissance: Social and Cultural Awakening - West ..., <https://westbengal.pscnotes.com/west-bengal-history/the-bengal-renaissance-social-and-cultural-awakening/>
  39. The Era of Bengali Renaissance – A Legacy of the Hallowed Sons of Bengal - Semantic Scholar, <https://pdfs.semanticscholar.org/9f6a/b91915c20aea4426b9f10bf0ab2462447716.pdf>
  40. Bengal Renaissance: Themes & Impact | StudySmarter, <https://www.studysmarter.co.uk/explanations/bengali/bengali-history/bengali-renaissance/>
  41. Full article: Rebuffing Bengali dominance: postcolonial India and Bangladesh, <https://www.tandfonline.com/doi/full/10.1080/14672715.2022.2150870>
  42. The Young Bengal Movement – SELF STUDY HISTORY, <https://selfstudyhistory.com/2015/04/02/the-young-bengal-movement/>
  43. Young Bengal Movement - Unacademy, <https://unacademy.com/content/upsc/study-material/modern-indian-history/young-bengal/>
  44. 'Young Bengal': How A Ragtag Group Of Bengali Students Became India's First Radicals, <https://homegrown.co.in/homegrown-voices/young-bengal-how-a-ragtag-group-of-bengali-students-became-indias-first-radicals>
  45. Henry Louis Vivian Derozio - Wikipedia, [https://en.wikipedia.org/wiki/Henry\\_Louis\\_Vivian\\_Derozio](https://en.wikipedia.org/wiki/Henry_Louis_Vivian_Derozio)
  46. Henry Derozio and the Making Indian Literature in English of - CORE, <https://core.ac.uk/download/230408263.pdf>
  47. From Imperial to International Horizons: A Hermeneutic Study of Bengali Modernism, [https://comparativestudies.osu.edu/sites/comparativestudies.osu.edu/files/Manjapra\\_Bengali\\_Modernism\\_MIH\\_2011.pdf](https://comparativestudies.osu.edu/sites/comparativestudies.osu.edu/files/Manjapra_Bengali_Modernism_MIH_2011.pdf)
  48. Kallol - Wikipedia, <https://en.wikipedia.org/wiki/Kallol>
  49. The Kallol Era: A Glimpse into Bengali Modernism | The Daily Star, <https://www.thedailystar.net/star-weekend/heritage/the-kallol-era-glimpse-bengali-modernism-1319827>
  50. The Kallol Era: A Glimpse into Bengali Modernism | The Daily Star, <https://thedailystar.net/star-weekend/heritage/the-kallol-era-glimpse-bengali-modernism-1319827>
  51. Grasshopper Kababs: The Problem of Language in the Fiction of Jibanananda Das by Rebecca Diane Whittington, [https://digicoll.lib.berkeley.edu/record/81677/files/2013Fall\\_Whittington\\_Rebecca\\_Diane.pdf](https://digicoll.lib.berkeley.edu/record/81677/files/2013Fall_Whittington_Rebecca_Diane.pdf)
  52. Modernism vs. Postmodernism: A Comparative Study of Different Poetic Movements in Bengal, [https://ijariie.com/AdminUploadPdf/Modernism\\_vs\\_Postmodernism\\_A\\_Comparative\\_Study\\_of\\_Different\\_Poetic\\_Movements\\_in\\_Bengal\\_ijariie25950.pdf](https://ijariie.com/AdminUploadPdf/Modernism_vs_Postmodernism_A_Comparative_Study_of_Different_Poetic_Movements_in_Bengal_ijariie25950.pdf)
  53. Freedom of Intellect Movement - Wikipedia, [https://en.wikipedia.org/wiki/Freedom\\_of\\_Intellect\\_Movement](https://en.wikipedia.org/wiki/Freedom_of_Intellect_Movement)
  54. Freedom of Intellect Movement - Wikiwand, [https://www.wikiwand.com/en/articles/Freedom\\_of\\_Intellect\\_Movement](https://www.wikiwand.com/en/articles/Freedom_of_Intellect_Movement)
  55. Sir Syed Ahmad Khan and the Muslim Renaissance in South Asia | The Daily Star, <https://www.thedailystar.net/opinion/focus/news/sir-syed-ahmad-khan-and-the-muslim-renaissance-south-asia-3732326>
  56. The Evolution of Nationalism in Bankim Chandra Chattopadhyay's Historical Bengali Novels, <https://gurukuljournal.com/the-evolution-of-nationalism-in-bankim-chandra-chattopadhyays-historical-bengali-novels/>
  57. BANKIM CHANDRA CHATTOPADHYAY ON NATIONALISM, <https://troindia.in/journal/ijcesr/vol11iss3/1-6.pdf>
  58. Reviving the Credo through Pop Culture: A Study of Sarat Chandra Chattopadhyay's Works,

- <https://www.creativeflight.in/2022/12/reviving-credo-through-pop-culture.html>
59. Kazi Nazrul Islam's poems inspire humans to rebel against tyranny - Awaz The Voice, <https://www.awazthevoice.in/heritage-news/kazi-nazrul-islam-s-poems-that-inspire-humans-to-rebel-against-tyranny-33042.html>
  60. Bengali Modernism: Themes & Characteristics | Vaia, <https://www.vaia.com/en-us/explanations/bengali/bengali-linguistics/bengali-modernism/>
  61. Bengali Novels: Classic Themes & Characters | Vaia, <https://www.vaia.com/en-us/explanations/bengali/bengali-literature/bengali-novels/>
  62. Human Love, Humanism, and the Philosophical Thoughts of Kazi ..., <https://globalmainstreamjournal.com/index.php/ALHE/article/download/153/118>
  63. Bengali Journalism: A Legacy of Literary and Political Prowess, <https://journalism.university/introduction-to-journalism-and-mass-communication/bengali-journalism-literary-political-legacy/>
  64. Peer Reviewed Journal The Evolution of Nationalism in Bankim ..., <https://gurukuljournal.com/wp-content/uploads/2024/07/GIMRJ2406IIV12P023.pdf>
  65. The role of Bengali Literature and Song in the Freedom Movement of India: A brief study - ijhsss, [https://www.ijhsss.com/files/13\\_1mu68525.-Suspendu-Roy.pdf](https://www.ijhsss.com/files/13_1mu68525.-Suspendu-Roy.pdf)
  66. Bengali Poetry: Themes & Techniques | Vaia, <https://www.vaia.com/en-us/explanations/bengali/bengali-literature/bengali-poetry/>
  67. Bengali Feminist Literature: Themes & Authors | Vaia, <https://www.vaia.com/en-us/explanations/bengali/bengali-literature/bengali-feminist-literature/>
  68. Arts: Women as Writers: Bengal: 19th century to early 20th century - Brill Reference Works, <https://referenceworks.brill.com/display/entries/EWIO/COM-002111.xml>
  69. Class, caste and habitus: The rise of Bhadrakol in 19th-century Bengal - The Satyashodhak, <https://thesatyashodhak.com/class-caste-and-habitus-the-rise-of-bhadrakol-in-19th-century-bengal/>
  70. Caste Movements in Bengal – It's Roots and Relevance: A Historical Assessment Kartik Chandra Sutradhar, <https://gsmp.in/wp-content/uploads/2024/08/15.pdf>
  71. Tol | Bengali Education, Language & Literature | Britannica, <https://www.britannica.com/topic/tol>
  72. Allegories Of Nationalism And Modernity In Rabindranath Tagore's The Home And The World - IJCRT, <https://ijcrt.org/papers/IJCRT2412562.pdf>
  73. The Question of Moral Education: Reading Selected Bangla and English Folktales, <https://www.sciencepublishinggroup.com/article/10.11648/j.ijla.20241204.13>
  74. Bharat Mata - Wikipedia, [https://en.wikipedia.org/wiki/Bharat\\_Mata](https://en.wikipedia.org/wiki/Bharat_Mata)
  75. Bharat Mata : As a Holy Depiction of Mother India - Enroute Indian History, <https://enrouteindianhistory.com/bharat-mata-as-a-holy-depiction-of-mother-india/>
  76. Development of Women Education in 19th Century Bengal, <https://kuey.net/index.php/kuey/article/download/9037/6858/17287>

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# AN EMPIRICAL STUDY ON DIVIDEND POLICY OF INDIAN POWER SECTOR COMPANIES

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## Abstract

In the present era dividend payout decision is the primary agenda of every company. Dividend payout ratio helps the investor where to invest that get more return. It is an important indicator about the financial health like volatility in the market of any concern. The objective of the study is to establish the relationship among dividend payout ratio with profitability, liquidity, leverage, firm size and firm growth of power sector companies in India. For the purpose of the study data has been collected from ten listed power sector companies in India. The study period is from the year 2016 to 2025. For these study total ten variables taken out of which one dependent variable namely Dividend Payout Ratio (DPR) and rest nine are independent variables i.e., ROA, ROE, EPS, NPR, DER, CR, QR, FSZ and FGR. To examine the relationship between dependent and independent variables researcher use different statistical tools like descriptive statistics, correlation and panel data regression analysis. From the results of hypotheses testing researcher noticed that out of nine independent variables six variables viz. ROA, ROE, EPS, CR, FSZ and FGR are significant relationship with DPR of the selected power sector companies in India.

**Keywords:** Dividend Payout Ratio, Fixed Effect Model, Random Effect Model, Hausman Test.

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## 1. Introduction

Dividend payout decision, one of the important aspects of company's financial policy, is not an independent decision. There are various factors that influence a firm's dividend policy. Dividend policy decides to distribute the profit and the managers have to make a choice between whether to use earning after tax to reinvest or pay out dividends to shareholders. Thus, managers should always equilibrate between different interests of shareholders so that they could utilize investment profitable opportunities and would pay required cash dividends for some shareholders. Therefore, a dividend decision by corporations' managers is very sensitive and important as well. Therefore, it is important to understand the factors that affect dividend policies so that managers can take decisions on the basis of these considerations. In India, the dividend policy is determined by the company's Board of Directors, considering the company's financial

performance, future investments, capital requirements, and other factors.

Some common types of dividend policies are given below:

**Regular Dividend Policy:** Companies following a regular dividend pattern fix a percentage of their profits to be given as dividends. With a higher yield, the company pays a higher and lower dividend when it makes a smaller profit. Some say this is the best policy for creating goodwill.

**Stable Dividend Policy:** A fixed amount is paid out every period, regardless of market volatility. This stability in distributing dividends is unaffected by the earnings of the company. With this dividend policy, the company pays shareholders a dividend even if they are making losses. In this pattern, shareholders receive a fixed dividend amount occasionally.

**Residual Dividend Policy:** Earnings are used to fund new projects or investments before any dividends are paid out. This policy can help companies pursue investment opportunities without harming their ability to pay dividends. It can also attract investors who are more interested in long-term gains than short-term dividends. However, companies that use this policy need to constantly justify their payouts to shareholders.

**Irregular Dividend Policy:** The board of directors can decide whether or not to pay dividends, and how much to pay if they do. For example, they might decide to distribute an abnormal profit in one year, or not pay any dividends at all.

Dividends can be paid out in cash or as additional stock, and are usually paid at regular intervals like monthly, quarterly, or annually. Before investing in dividend-providing companies, shareholders must consider the company's dividend policy. Factors such as profitability, dividend payment history, growth plans, industry trends, and availability of funds influence the dividend policy. By understanding these concepts and the patterns of dividend distribution, investors (like you) can make informed decisions and maximise their returns.

## **2. Literature Review**

Some important relevant studies are mentioned which have been reviewed before the following study are taken up.

Ahmed (2019) evaluates the effect of dividend policy on market price of share in Bangladesh. The study has covered secondary data and analyzed by different statistical tools like descriptive statistics, correlation, regression analysis and F test. Researcher finds that the market price is more affected by dividend payout than retained earnings. Ali et al. (2017) looks into the factors that affect dividend policy in long-run. After analyzing researchers pointed out that regular dividend payers are larger, older, more profitable, and less investment opportunities. On the other hand regular non-dividend payers are young, small, less profitable firms with greater investment opportunities and low retained earnings ratio. Bezawada and Tati (2017) stab to analyze the

dividend policy of a firm affects the market value of a firm and the shareholders' wealth. For this study a sample of 439 electrical machinery manufacturing companies listed in Bombay Stock Exchange (BSE) were taken. Investigator pointed out that there is a negative non-linear association between share market value and the dividend yields. Bhatia (2020) looks into the factors affecting the dividend decisions of Indian companies by panel regression analysis. Data is covered from 2007 to 2018. Researcher finds that dividend pay-out ratio, current earnings and investment opportunities are key parameters of the firm's dividend policy. Hooi et al. (2015) examine the relationship between dividend policy and share price volatility in the Malaysian market. Researcher reveals that there is a negative significant relation between dividend yield and dividend payout and also firm size and share price. Another observation of the researcher is that positive statistically significant relationships between earning volatility and long term debt and no significant relationship found between growth in assets and price volatility in the Malaysian market. Kawadkar (2020) investigate the dividend policy and its impact on market value of share price covering from the year 2015 to 2019 of Power Sector Company. Researcher noted that dividend policy has significant impact on share price of the power sector company listed in BSE. Kumar and Sujit (2018) inspect the trends of dividend policies of Indian Firms. Researchers reveal that high growth firms retain cash flows for future investment and dividend intensity of firms is directly related to the size of firm. It also noticed that those firms with higher agency costs, liquid and profitable firms tend to pay higher dividend intensity. Livoreka et al. (2014) provide information to stakeholders about the factors that determine dividend policy. Investigator pointed out that the effect of dividend policy in current stock prices is very relevant issue because in the last three years 80% of our respondent companies have distributed dividends that will helpful to the dividend policy makers. Padmavathi (2016) focused on dividend distribution policies of Indian information technology and power sector companies in India. The study exposes that power sector has regular dividend policy as compared to Information Technology sector. Rawal and Gopalkrishnan (2024) aims to examine the impact of financial distress on the

dividend distribution policy of 31 banks out of 36 banks operating in India between 2016 and 2020. Researchers shows that linear association between financial distress and dividend decisions has become positively significant and debt equity ratio exhibits a negatively significant influence on the association between financial distress and the dividend payment policy of Indian banks. Raza (2018) compared the relationship between the dividend policy of Indian Public Sector Banks and the Indian private sector banks. For this study data has been collected from 36 banks out of which 25 is public sector banks and 11 are private sector banks for the period from 2002-03 to 2014-15. Researcher pointed out that private sector banks there is more relationship between the shareholder's wealth and the dividend policy than in the public sector banks. Roy (2015) looks into the possible association between the firm's ownership structure and dividend policy. Researcher wrap up that foreign institutional ownership, board size and the proportion of non-executive directors on the board have significant impact on the dividend policy of the firm. Also noticed growth opportunities and the size of the firm also impact the dividend policy of firms. Singh and Tandon (2019) evaluate the effect of dividend policy on market prices of shares of Nifty 50 companies listed on the National Stock Exchange (NSE) for 2008–2017. The data have been analyzed by pooled regression model. Hausman test indicates that random effect model is more relevant and concludes that there is significant effect of dividend policy on the stock price of firms. Suresh and Puja (2020) examining the relationship between dividend pay-out policy and financial performance of 60 firms listed on the National Stock Exchange between 2009–2018. From the analysis researchers noted that a positive and significant relationship between dividend pay-out policy and return on assets and also recommended that companies should robust dividend pay-out policy that would encourage investment in projects that give positive Net Present Value.

## 2. Research Gap

On the basis of literature reviewed, it is observed that there is no particular study bring

into being as related to the connection between dividend payout ratio with profitability, liquidity, leverage, firm size and firm growth during the study period of the power sector companies in India.

## 3. Objective of the Study

The objective of the study is to establish the relationship among dividend payout ratio and profitability, liquidity, leverage, firm size and firm growth of power sector companies in India.

## 4. Hypotheses of the Study

In compliance with the above stated objectives, the following hypothesis has been formulated:

- H<sub>0</sub>: There is no significant relationship among dividend payout ratio with profitability, liquidity, leverage, firm size and firm growth.
- H<sub>1</sub>: There is a significant relationship among dividend payout ratio with profitability, liquidity, leverage, firm size and firm growth.

## 5. Research Design

Research design means a mode to scientifically solve a research dilemma. It consists of a string of steps that are engaged mutually to give a roadway for haulage out a research assignment.

- **Sample Size and Selection:** The pragmatic work is based on a swot up of power sector companies in India. Hence, the sample size is ten and the period of study is from 2016 to 2025.
- **Data Type:** The entire study is based on secondary/quantitative data collected from the money control website ([www.moneycontrol.com](http://www.moneycontrol.com)).
- **Research Methods Applied:** Based on the objectives of this study, the author uses descriptive statistics, correlation and panel data regression analysis.

The following table depicts the variables taken for the study.

**Table 1: Abbreviations and Full Form**

<b>Dependent Variable</b>		
<b>Abbreviation</b>		<b>Full Form</b>
DPR		Dividend Payout Ratio
<b>Independent Variables</b>		
<b>Indicators</b>	<b>Abbreviations</b>	<b>Full Form</b>
<b>Profitability</b>	ROA	Return on Assets
	ROE	Return on Equity
	EPS	Earnings Per Share
	NPR	Net Profit Ratio
<b>Leverage</b>	DER	Debt Equity Ratio
<b>Liquidity</b>	CR	Current Ratio
	QR	Quick Ratio
<b>Size</b>	FSZ	Firm Size
<b>Growth</b>	FGR	Firm Growth

Source: Compiled by Author

**7. Analysis and Findings**

The findings of the study are presented in below:-

Descriptive statistics provide a way to describe the main features of a data set in a clear and concise manner. These statistics are often summarized in tables to provide a clear picture of the distribution and variability of the data.

**7.1 Descriptive Statistics-****Table – 2: Descriptive Statistics**

<b>Variable</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>DPR</b>	-319.75	237.09	25.047	51.569	-2.117	24.196
<b>ROA</b>	-7.64	8.99	3.074	2.303	-1.241	5.151
<b>ROE</b>	-34.34	21.74	8.790	7.079	-2.850	14.530
<b>EPS</b>	-14.53	100.40	12.852	18.726	3.083	11.045
<b>NPR</b>	-56.48	49.18	12.974	14.825	-0.784	4.888
<b>DER</b>	0.24	3.18	1.413	0.743	0.464	-0.665
<b>CR</b>	0.30	2.99	1.163	0.618	1.136	0.733
<b>QR</b>	0.24	2.90	1.071	0.612	1.163	0.629
<b>FSZ</b>	0.58	4.33	1.437	0.996	1.960	2.899
<b>FGR</b>	-0.23	5.54	4.148	1.419	-2.301	4.288

Source: Compiled by Author

In the above table descriptive statistics shows minimum, maximum, mean, standard deviation, skewness and kurtosis. DPR appears to be a central component, given that it has the highest mean, suggesting it has the most significant average value among the variables considered. However, its higher standard deviation means there's also considerable variation in the data for DPR, which might warrant further investigation into the causes of this variability. On the other hand, FSZ (with

the highest minimum value) might represent a variable with more consistent or less extreme lower values and QR (with the lowest maximum value) might be relatively less variable at the higher end of the range. The skewness and kurtosis values could further provide insights into the distribution shape for these variables and understanding these could be crucial in identifying the underlying patterns or concerns.

## 7.2 Correlation Analysis

The correlation matrix is used to assess the relationships between pairs of variables. Multi-collinearity is a situation in which two or more independent variables in a regression model are

highly correlated, leading to unreliable estimates of the model's coefficients. It's typically considered problematic when the correlation between variables is above 0.80 or 0.90, as it can cause issues with model stability and interpretation.

**Table – 3: Correlations**

		DPR	ROA	ROE	EPS	NPR	DER	CR	QR	FSZ	FGR
<b>DPR</b>	P	1									
	Sig.										
<b>ROA</b>	P	.123	1								
	Sig.	.223									
<b>ROE</b>	P	.129	.683	1							
	Sig.	.202	.000								
<b>EPS</b>	P	-.004	.246*	.378	1						
	Sig.	.971	.014	.000							
<b>NPR</b>	P	.081	.671	.640	.047	1					
	Sig.	.426	.000	.000	.644						
<b>DER</b>	P	-.218*	-.472	-.114	.000	-.273	1				
	Sig.	.029	.000	.258	.998	.006					
<b>CR</b>	P	.104	.442	.137	-.020	.443	-.690	1			
	Sig.	.305	.000	.173	.846	.000	.000		.		
<b>QR</b>	P	.100	.420	.130	-.026	.458	-.671	.794	1		
	Sig.	.320	.000	.199	.794	.000	.000	.000			
<b>FSZ</b>	P	-.111	-.145	-.117	-.181	-.324	.065	-.106	-.059	1	
	Sig.	.274	.150	.247	.071	.001	.519	.292	.559		
<b>FGR</b>	P	.001	.050	.071	.039	.325	.147	-.098	-.141	-.796	1
	Sig.	.993	.620	.486	.704	.001	.143	.330	.163	.000	

Source: Compiled by Author P = Pearson Correlation

\*. Significant at the 5% level (2-tailed). Significant at the 1% level (2-tailed).

Since all correlation values are below 0.80, there is no multi-collinearity issue in this study. This means that the independent variables do not exhibit a high degree of correlation, ensuring that the estimates of the regression coefficients will be more reliable. With no multi-collinearity, the independent variables can be included together in the regression model without significant concern about redundant information or instability. This may

involve running a regression analysis, examining the relationships between the independent variables and the dependent variable and evaluating model fit, significance levels and assumptions.

## 7.3 Panel Regression Analysis

In this section author shows the output obtained through the data input in the STATA software. The details result of panel data are given below in the table number 4, 5 and 6.



**Table – 4: Results of Fixed Effect Model**

Fixed-effects (within) regression Group variable: company code R-sq: within = 0.1179 between = 0.0304 overall = 0.0599 corr(u_i, Xb) = -0.6013				Number of observation = 100 Number of groups = 10 Observation per group: min = 10 avg = 10.0 max = 10 F(6,54) = 1.20 Prob > F = 0.3048		
DPR	Coefficient	Std. Error	t	p >  t	[ 95% Conf. Interval ]	
ROA	-22.0797	10.4127	-2.12	0.037	-42.7977	-1.3617
ROE	8.3428	3.2544	2.56	0.012	1.8677	14.8179
EPS	-0.5123	0.6543	-0.78	0.436	-1.8142	0.7896
NPR	-1.3729	1.1041	-1.24	0.217	-3.5696	0.8238
DER	40.8580	185.0193	0.22	0.826	-.327.2724	408.9883
CR	-39.1621	16.8424	-2.33	0.023	-72.6732	-5.6510
QR	-39.2484	179.5195	-0.22	0.827	-396.4538	317.939
FSZ	-5.18934	30.2002	-0.17	0.864	-65.2783	54.8996
FGR	-8.9592	61.6952	-0.15	0.885	-131.7133	113.7949
_cons	145.8529	267.3626	0.55	0.587	-386.1148	677.8205
sigma_u	25.3544					
sigma_e	50.9861					
Rho	0.1983 (fraction of variance due to u_i)					
F test that all u_i=0:				F(9, 81) = 0.38 Prob > F = 0.9431		

Source: Compiled by Author

**Table – 5: Results of Random Effect Model**

Random-effects GLS regression Group variable: company code R-sq: within = 0.1067 between = 0.7496 overall = 0.1667 corr(u_i, X) = 0 (assumed)				Number of observation = 100 Number of groups = 100 Observation per group: min = 10 avg = 10.0 max = 10 wald chi2(6) = 18.01 Prob > chi2 = 0.0351		
DPR	Coefficient	Std. Error	z	p>  z	[ 95% Conf. Interval ]	
ROA	20.1172	9.1109	-2.21	0.027	-37.9742	-2.2603
ROE	7.5252	2.8484	2.64	0.008	1.9424	13.1081
EPS	0.6336	0.3304	-1.92	0.055	-1.2811	0.1389
NPR	0.6157	0.7616	-0.81	0.419	-2.1084	0.8770
DER	37.7365	107.8733	0.35	0.726	-173.6913	249.1644
CR	34.8926	12.8296	-2.72	0.007	-60.0382	-9.7470
QR	35.8736	106.0717	-0.34	0.735	-243.7704	172.0231
FSZ	22.4077	14.7164	-1.52	0.028	-51.2514	6.4359
FGR	9.2107	11.4347	-0.81	0.021	-31.6224	13.2009
_cons	157.9108	70.5741	2.24	0.025	19.5882	296.2335
sigma_u	0					
sigma_e	50.9861					
Rho	0 (fraction of variance due to u_i)					

Source: Compiled by Author

**Table – 6: Results of Hausman Test**

<b>Hausman Fixed Random</b>
Chi2 (9) = 2.41
Prob>chi2 = 0.9832

Source: Compiled by Author

The Hausman test compares the fixed effects model with the random effects model. Based on the above table (no. 6), it is observed that the Hausman test prefers the random effect model to the fixed effect model as the p value (0.9832) of the chi-square (2.41) lies above the significance level of 0.05. Similarly, the p-value (0.0351) for the random effects model is below 0.05, which indicates that the random effects model is statistically significant and well-fitted to the data. The independent variables in the model explain 16.67% of the variation in the dependent variable (Dividend Payout Ratio, DPR). While this indicates some explanatory power, there is still a substantial amount of unexplained variation, suggesting that other factors not included in the model may also be influencing DPR. The model shows that six independent variables — ROA (Return on Assets), ROE (Return on Equity), EPS (Earnings per Share), CR (Current Ratio), FSZ (Firm Size) and FGR (Firm Growth Rate) have a statistically significant relationship with DPR. These variables are positively associated with DPR meaning that an increase in these variables is associated with an increase in the Dividend Payout Ratio. The coefficients of the random effect model reveal that –

- i. ROE (Return on Equity): For every 1% increase in ROE, DPR increases by 752.52%. This is a very large change, and the effect is statistically significant at the 1% level, meaning that ROE has a highly significant positive effect on DPR.
- ii. CR (Current Ratio): For every 1% increase in CR, DPR increases by 3489.26%. This is a substantial change, and the effect is also statistically significant at the 1% level, indicating that liquidity (as measured by CR) has a strong positive relationship with DPR.
- iii. ROA (Return on Assets): For every 1% increase in ROA, DPR increases by 2011.72%. This effect is statistically significant at the 5% level, meaning ROA positively influences the Dividend Payout

Ratio, though the magnitude is slightly smaller than ROE and CR.

- iv. EPS (Earnings per Share): A 1% increase in EPS leads to a 63.36% change in DPR. This effect is statistically significant at the 5% level, meaning that profitability (measured by EPS) also has a positive and meaningful impact on DPR.
- v. FSZ (Firm Size): For every 1% increase in FSZ, DPR increases by 2240.77%. This is a significant positive relationship at the 5% level, showing that larger firms tend to have a higher dividend payout ratio.
- vi. FGR (Firm Growth Rate): A 1% increase in FGR results in a 921.07% change in DPR. This effect is statistically significant at the 5% level, suggesting that firms with higher growth rates tend to pay higher dividends.

The random effects model indicates that Dividend Payout Ratio (DPR) is directly and positively influenced by key financial indicators, including profitability (ROE, ROA), liquidity (CR) and firm characteristics (FSZ and FGR). These relationships are statistically significant with varying magnitudes of impact where CR and ROE have the largest effects on DPR.

## 5. Conclusion

The study investigates the determinants of Dividend Payout Ratio (DPR) for quoted power sector companies in India. By examining panel data for ten listed power sector companies between 2016 and 2025, the researcher identifies six significant factors that influence dividend policy. The study utilizes the Random Effects Model to analyze the data and draw conclusions. The study's findings provide valuable insights for finance managers in the power sector, particularly in India. The significant factors like profitability (ROA, ROE), liquidity (CR) and firm characteristics (FSZ and FGR) suggest that finance managers can make more informed dividend decisions by considering these indicators. Profitability (ROA, ROE and EPS) and liquidity (CR) are central to the decision-making process,

implying that companies with higher earnings and better financial stability are more likely to distribute higher dividends. Firm size and growth also play an important role suggesting that larger, more stable companies with growth potential can afford to share more profits with shareholders, offering a potential signal of financial health and stability. For finance managers, understanding the relationship between these factors and DPR is crucial for making dividend decisions that align with company performance and shareholder expectations. Managers might consider focusing on improving profitability and liquidity to ensure consistent dividend payouts while also taking into account the firm's size and growth prospects. This empirical study provides a robust framework for understanding the determinants of Dividend Payout Ratio in India's power sector. It highlights the importance of profitability, liquidity, and firm characteristics in shaping dividend policies, offering practical guidance to finance managers for making dividend decisions based on these influential factors.

## References:

1. Ahmed, H. (2019), "The Effect of Dividend Policy on Share Price: An Evaluative Study, *The Cost and Management*, 47(4), 54-58.
2. Singh, N. P. and Tandon, A. (2019), "The Effect of Dividend Policy on Stock Price: Evidence from the Indian Market", *Asia-Pacific Journal of Management Research and Innovation*, 15(1), 7-15.
3. Livoreka, B., Hetemi, A., a Shala, A., a Hoti, A. and Asllanaj, R. (2014), "Theories on Dividend Policy Empirical Research in Joint Stock Companies in Kosovo", *Procedia Economics and Finance*, 14(1), 387-396.
4. Suresh, N. and Puja, M. (2020), "A study on Determinants of Dividend Policy and its Impact on Financial Performances: A Panel Data Analysis for Indian Listed Firms", *Journal of Seybold Report*, 15(8), 2791-2799.
5. Rawal, A. and Gopalkrishnan, S. (2024), "Impact of financial distress on the dividend policy of banks in India: evidence using panel data", *Future Business Journal*, 10(27), 1-11.
6. Raza, A. (2018), "A Comparative Study of Determinants of Dividend Policy of Indian Public and Private Sector Banks", *Journal of Emerging Technologies and Innovative Research*, 5(7), 1373 – 1379.
7. Bhatia, B. S. (2020), "Financial Parameters and Dividend Decisions of Indian Companies: An Empirical Investigation", *Business Analyst*, 41(2), 155-170.
8. Kawadkar, H. (2020), "Study of Dividend Policy and Its Effect on Market Value of Shares of Power Sector Company In India", *Journal of Emerging Technologies and Innovative Research*, 7(5), 649 – 653.
9. Bezawada, B. and Tati, R. K. (2017), "Dividend Policy and Firm Valuation —A Study of Indian Electrical Equipment Manufacturing Industry", *Theoretical Economics Letters*, 7(5), 1233-1243.
10. Ali, I., Gohar, A. and Meharji, O. (2017), "Why do firms change their dividend policy?", *International Journal of Economics and Financial Issues*, 7(3), 411-422.
11. Roy, A. (2015), "Dividend Policy and Corporate Governance: An Analysis of listed Indian Firms", *Great Lakes Herald*, 9(2), 33-75.
12. Hooi, S.E., Albaity, M. and Ibrahimy, A. I. (2015), "Dividend Policy and Share Price Volatility", *Investment Management and Financial Innovations*, 12(1), 226-234.
13. Padmavathi, Uppugunduri. (2016), "Dividend Policies in Indian Corporate Sector: A Special Focus on Information Technology and Power Industries", *Indian Journal of Research*, 5(10), 212-214.
14. Kumar, B.R and Sujit, K. S (2018), "Determinants of dividends among Indian firms - An Empirical Study", *Congent Economics & Finance*, 6(1), 1-18.

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# **TREND ANALYSIS OF INDIA'S FOREIGN DIRECT INVESTMENT INFLOW IN CEMENT AND GYPSUM PRODUCTS SECTOR**

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## **Abstract**

This paper examines the trends, patterns, and determinants of Foreign Direct Investment (FDI) in the Cement and Gypsum Products sector in India from 2000 to 2021. The sector, essential for infrastructure and construction, demonstrates a highly volatile and irregular pattern of FDI inflows, marked by intermittent increases and sharp decreases. The study employs descriptive trend analysis, linear regression, moving averages, and percentage growth metrics to identify five distinct phases: early volatility (2000–2005), surge and instability (2006–2010), decline and inconsistency (2010–2015), a sharp peak (2016–2017), and a prolonged downturn (2018–2021). Years such as 2005–06 and 2016–17 experienced remarkable surges in FDI, primarily attributable to isolated substantial projects or policy changes rather than enduring investor confidence. The linear regression study yielded a  $R^2$  value of 0.0189, signifying negligible explanatory power of time on investment patterns and implying that external factors such as governmental reforms, global economic cycles, infrastructure demand, and environmental changes predominate. The period after 2017 witnessed a steady decrease in inflows, perhaps attributable to market saturation, environmental issues, global uncertainties, and the detrimental effects of the COVID-19 pandemic. The research highlights the importance of stable policy frameworks, strategic sectoral reforms, and sustainable investment models in attracting and keeping foreign direct investment in capital-intensive industries such as cement and gypsum. The article finishes by examining the importance of FDI, the obstacles hindering long-term investment, and the policy frameworks influencing foreign capital inflows in the sector.

**Keywords:** FDI, Cement and Gypsum Products, LPG

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## **1. Introduction**

Foreign Direct Investment (FDI) has historically been fundamental to economic development, especially in capital-intensive sectors like cement and gypsum products. The cement industry, an essential element of the construction and infrastructure sectors, is acutely responsive to global and domestic economic situations. It is pivotal in influencing the advancement of emerging markets and is essential for the execution of significant infrastructure projects, including roads, bridges, housing, and industrial facilities. Due to its significance, foreign direct investment in

the cement and gypsum sector is frequently regarded as both a source of capital and a crucial vehicle for technical transfer, knowledge dissemination, and productivity improvement (Chakrabarti, 2001)<sup>1</sup>. The cement and gypsum materials industry is essential for the advancement and modernisation of infrastructure in both established and developing nations. Cement, an essential component in construction, and gypsum, commonly utilised in building materials such as drywall and plaster and, are pivotal commodities propelling the worldwide construction surge. According to the International Cement Review (2019)<sup>2</sup>, global cement demand is projected to grow steadily

due to increasing urbanization, industrialization, and infrastructure development, especially in emerging markets. Consequently, foreign direct investment in this sector is essential for augmenting production capacity, promoting innovation, and strengthening the sustainability of production processes. Foreign Direct Investment (FDI) can assist in mitigating the issues of overcapacity, promoting environmental sustainability, and facilitating modernisation within the cement industry. Foreign investors, especially from industrialised nations, provide essential sophisticated technology, finance, and management knowledge necessary for industry transformation (Meyer, 2001)<sup>3</sup>.

The cement and gypsum products sector is a primary subject for FDI research, especially in emerging economies where infrastructure development is a pivotal policy goal. Foreign Direct Investment (FDI) significantly contributes to economic development by supplying capital, technology, and access to global markets. The Eclectic Paradigm (Dunning, 1988)<sup>4</sup> posits that foreign direct investment (FDI) is influenced by three determinants: ownership advantages, location advantages, and internalisation advantages. Foreign investors in the cement and gypsum products sector are typically drawn to nations characterised by inexpensive labour, increasing infrastructure demand, and prospects for technological and market advancement. Numerous studies have emphasised the beneficial effects of foreign direct investment on the economic performance of the host nation. Javorcik (2004)<sup>5</sup> asserts that foreign direct investment (FDI) can augment the productivity of indigenous enterprises by providing access to global best practices and technologies. Moreover, FDI inflows can facilitate the integration of local markets into global value chains, hence enhancing exports and bolstering competitive performance internationally. Within the cement sector, foreign direct investment frequently entails the potential for increased efficiency, augmented production capacity, and elevated product quality standards. Foreign investors may use cleaner, more efficient industrial technology or sophisticated logistical systems that lower costs and enhance competitiveness. Consequently, foreign direct investment in the cement and gypsum products sector is frequently regarded as a means to modernise the entire industry,

enhancing both the environmental and economic performance of the host nation (Blomström & Kokko, 2003)<sup>6</sup>. The patterns in foreign direct investment inflows to the cement and gypsum sector have fluctuated considerably over time. UNCTAD (2020)<sup>7</sup> reports that global FDI flows have experienced cycles of expansion and contraction, shaped by global economic conditions, trade policy, and regional geopolitical risks. Between the early 2000s and the mid-2010s, foreign direct investment in the cement sector saw significant volatility, influenced by global economic events such as the Asian Financial Crisis (1997), the global financial crisis (2008), and the ensuing recovery periods. Foreign Direct Investment (FDI) increased significantly due to worldwide demand for infrastructure development and the emergence of new markets, especially in rapidly industrialising economies such as China, India, and Brazil. Nonetheless, these trends have not been consistent. During economic instability, exemplified by the 2008 financial crisis, FDI inflows into the sector experienced substantial drops owing to diminished demand for cement and gypsum products, construction deceleration, and the constriction of credit markets. In contrast, during periods of economic recovery and policy liberalisation, exemplified by the post-2016 infrastructure boom, there was a significant rise in foreign direct investment flows, especially from multinational corporations aiming to exploit extensive construction projects in developing nations (Kokko, 1994)<sup>8</sup>. Although foreign direct investment offers significant prospects for advancement in the cement and gypsum industry, it also poses several problems. A principal worry is the environmental impact of cement manufacture, a major industrial contributor to global carbon emissions. Investors in the sector must contend with ever rigorous environmental rules and expectations for enhanced sustainable production methods. These difficulties pose both a danger and an opportunity for foreign investors, who may get a competitive advantage by implementing cleaner technology or investing in research and development for alternative materials (OECD, 2015)<sup>9</sup>. Moreover, geopolitical concerns and economic uncertainty, including trade disputes, economic downturns, and the persistent repercussions of the COVID-19 outbreak, have complicated foreign investment decisions.

Although these considerations may inhibit short-term investing, they underscore the necessity for improved risk management and the advantages of diversification.

## 2. Trend Analysis of Foreign Direct Investment (FDI) in the Cement and Gypsum Products Sector (2000-2021)

**Table:1: 2.Trend Analysis of Foreign Direct Investment (FDI) in the Cement and Gypsum Products Sector (2000-2021)**

YEAR/SECTOR	FDI Inflow in Cement And Gypsum Products( in million USD)	Moving Average	Percentage Growth Rate
2000-01	67.72	#N/A	
2001-02	139.9	#N/A	106.58
2002-03	21.08	76.23	-84.93
2003-04	9.58	56.85	-54.55
2004-05	0.16	10.27	-98.32
2005-06	452.08	153.94	282450
2006-07	242.47	231.57	-46.36
2007-08	16.89	237.14	-93.03
2008-09	724.8	328.05	4191.29
2009-10	33.8	258.49	-95.33
2010-11	637.68	465.42	1786.62
2011-12	267.9	313.12	-57.98
2012-13	12.38	305.98	-95.37
2013-14	254.01	178.09	1951.77
2014-15	208.99	158.46	-17.72
2015-16	19.69	160.89	-90.57
2016-17	2130.1	786.26	10718.2
2017-18	19.44	723.07	-99.08
2018-19	17.61	722.38	-9.41
2019-20	5.1	14.05	-71.03
2020-21	3.78	8.83	-25.88

Source: DPIIT

### 1. Preliminary Volatility (2000–2005)

The early 2000s signified a phase of considerable instability in foreign direct investment inflows to the cement and gypsum industry. In 2000-01, the industry obtained 67.72 million USD, subsequently experiencing unstable oscillations. A significant increase in 2001-02 was succeeded by a considerable decrease in 2002-03, indicating a growth contraction of -85% following a rapid rise of 106.6%. The most significant decline transpired

in 2004-05, when FDI fell to only \$0.16 million USD. This volatility may be ascribed to a combination of external and internal causes that significantly affected investor mood. The early 2000s were shaped by the repercussions of the Asian Financial Crisis (1997-98), which had enduring effects on capital flows and investor risk tolerance in emerging markets (UNCTAD, 2020)<sup>10</sup>. Many emerging economies, including India, were implementing structural reforms domestically, such as trade liberalisation and the partial deregulation of essential sectors like

cement (Dunning, 1988)<sup>11</sup>. The liberalisation of the sector attracted foreign investment; nevertheless, inconsistent policy execution and sluggish institutional adaption probably diminished investor excitement. The fluctuations throughout this period indicate the overarching global economic uncertainty and the difficulties in harmonising regulatory frameworks with international investor expectations (World Bank, 2021)<sup>11</sup>.

### **FDI Surge (2005–06) and Subsequent Volatility (2006–2010)**

The 2005–06 fiscal year had an exceptional rise in foreign direct investment (FDI) to \$452.08 million USD, representing a remarkable 282,450% increase compared to the prior year. This pronounced increase is probably due to a singular substantial investment or the involvement of prominent multinational businesses, motivated by extensive infrastructure projects and market liberalisation strategies (Gopalan & Rajan, 2012)<sup>13</sup>. In 2006–07, sustained high inflows and a subsequent peak in 2008–09 (amounting to \$724.8 million USD with a growth rate of 4,191%) corresponded with the response to the post-2008 global financial crisis. Numerous governments, notably India, implemented infrastructure-intensive stimulus programs, enhancing demand for construction materials like cement (UNCTAD, 2020)<sup>13</sup>. Foreign investors, in pursuit of stable profits during global financial instability, regarded government-supported infrastructure expenditure as a low-risk prospect (Dunning, 1988)<sup>14</sup>. The investment increase consequently indicated a reorientation of global capital towards tangible assets in emerging nations under macroeconomic instability.

### **Declining FDI and Increased Volatility (2010–2015)**

From 2010 to 2015, the sector experienced a downward trend in FDI inflows, characterised by significant volatility. Although 2010–11 experienced a significant increase of 1,786.63%, subsequent inflows exhibited considerable volatility. A significant decrease in 2015–16 resulted in FDI falling to \$19.69 million USD, indicating a -90.58% year-over-year reduction. This decline aligns with the

global economic recalibration post-2008 crisis, when developed nations enacted austerity measures and limited fiscal expenditure (World Bank, 2021)<sup>15</sup>. Concurrently, the cement sector encountered escalating apprehensions regarding overcapacity, intensified rivalry, and stagnant demand in principal countries like China (Gopalan & Rajan, 2012)<sup>16</sup>. The aforementioned constraints, along with sluggish development in emerging markets and falling commodity prices, certainly diminished investor confidence in the sector. Moreover, the maturation of markets and diminished profitability dissuaded long-term foreign direct investment commitments.

### **Sharp Surge in 2016–17 and Renewed Decline (2017–2021)**

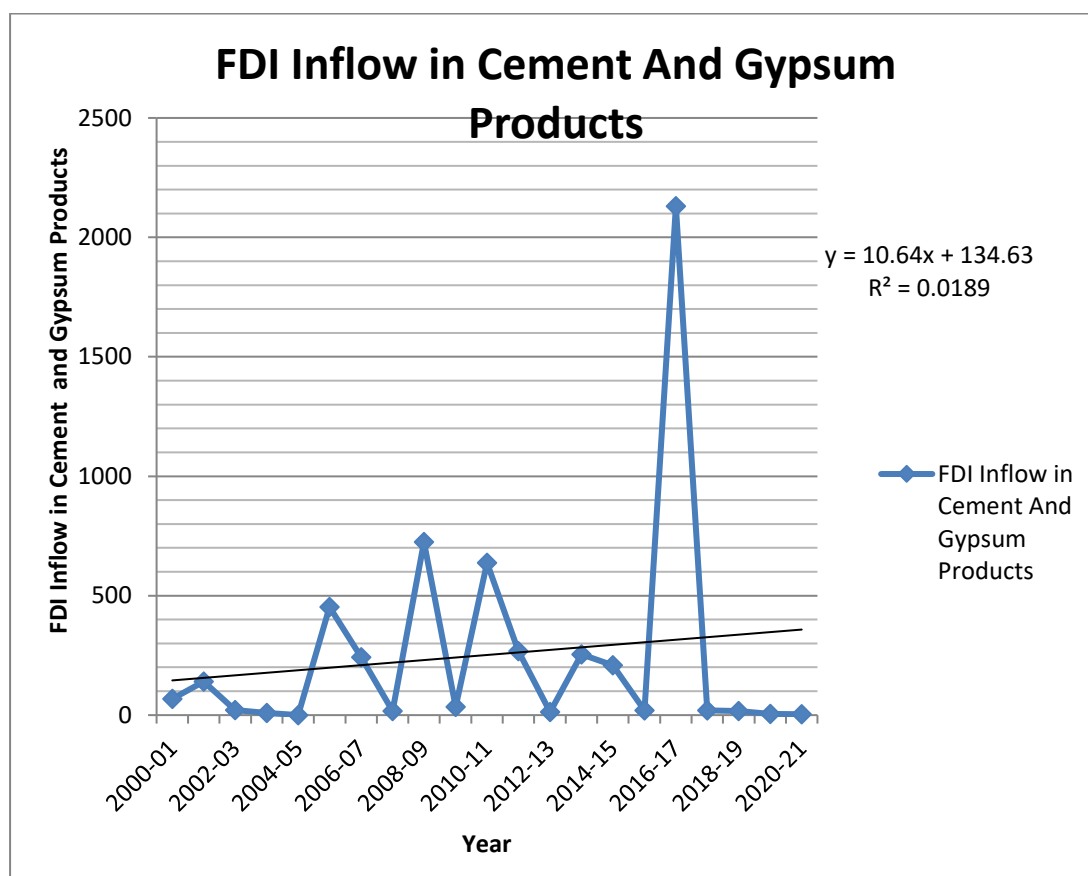
In 2016–17, there was a sudden influx of FDI amounting to \$2,130.1 million USD, signifying an extraordinary growth of 10,718%. This increase presumably originated from several substantial investments by multinational firms exploiting infrastructure developments, urbanisation, and housing demand in emerging markets (Javorcik, 2004)<sup>17</sup>. Policy improvements in India, including the introduction of the Goods and Services Tax (GST) and the ease of doing business, may have contributed to attracting international investments. Nevertheless, the increasing trajectory was unsustainable, resulting in a fall of FDI inflows from 2017 onwards. Contributing variables were market saturation, intense sectoral competition, and global geopolitical concerns, particularly the U.S.-China trade war and variable commodity prices (UNCTAD, 2020)<sup>18</sup>. The emergence of the COVID-19 pandemic in 2020–21 disrupted global supply chains and postponed infrastructure projects, resulting in diminished cement demand and investment (World Bank, 2021)<sup>19</sup>.

### **Final Years and Long-Term Decline (2018–2021)**

Between 2018 and 2021, foreign direct investment inflows into the cement and gypsum sector were minimal, exhibiting persistent negative growth rates. The ongoing fall signifies increasing market maturity, heightened pricing competition, and

environmental challenges that have necessitated a change in investment methods. Significantly, there has been a progressive global shift towards sustainable construction and eco-friendly materials, such as green cement, which may have diminished the attractiveness of traditional cement manufacturing investments (Javorcik, 2004)<sup>20</sup>. Moreover, investor attention seems to be

transitioning from capital-intensive industries to more innovation-oriented and sustainable sectors, particularly in the post-pandemic global economy. The cumulative impact of these structural changes indicates a fundamental shift in FDI preferences away from conventional heavy sectors such as cement.



During the specified period, the influx of FDI in this industry was predominantly erratic. Several significant years experienced a substantial increase in FDI inflows, including 2006-07, 2008-09, 2010-11, 2014-15, and most notably, 2016-17, when FDI inflow reached a peak above 2,000 million USD. The significant gains seem to be anomalous occurrences rather than signs of enduring growth, as the inflows markedly decreased in the following years, reverting to pre-2005 levels or below by 2020-21. The remainder of the dataset, especially during the early 2000s and from 2017 to 2018, demonstrates negligible investment activity, indicating a deficiency in long-term investor confidence or inherent structural constraints

within the sector. This irregular behaviour underscores the episodic and opportunistic characteristics of FDI in this sector, which may be more responsive to short-term market fluctuations or policy declarations than to long-term investment initiatives. To elucidate the pattern, a linear regression line was incorporated into the graph, yielding the equation:

$$Y = 10.64X + 134.63$$

**X** and **Y** represent the following:



**X (Independent Variable):** This is the **time period**, represent the year **2000-01, 2001-02**, and so on, up to **2020-21**.

**Y (Dependent Variable):** This is the **FDI inflow** in the Cement and Gypsum Products sector, measured in US Millions Dollar.

This equation demonstrates that, on average, FDI inflow in this industry has risen by around 10.64 million USD year over the 21-year span, commencing from a baseline of 134.63 million USD in the initial year. The explanatory capacity of this trend line is significantly constrained, as indicated by the coefficient of determination  $R^2 = 0.0189$ . This indicates that merely 1.89% of the change in FDI inflow is attributable to the passage of time, highlighting the statistical insignificance of the identified trend. A low  $R^2$  value indicates that external forces, rather than time, predominantly influence fluctuations in FDI inflows. These may encompass alterations in government policy, variations in global commodity demand, mergers and acquisitions, trade agreements, or domestic economic circumstances. The trend line is further skewed by the outlier in 2016-17, which artificially elevates the slope and creates a deceptive impression of progressive expansion.

The moving average of FDI inflows in the Cement and Gypsum sector elucidates long-term investment trends while mitigating short-term volatility. From 2000-01 to 2004-05, the moving average remained low, consistently below 60 million USD, indicating relatively moderate and volatile foreign direct investment inflows. By 2004-05, it had decreased markedly to 10.27 million USD, signifying a substantial reduction in investor interest. In the mid-2000s, there was a significant increase in foreign direct investment (FDI), with the moving average rising rapidly from 153.94 million USD in 2005-06 to a peak of 328.05 million USD in 2008-09. The surge in investment was probably propelled by elevated investor confidence, stimulated by economic liberalisation, a thriving real estate sector, and significant infrastructural initiatives. From 2009-10 to 2015-16, the moving average exhibited erratic trends, oscillating between 258.49 million USD and 160.89 million USD. This period of volatility is attributable to the repercussions of

the global financial crisis, coupled with policy uncertainties and market corrections. During the fiscal year 2016-17, there was an exceptional influx of 2130.1 million USD, elevating the moving average to a record high of 786.26 million USD. Nonetheless, this surge was ultimately unsustainable, leading to a subsequent decrease in the moving average in the ensuing years. Beginning in 2017-18, the trend had a significant reversal, with the moving average plummeting from 723.07 million USD to merely 8.83 million USD in 2020-21. This significant fall indicates diminishing investor interest, maybe attributable to reasons including economic downturn, market saturation, and the negative effects of the COVID-19 pandemic.

The Percentage Growth Rate of FDI inflow in the Cement and Gypsum industry reveals considerable annual changes, demonstrating a trend characterized by both velocity and volatility. The data indicates instances of remarkable growth, such a 282,450% spike in 2005-06 and a 10,718% surge in 2016-17. Nonetheless, these remarkable surges did not signify enduring growth but rather isolated influx occurrences, frequently succeeded by precipitous drops exceeding 90%, illustrating erratic investor conduct. Positive increase occurred in various years, including 2001-02, 2005-06, 2008-09, 2010-11, 2013-14, and 2016-17, indicating surges in investment activity presumably associated with particular projects or governmental incentives. However, these were often followed by substantial declines, underscoring the idea that the sector lacked stable investment impetus. The prevailing trend indicates a preponderance of negative growth years, especially following 2016-17, which signifies a marked reduction in investor confidence and a declining appeal of the sector to international investors.

### **3. Significance of Foreign Direct Investment (FDI) in the Cement and Gypsum Products Sector**

Foreign Direct Investment (FDI) is a crucial element in the growth and advancement of companies globally, especially in capital-intensive sectors such as cement and gypsum products. Foreign Direct Investment (FDI) serves as a fundamental catalyst for economic

growth, providing essential capital, technological innovations, access to global markets, managerial proficiency, and sustainability efforts, all of which are vital for the advancement and competitiveness of the cement and gypsum sector. This section examines the critical importance of FDI in the cement and gypsum products sector, highlighting its roles in economic development, knowledge transfer, industry modernisation, environmental sustainability, and worldwide market integration.

### **Economic Growth and Development**

The primary relevance of FDI in the cement and gypsum products sector is its capacity to stimulate economic growth. Cement is an essential substance utilized in construction, directly associated with a nation's infrastructural advancement. This sector is crucial in facilitating economic activity, including the construction of roads, bridges, housing, and industrial facilities (UNCTAD, 2020)<sup>21</sup>. Foreign Direct Investment in the cement sector allows nations, especially in the developing world, to satisfy the increasing infrastructure demands resulting from swift urbanization and industrialization. Foreign Direct Investment (FDI) serves as an essential financial source for developing economies, augmenting domestic investment, hence stimulating more construction and fostering overall economic growth. For instance, research indicates that foreign direct investment inflows have been pivotal in nations such as India and China, where the demand for cement and gypsum products is substantial due to swift urbanization (Chakrabarti, 2001)<sup>22</sup>. Foreign Direct Investment (FDI) enhances job creation, boosts productivity, and elevates tax revenues by augmenting the resources allocated for infrastructure projects, thus generating a multiplier effect on the overall economy (OECD, 2015)<sup>23</sup>. Foreign Direct Investment (FDI) in the cement business is crucial for economic development, especially in emerging economies, as it addresses deficiencies in domestic investment and expedites infrastructure advancement. The influx of foreign cash into the sector not only stimulates growth in the building industry but also facilitates job creation and industrial expansion.

### **Technology Transfer and Innovation**

Another crucial relevance of FDI in the cement and gypsum products sector is its role in facilitating technology transfer and fostering innovation. Foreign investors frequently introduce sophisticated manufacturing technology and production methodologies that enhance the efficiency of cement and gypsum production. This is especially crucial as the business is significantly capital-intensive, necessitating sophisticated apparatus and technology to maintain competitiveness. Foreign direct investment facilitates the transmission of advanced technology, including energy-efficient production systems, automated facilities, and sustainable cement manufacturing techniques (Meyer, 2001)<sup>24</sup>. Advanced rotary kilns and alternative fuel technologies can markedly decrease energy usage and CO<sub>2</sub> emissions, a critical concern due to the cement industry's substantial carbon footprint. The transfer of information and technology enhances productivity and promotes sustainable manufacturing practices, benefiting both the investor and the host nation (Blomström & Kokko, 2003)<sup>25</sup>. Furthermore, technology transfer via foreign direct investment generates a spillover impact that advantages the whole sector. Local enterprises can implement optimal practices, augment their technological competencies, and elevate their productivity levels (Javorcik, 2004)<sup>26</sup>. This promotes innovation in the cement business, allowing it to more effectively address the requirements of the contemporary building sector, especially concerning green technology and sustainable manufacturing methods. Foreign Direct Investment (FDI) is crucial in the cement business since it enables the transfer of sophisticated technologies and innovative practices that modernise the industry. This transfer enhances the efficiency and productivity of cement makers while facilitating the shift towards more sustainable production practices.

### **Improvement of Industrial Competitiveness**

Foreign Direct Investment is crucial in augmenting the competitiveness of the cement and gypsum products industry. International investors frequently contribute not just finance but also managerial acumen and organisational

best practices that enhance operational efficiency. Multinational corporations in the cement sector implement strategies such as lean manufacturing, just-in-time inventory, and supply chain optimisation, which contribute to cost reduction and enhance the overall competitiveness of local enterprises (Kokko, 1994)<sup>27</sup>. Foreign companies can enhance production quality standards by investing in cement facilities, so motivating local enterprises to embrace these elevated standards to maintain competitiveness. This thus enhances the overall quality of products in the host country, resulting in superior building materials and more robust industrial performance (Blomström & Kokko, 2003)<sup>28</sup>. Furthermore, the implementation of effective manufacturing procedures via foreign direct investment enables local enterprises to augment their production capacity, which is essential for satisfying the escalating demand in emerging markets. Foreign Direct Investment (FDI) improves the competitiveness of the cement business by introducing managerial skills, contemporary manufacturing techniques, and elevated operational standards. This competitiveness transcends individual enterprises, benefiting the sector collectively by addressing the problems posed by escalating global demand and intensifying market competition.

#### **Access to Global Markets and International Trade**

Foreign Direct Investment (FDI) substantially enhances the cement and gypsum industry's integration into international markets. Multinational cement corporations generally possess established trade networks and access to global markets. Foreign investors entering a host country frequently assist domestic enterprises in accessing global supply networks and export markets, so enhancing their possibilities in the international business arena (OECD, 2015)<sup>29</sup>. Foreign Direct Investment (FDI) enhances exports by linking the host nation's cement manufacturers with global distributors, suppliers, and construction initiatives. The development into international markets is essential for cement companies in nations with excess production capacity, as it provides opportunities for growth beyond domestic demand (Javorcik, 2004)<sup>30</sup>. Moreover, foreign investments offer exposure

to global production norms, hence enhancing the international competitiveness of cement products from the host countries. Foreign Direct Investment (FDI) facilitates access to worldwide markets, hence augmenting the international competitiveness of the cement industry, enabling firms to broaden their scope and exploit opportunities in the global trade landscape. Foreign Direct Investment (FDI) alleviates concerns linked to overproduction in domestic markets by offering alternative revenue sources via exports.

#### **Environmental Sustainability and Green Practices**

In recent years, the ecological ramifications of the cement industry have emerged as a substantial worry. The cement industry is a major contributor to global carbon emissions, prompting the international community to intensify pressure on companies to implement more sustainable practices. Foreign Direct Investment (FDI) can facilitate the use of green technologies and sustainable practices in cement manufacturing (OECD, 2015)<sup>31</sup>. Foreign investors frequently introduce access to more sustainable industrial technology, including alternative fuels and raw materials, carbon capture and storage (CCS) methods, and energy-efficient production systems. Several international cement corporations have engaged in low-carbon cement production methods, aiding the global initiative to diminish carbon emissions and combat climate change (Meyer, 2001)<sup>32</sup>. This transition to green cement production not only complies with international environmental criteria but also guarantees the sector's long-term sustainability. Foreign Direct Investment (FDI) is progressively vital in advancing environmental sustainability in the cement sector. Foreign investment expedites the implementation of cleaner, more energy-efficient technology, essential for diminishing the carbon footprint of the cement industry and conforming to global sustainability objectives.

#### **Infrastructure Development and Urbanization**

Foreign Direct Investment in the cement and gypsum products sector is intricately associated with overarching infrastructure development objectives, especially in emerging nations.

Cement is a fundamental material for the construction and development of transportation networks, energy systems, urban housing, and commercial buildings. The influx of foreign direct investment into the cement sector is essential for satisfying the demand for this infrastructure, especially as global urbanisation rates persist in their ascent (Chakrabarti, 2001)<sup>33</sup>. As urban areas grow and economies develop, the demand for cement products rises significantly. Foreign Direct Investment furnishes essential resources for cement makers to augment production, optimise supply chains, and satisfy the escalating demands of the construction industry. The World Bank (2021)<sup>34</sup> asserts that infrastructure development is a crucial catalyst for economic growth in underdeveloped countries. The influx of foreign capital can facilitate the development of essential infrastructure that allows other sectors, such as energy, transportation, and communications, to thrive. Foreign Direct Investment (FDI) accelerates infrastructure development, crucial for fostering industrialisation and urbanisation. In developing economies, the cement sector serves as a crucial facilitator of broader economic reforms, with foreign investment being vital in satisfying the increasing need for construction materials.

#### **4. Challenges of Foreign Direct Investment (FDI) in the Cement and Gypsum Products Sector**

Foreign Direct Investment (FDI) provides various advantages to the cement and gypsum products sector, including capital inflows, technological progress, and market expansion; however, it also presents several challenges that may impede the sector's growth and the efficient assimilation of foreign investment. These issues are complex and encompass a blend of political, economic, social, environmental, and operational obstacles. Comprehending these problems is essential for policymakers and industry stakeholders to establish a conducive climate that optimises the advantages of FDI while alleviating its related hazards. This section examines the principal obstacles encountered by the cement and gypsum products industry in attracting and efficiently using foreign direct investment (FDI).

#### **Political and Regulatory Risks**

Foreign investors encounter considerable obstacles in the cement and gypsum products market due to political instability and regulatory unpredictability. Political risk includes several factors like as alterations in government policy, risks of expropriation, and variations in the legal and regulatory environment. In numerous emerging nations, where the cement industry is poised to attract foreign direct investment, political instability may result in abrupt alterations to trade policies, tax regulations, and environmental legislation (Chakrabarti, 2001)<sup>35</sup>. Changes in government rules concerning foreign ownership or cement price can substantially influence the sector's appeal to international investors. The regulatory landscape may pose obstacles due to bureaucratic inefficiencies, inconsistent law enforcement, and delays in acquiring essential permits or licenses for cement manufacturing (Meyer, 2001)<sup>36</sup>. The cement industry, characterised by its capital intensity, is notably susceptible to regulatory changes due to its necessity for long-term investments in infrastructure, technology, and production facilities. A deficiency in clarity or stability within the regulatory environment may deter foreign investors from making substantial investments in the area. Political and regulatory issues constitute substantial obstacles to the attraction and retention of foreign direct investment in the cement and gypsum products industry. Countries that do not establish a solid and transparent policy framework jeopardise their ability to attract potential investors, thereby forgoing the economic and technological advantages linked to foreign capital.

#### **Environmental and Sustainability Challenges**

The cement and gypsum products sector is among the most energy-intensive and environmentally detrimental businesses worldwide, chiefly owing to the substantial carbon emissions generated during cement production. The environmental impact of the sector, especially the elevated carbon dioxide (CO<sub>2</sub>) emissions from limestone and coal utilisation in manufacturing, has attracted heightened scrutiny from global regulatory agencies and environmental organisations

(OECD, 2015)<sup>37</sup>. Foreign investors may encounter difficulties in complying with rigorous environmental rules in both the host and home nations. As governments globally implement more environmental regulations to fulfil climate change obligations, including those specified in the Paris Agreement, the cement industry must identify methods to diminish its carbon emissions. Numerous international investors in the cement sector may provide modern, energy-efficient technology; but, local conditions, such as access to renewable energy and waste materials, may restrict the implementation of these solutions. Moreover, foreign investors may have difficulties in guaranteeing compliance with local environmental legislation, which can vary significantly among locations (Meyer, 2001)<sup>38</sup>. Moreover, the adoption of green technology and sustainable practices in cement manufacturing, including carbon capture and storage (CCS), alternative fuels, and low-carbon cement production, may necessitate substantial initial investment. Countries with restricted access to money or expertise have obstacles in effectively using foreign direct investment (FDI) to enhance environmental sustainability (Chakrabarti, 2001)<sup>39</sup>. Environmental and sustainability issues pose significant barriers for foreign direct investment in the cement industry. Foreign investors may provide innovative technology that can reduce environmental effect; nevertheless, the substantial capital investment needed for green breakthroughs and differing local environmental legislation can hinder their application.

### **Infrastructure and Supply Chain Issues**

The cement and gypsum products industry depends significantly on a robust and well-established infrastructure, encompassing transportation systems, energy provision, and access to raw materials. Nevertheless, numerous developing nations, where foreign direct investment in the cement sector is frequently directed, encounter substantial infrastructure deficiencies. Subpar transportation networks, unpredictable energy supplies, and insufficient supply chain infrastructure can impede the efficacy of foreign investment and elevate operational expenses (OECD, 2015)<sup>40</sup>. The cement

business necessitates substantial amounts of raw materials, including limestone, clay, and gypsum, which must be procured and transported effectively. Delays in the procurement of essential supplies or interruptions in transportation may result in production setbacks and heightened operational expenses. The absence of dependable infrastructure poses a considerable obstacle for international investors aiming to develop large-scale cement factories, particularly in areas where raw materials need to be imported (Chakrabarti, 2001)<sup>41</sup>. Furthermore, infrastructural deficiencies frequently impact local suppliers and may restrict the advantages of foreign direct investment via spillover effects. If local providers of raw materials or construction services cannot satisfy the requirements of international investors, the prospects for local economic development from foreign direct investment are diminished (Javorcik, 2004)<sup>42</sup>. Inadequate infrastructure and supply chain inefficiencies can undermine the value of foreign direct investment in the cement industry. The failure to efficiently source and transport raw materials or deliver dependable energy services markedly elevates operating risks and expenses for foreign investors, hence diminishing the sector's overall appeal.

### **Competition from Domestic Players and Market Saturation**

Foreign Direct Investment in the cement and gypsum products sector frequently encounters obstacles due to local market dynamics, especially vigorous rivalry from established domestic entities. In numerous developing nations, indigenous cement firms are already deeply embedded in local markets and supply chains, potentially granting them a competitive edge due to their established brand recognition and regional expertise (Blomström & Kokko, 2003)<sup>43</sup>. In certain markets, foreign investors may encounter challenges in market entry, particularly if domestic firms possess substantial market share or have forged strong connections with essential customers and suppliers. Moreover, in economies characterised by overcapacity in the cement sector, foreign investors may encounter market saturation, hindering their ability to secure profitable returns. This is particularly pertinent

in nations where cement supply exceeds building demand, and new entrants may find it challenging to compete with established producers, both international and domestic (OECD, 2015)<sup>44</sup>. Competitive pressures and market saturation provide substantial obstacles for international businesses attempting to penetrate the cement and gypsum products industry. Foreign investors may encounter difficulties in penetrating markets that are already controlled by local or multinational cement companies, especially in nations with surplus production capacity.

### **Cultural and Socioeconomic Barriers**

Cultural and socioeconomic considerations may present obstacles for foreign investors in the cement and gypsum products industry. The efficacy of foreign direct investment frequently hinges on the capacity to acclimatise to the local culture, comprehend social dynamics, and establish rapport with essential players, such as local communities, labour unions, and government officials. Foreign investors often have challenges in navigating interactions with local stakeholders who possess divergent expectations and priorities (Kokko, 1994)<sup>45</sup>. In the cement industry, challenges such as labour conflicts, community opposition to large-scale projects, and apprehensions over the environmental repercussions of cement facilities can generate friction between foreign investors and local populations. Moreover, social and economic inequalities may hinder foreign companies' capacity to participate in corporate social responsibility (CSR) efforts, which are increasingly regarded as essential for sustainable business practices. Socioeconomic and cultural obstacles provide considerable difficulties for foreign investors in the cement and gypsum industry. Comprehending and addressing local cultural dynamics, labour relations, and community issues is crucial for the successful and enduring acceptance of foreign investments.

### **5. Policies Related to Foreign Direct Investment (FDI) in the Cement and Gypsum Products Sector**

The effective influx and administration of Foreign Direct Investment (FDI) in the cement and gypsum products sector necessitate a series

of meticulously crafted policies and regulations. These policies seek to cultivate an environment that appeals to international investors, protects national interests, guarantees the efficient utilisation of resources, and fosters sustainable growth in the sector. The policies governing FDI in the cement and gypsum sector are varied and encompass a blend of regulatory frameworks, incentives, and strategies to tackle environmental issues, enhance industry competitiveness, and facilitate integration into the global market.

### **Liberalization of FDI Policies**

A fundamental policy to entice foreign investment in the cement and gypsum products sector is the deregulation of FDI policies. Numerous nations, especially developing economies, have been implementing liberalised foreign direct investment policies to stimulate international investment and promote industrial growth. These policies often entail the relaxation of foreign ownership limitations, the streamlining of investment processes, and the creation of a more conducive environment for foreign enterprises to initiate operations. India has gradually liberalised its cement sector to international investment by relaxing limitations on foreign ownership in cement enterprises. The Indian government has permitted up to 100% foreign direct investment in the cement sector under the automatic route, enhancing its appeal to foreign investors (Chakrabarti, 2001)<sup>46</sup>. This liberalised strategy promotes investment by global cement companies in production facilities, hence enhancing local production capacity and technological advancement. Liberalisation strategies generally seek to diminish bureaucratic obstacles, enhance transparency, and streamline the legal and administrative prerequisites for international investors. These policies aim to encourage long-term investments by mitigating uncertainty and fostering economic growth (Meyer, 2001)<sup>47</sup>. Relaxing foreign direct investment policies in the cement and gypsum products sector is essential for attracting international capital. By alleviating ownership constraints and streamlining investment procedures, governments can cultivate an atmosphere favourable to foreign capital influx, hence

enhancing industrial modernisation and economic expansion.

### **Incentive-Based Policies**

Incentive-based policies are a crucial component in promoting foreign direct investment in the cement and gypsum products industry. These policies frequently offer targeted financial and fiscal advantages to foreign investors to mitigate the substantial expenses related to the establishment of cement plants, particularly in capital-intensive industries such as cement manufacture. Governments may provide tax incentives, duty waivers, and subsidies for the importation of machinery and equipment utilised in cement manufacturing. Furthermore, several nations offer investment allowances or tax credits to firms who invest in energy-efficient technologies or sustainable manufacturing methods (OECD, 2015)<sup>48</sup>. In nations such as Vietnam, the government has instituted economic incentives to bolster the cement industry, including tax exemptions for new cement plants and reductions in import duties for raw materials and machinery (OECD, 2015)<sup>49</sup>. These incentives aim to alleviate the initial capital burden for foreign investors, so enhancing the appeal of long-term investment in the cement sector. Furthermore, the implementation of incentives consistent with sustainable development objectives, such as subsidies for eco-friendly technologies, might motivate investors to adopt more environmentally sustainable practices in cement production. Incentive-based policies mitigate the early financial risks for foreign investors, facilitating their entry and expansion in the cement business. Governments can guarantee that investments support both economic and environmental objectives by providing tax exemptions, subsidies, and incentives for ecologically sound practices.

### **Regulations on Environmental Sustainability and Carbon Emissions**

The cement and gypsum products industry significantly contributes to carbon emissions, rendering environmental sustainability a crucial policy concern for investors and host nations. Numerous nations have implemented legislation and policies designed to mitigate the

environmental effects of cement production while incentivising foreign investors to embrace cleaner technologies. In the European Union (EU), cement businesses must adhere to rigorous rules imposed by the Emissions Trading System (ETS), which limits CO<sub>2</sub> emissions and mandates the purchase of carbon credits for any excess emissions beyond allocated permits. These rules promote the utilisation of alternative fuels (e.g., waste-derived fuels) and energy-efficient technology in cement manufacturing, which can substantially diminish the industry's carbon footprint (Meyer, 2001)<sup>50</sup>. Foreign investors in the cement industry are urged to implement these technologies to adhere to local environmental regulations and contribute to global sustainability objectives. In developing nations, certain governments provide green incentives to international cement firms that invest in low-carbon cement manufacturing or carbon capture and storage (CCS) technologies (Chakrabarti, 2001)<sup>51</sup>. These incentives may encompass tax refunds or funding for initiatives designed to mitigate emissions, enhance energy efficiency, and diminish the environmental impact of cement facilities. Environmental sustainability requirements serve a dual purpose by promoting foreign investment and ensuring that cement production complies with worldwide environmental norms. These regulations reduce the sector's environmental effect and promote the use of sustainable technologies, benefiting both the host nation and the global community.

### **Local Content and Technology Transfer Policies**

In numerous host nations, especially in developing economies, a primary aim of foreign direct investment (FDI) is to attract foreign capital while simultaneously facilitating technology transfer and knowledge spillovers. The cement industry has a significant opportunity for knowledge transfer, as multinational cement companies frequently introduce sophisticated production methods, equipment, and management practices to local markets. Governments may establish local content rules mandating foreign corporations to get a specified percentage of materials and services domestically, thereby promoting partnership with local suppliers and enterprises.

These policies seek to guarantee that foreign direct investment (FDI) advantages the overall economy, rather than solely the cement sector, by establishing local supply networks and enhancing the skill set of the local labour force (Blomström & Kokko, 2003)<sup>52</sup>. Additionally, governments may offer incentives for foreign investors to transfer technology to domestic companies. These laws frequently mandate that foreign investors partner with domestic firms on research and development (R&D) initiatives or disseminate knowledge and best practices in cement manufacturing (Chakrabarti, 2001)<sup>53</sup>. This collaboration can enhance local enterprises' technological skills and support the long-term growth and sustainability of the cement industry. Local content and technology transfer regulations are crucial instruments for guaranteeing that foreign direct investment (FDI) advantages the broader economy. Governments can enhance local capacity, augment productivity, and stimulate innovation in the cement sector by mandating foreign investors to collaborate with domestic enterprises and transfer knowledge.

### **Infrastructure Development Policies**

The capital-intensive characteristics of the cement and gypsum products industry render infrastructure essential for the efficacy and sustainability of foreign direct investment (FDI). Governments frequently enact infrastructure development programs to tackle the logistical issues related to cement manufacture, including transportation, energy supply, and access to raw materials. Numerous nations have emphasised the establishment of industrial parks and special economic zones (SEZs), providing investors with access to essential infrastructure, including transportation networks, energy, and water supply (OECD, 2015)<sup>54</sup>. These infrastructure advancements not only diminish operational expenses but also enhance the business environment in the cement sector, rendering it more appealing to overseas investors. Governments may engage with private investors to construct or enhance transport networks, such as roads and railways, crucial for the distribution of cement products (Meyer, 2001)<sup>55</sup>. Infrastructure development strategies are essential for facilitating foreign direct investment in the cement and gypsum products

industry. Governments can mitigate operational inefficiencies and enhance the appeal of investments for foreign enterprises by ensuring access to dependable transportation, electricity, and raw materials.

### **6. Conclusion:**

The examination of FDI trends in the cement and gypsum sector from 2000 to 2021 indicates a cyclical and highly variable investment pattern influenced by global economic conditions, domestic policy alterations, and shifting investor objectives. Significant increases in investment corresponded with global infrastructure expansions and liberalisation initiatives, whereas substantial declines were indicative of global crises, policy inconsistencies, and market saturation. Long-term trends indicate a diminishing interest in the sector attributed to environmental issues and decreased profitability, highlighting the necessity for comprehensive policy reforms and sectoral innovation to restore investor trust. Foreign Direct Investment (FDI) is crucial to the cement and gypsum products sector because it stimulates economic growth, enables technology transfer, boosts competitiveness, expands market access, and fosters sustainability. Foreign Direct Investment (FDI) modernises the sector by supplying cash, skills, and innovative practices, thereby enhancing its integration with the global economy. Furthermore, foreign direct investment provides essential resources for advancing green technology and minimising the environmental impact of cement production, tackling a critical concern within the industry. Consequently, foreign direct investment is essential for the future growth and advancement of the cement and gypsum products industry, especially in growing economies aiming to enhance their infrastructure. Notwithstanding the evident benefits of Foreign Direct Investment (FDI) in the cement and gypsum products sector, such as capital influx, technological progress, and enhanced competitiveness, numerous hurdles must be resolved for effective execution. Political instability, environmental constraints, infrastructural deficiencies, competition from local entities, and cultural impediments provide substantial challenges to foreign investment. Addressing these difficulties necessitates a holistic approach, encompassing stable



political and regulatory frameworks, infrastructural investment, and techniques for engaging local stakeholders. Overcoming these obstacles will optimise the potential of foreign direct investment and guarantee that its advantages are completely actualised in the cement and gypsum products industry. Policies concerning Foreign Direct Investment (FDI) in the cement and gypsum products sector are varied and complex. The liberalisation of FDI regulations, incentive-based frameworks, environmental sustainability standards, local content and technology transfer mandates, and infrastructure development strategies are all essential in attracting and managing FDI in this industry. Through the implementation and refinement of these regulations, governments may guarantee that foreign direct investment (FDI) fosters both the nation's economic development and the sustainable advancement of the cement sector. Moreover, these rules furnish international investors with the stability, incentives, and assistance requisite for making long-term investments in the sector.

#### References:

1. Chakrabarti, A. (2001). "The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions." *Kyklos*, 54(1), 89-114.
2. International Cement Review. (2019). "Global Cement Market Review."
3. Meyer, K. E. (2001). "Institutional Environment and FDI in Emerging Markets: Evidence from the Cement Industry." *World Development*, 29(2), 255-273.
4. Dunning, J. H. (1988). "The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions." *Journal of International Business Studies*, 19(1), 1-31.
5. Javorcik, B. S. (2004). "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages." *American Economic Review*, 94(3), 605-627.
6. Blomström, M., & Kokko, A. (2003). "The Economics of Foreign Direct Investment Incentives." NBER Working Paper No. 9489.
7. UNCTAD. (2020). "World Investment Report: Investing in Sustainable Recovery."
8. Kokko, A. (1994). "Technology, Market Characteristics, and Spillovers." *Journal of Development Economics*, 43(2), 279-293.
9. OECD. (2015). "Green Investment Policies and the Cement Industry." *OECD Green Growth Studies*.
10. UNCTAD. (2020). *World Investment Report: Investing in Sustainable Recovery*. United Nations Conference on Trade and Development.
11. World Bank. (2021). *Global Economic Prospects: Trends in Foreign Direct Investment*. Washington, DC: The World Bank.
12. Gopalan, S., & Rajan, R. (2012). *FDI and Host Country Economic Growth: A Survey*. *The World Economy*, 35(5), 565-582.
13. UNCTAD. (2020). *World Investment Report: Investing in Sustainable Recovery*. United Nations Conference on Trade and Development.
14. Dunning, J.H. (1988). *The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions*. *Journal of International Business Studies*, 19(1), 1-31.
15. World Bank. (2021). *Global Economic Prospects: Trends in Foreign Direct Investment*.
16. Gopalan, S., & Rajan, R. (2012). *FDI and Host Country Economic Growth: A Survey*. *The World Economy*, 35(5), 565-582.
17. Javorcik, B. S. (2004). *Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages*. *American Economic Review*, 94(3), 605-627.
18. UNCTAD. (2020). *World Investment Report: Investing in Sustainable Recovery*. United Nations Conference on Trade and Development.
19. World Bank. (2021). *Global Economic Prospects: Trends in Foreign Direct Investment*. Washington, DC: The World Bank.
20. Javorcik, B. S. (2004). *Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In*

- Search of Spillovers through Backward Linkages. *American Economic Review*, 94(3), 605–627.
21. UNCTAD. (2020). "World Investment Report: Investing in Sustainable Recovery."
22. OECD. (2015). "Green Investment Policies and the Cement Industry." *OECD Green Growth Studies*.
23. OECD. (2015). "Green Investment Policies and the Cement Industry." *OECD Green Growth Studies*.
24. Meyer, K. E. (2001). "Institutional Environment and FDI in Emerging Markets: Evidence from the Cement Industry." *World Development*, 29(2), 255-273.
25. Blomström, M., & Kokko, A. (2003). "The Economics of Foreign Direct Investment Incentives." NBER Working Paper No. 9489.
26. Javorcik, B. S. (2004). "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages." *American Economic Review*, 94(3), 605-627.
27. Kokko, A. (1994). "Technology, Market Characteristics, and Spillovers." *Journal of Development Economics*, 43(2), 279-293.
28. Blomström, M., & Kokko, A. (2003). "The Economics of Foreign Direct Investment Incentives." NBER Working Paper No. 9489.
29. OECD. (2015). "Green Investment Policies and the Cement Industry." *OECD Green Growth Studies*.
30. Javorcik, B. S. (2004). "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages." *American Economic Review*, 94(3), 605-627.
31. OECD. (2015). "Green Investment Policies and the Cement Industry." *OECD Green Growth Studies*.
32. Meyer, K. E. (2001). "Institutional Environment and FDI in Emerging Markets: Evidence from the Cement Industry." *World Development*, 29(2), 255-273.
33. Chakrabarti, A. (2001). "The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions." *Kyklos*, 54(1), 89-114.
34. World Bank. (2021). "Global Economic Prospects: Trends in Foreign Direct Investment."
35. Chakrabarti, A. (2001). "The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions." *Kyklos*, 54(1), 89-114.
36. Meyer, K. E. (2001). "Institutional Environment and FDI in Emerging Markets: Evidence from the Cement Industry." *World Development*, 29(2), 255-273.
37. OECD. (2015). "Green Investment Policies and the Cement Industry." *OECD Green Growth Studies*.
38. Meyer, K. E. (2001). "Institutional Environment and FDI in Emerging Markets: Evidence from the Cement Industry." *World Development*, 29(2), 255-273.
39. Chakrabarti, A. (2001). "The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions." *Kyklos*, 54(1), 89-114.
40. OECD. (2015). "Green Investment Policies and the Cement Industry." *OECD Green Growth Studies*.
41. Chakrabarti, A. (2001). "The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions." *Kyklos*, 54(1), 89-114.
42. Javorcik, B. S. (2004). "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages." *American Economic Review*, 94(3), 605-627.
43. Blomström, M., & Kokko, A. (2003). "The Economics of Foreign Direct Investment Incentives." NBER Working Paper No. 9489.
44. OECD. (2015). "Green Investment Policies and the Cement Industry." *OECD Green Growth Studies*.
45. Kokko, A. (1994). "Technology, Market Characteristics, and Spillovers." *Journal of Development Economics*, 43(2), 279-293.
46. Chakrabarti, A. (2001). "The Determinants of Foreign Direct

- Investment: Sensitivity Analyses of Cross-Country Regressions." *Kyklos*, 54(1), 89-114.
47. Meyer, K. E. (2001). "Institutional Environment and FDI in Emerging Markets: Evidence from the Cement Industry." *World Development*, 29(2), 255-273.
  48. OECD. (2015). "Green Investment Policies and the Cement Industry." OECD Green Growth Studies
  - Blomström, M., & Kokko, A. (2003). "The Economics of Foreign Direct Investment Incentives." NBER Working Paper No. 9489.
  49. OECD. (2015). "Green Investment Policies and the Cement Industry." OECD Green Growth Studies
  - Blomström, M., & Kokko, A. (2003). "The Economics of Foreign Direct Investment Incentives." NBER Working Paper No. 9489.
  50. Chakrabarti, A. (2001). "The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions." *Kyklos*, 54(1), 89-114.
  51. Chakrabarti, A. (2001). "The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions." *Kyklos*, 54(1), 89-114.
  52. Blomström, M., & Kokko, A. (2003). "The Economics of Foreign Direct Investment Incentives." NBER Working Paper No. 9489.
  53. Chakrabarti, A. (2001). "The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions." *Kyklos*, 54(1), 89-114.
  54. OECD. (2015). "Green Investment Policies and the Cement Industry." OECD Green Growth Studies.
  55. Meyer, K. E. (2001). "Institutional Environment and FDI in Emerging Markets: Evidence from the Cement Industry." *World Development*, 29(2), 255-273.

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# KNOWLEDGE IN TRANSITION: ALIGNING KNOWLEDGE MANAGEMENT PRACTICES WITH CONTEMPORARY WORKPLACE CULTURE

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## Abstract

In today's internationally competitive market, ethics has emerged as a major area of concern for organisations seeking to reduce difficulties associated with knowledge sharing. It is believed that both individuals and organizations can achieve a competitive edge by leveraging knowledge. This assertion holds particularly true for sectors that are engaged with information and technology. In accordance with the above concept, the current study seeks to evaluate the relevance of ethics as a catalyst in influencing knowledge sharing. Adapting knowledge management (KM) practices within workplace etiquette can significantly enhance organizational culture and effectiveness. By fostering an environment that prioritizes respectful communication and knowledge sharing, organizations can break down silos and encourage collaboration among employees. Integrating KM into workplace etiquette involves establishing norms that promote open dialogue, where individuals feel valued and empowered to share their insights and expertise. This approach not only facilitates the flow of information but also builds trust and strengthens relationships among team members. Additionally, training sessions focused on effective communication and active listening can further embed these practices into the workplace culture. As employees become more attuned to the importance of sharing knowledge in a respectful manner, the overall productivity and innovation of the organization are likely to improve, creating a more inclusive and dynamic work environment.

**Keywords:** Knowledge management, etiquette, ethics, workplace.

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## Introduction

Organisations today prioritise ethics in order to eradicate the problems that develop during knowledge exchange in this highly competitive global economy. Overall organisational effectiveness is impacted by individuals' propensity and actions to hoard knowledge for their own personal gain (Mursaleen et al., 2015). Both individuals and the organization collectively gain from the competitive edge provided by knowledge. Given that tacit information acts as a valuable asset for them, knowledge workers tend to be less inclined to disseminate it to others (Ma et al., 2008). This knowledge hoarding, however, acts as a roadblock to information exchange. The rise in unethical behaviour has led to a pursuit of self-

interest, which has impeded the organization's efficiency.

Consequently, it is crucial to acknowledge the significance of ethics within the professional environment. Ethics highlight the value of principles and morality in our society. Human laws too are based on ethics. Moreover, ethics extend beyond laws and thereby, where even laws cannot serve to guide behaviour. The ethics perceived by humans helps in providing eminent direction to take the right decision in controlling one's behaviour when faced with different situations and obstacles. Thus, when presented with various circumstances and challenges, human ethics helps to provide excellent guidance on how to make the best choice and manage one's behaviour.

The administration of business knowledge aimed at improving organizational performance is a widely accepted definition of knowledge management. It could result in the creation of organisations that make decisions quickly and are frequently described as "intelligent acting" and "innovative." It is also regarded as an information handling tool. In order to cope with knowledge generation administration, sharing, and exploitation, knowledge management (KM) is essential. Getting information is the initial step in the knowledge management process. The second stage is to logically store and arrange the information that has been obtained.

The next stage is to provide all of the organization's employees with access to the information that has been gathered and stored. Utilisation constitutes the last phase. It entails socialising, exchanging information in many ways, and people sharing their knowledge with one another. Last but not least, knowledge management is a strategic management tool that will assist the company in achieving greater innovation by lowering research expenses and revealing the advantages of improved performance, productivity, competitive advantage, and decision-making (Evans & McKinley, 2011). Therefore, it may be emphasised that defining the elements influencing information exchange is essential to guaranteeing the smooth expansion of IT companies in India.

An organization's ethical orientation fosters its culture through data privacy, secrecy, confidentiality, trust, honesty, dedication, and responsibility. When an organisation practices knowledge culture, it faces a number of unethical problems. Both individuals and organisations suffer from unethical behaviours such as cheating, exploitation, corruption, trade secret leaks, and unfair and unjust behaviour (Sims & Brinkmann, 2009). It is crucial to research current ethical standards and codes in businesses because doing so has long-term benefits, such as improving the company's reputation (Turgut & Sökmen, 2018).

More than information processing and storage infrastructure, values and ethics are responsible for the capacity to receive, understand, and comprehend information (Mas et al., 2004). Given that IT companies operate with large

amounts of data, it is imperative that an ethical framework and policy standards be established expressly for data protection and confidentiality.

Thus, information workers combine a solid moral and ethical basis with a heightened awareness of challenges that frequently appear in knowledge- and information-related labour. They are aware of and follow professional norms. of behaviour developed by the Association of Special Libraries as well as any other relevant professional associations. Furthermore, they comprehend and adhere to the ethical code established by their employer. According to the language of the SLA Professional Ethics Guidelines, they conduct themselves with honesty, diligence, competence, integrity, discretion, and respect for privacy by fostering and sustaining an environment that promotes trust among individuals, including employers, clients, and others they serve, as well as within the profession. They serve as a role model for moral information behaviour for others at work and spearhead the creation of Procedures and regulations to promote information ethics all of their organisation.

## **Literature Review**

### **Outlining Ethics and the Ethical Issues**

Ethics are not just a human invention. Instead, they are the outcome of unique aspects of human nature that make up the fundamental structure of rules. Human laws are therefore based on ethics. The concept of ethics is discussed and used to analyse people's moral lives, strategies for understanding decisions, and everyday behaviour in order to take appropriate responsibility and accountability of action in certain specific situations, according to Tseng and Fan (2011)'s study outline. It is more than just a theoretical philosophy. Conversely, it serves as a guide for individual or group practices (Kuenzi et al., 2020).

Akhavan et al. (2014) contend that ethics comprises both positive and negative characteristics, actions, and intentions. Consequently, ethics engages with and is associated with two polarities of existence: good and evil. It is a branch of philosophy recognized as a norm-based science. This is due

to the guiding role it performs in directing human behaviour. In this sense, ethics can be broadly separated from natural sciences like chemistry and physics or from mainstream disciplines like mathematics.

Concerning the ownership of knowledge, a conflict of interest exists between the organization and the employee. The personnel believe that knowledge is a personal concept. On the other side, the company believes that knowledge is a resource that is created by giving its workers access to sufficient resources, such as infrastructure, technology, money, and rewards.

According to Gaur and Gupta (2018), ethical problems fall into a variety of categories, including juridical, socioeconomic, and technical. Since the technical team is primarily in charge of creating and executing knowledge management, they may run into a number of unethical situations. Technical team members may choose to serve as whistleblowers in these situations, alerting management to the unethical elements. Furthermore, the socioeconomic problem with ethical practices is outlined by such a covert goal for the adoption of knowledge management in an organisation.

This idea explains why capturing employee knowledge may be the primary motivation for implementing the knowledge sharing process, which aims to lower human resource costs. Lastly, disputes between organisations and employees over knowledge ownership rights are a special focus of legalistic ethical issues.

When it comes to figuring out how someone's moral or ethical behaviour is formed, the PRIMES model is crucial. According to the paradigm, moral behaviour is based on comparatively stable personality traits. The degree to which an individual incorporates morality (IM) into their self-concept significantly influences their moral conduct. Additionally, the abilities and knowledge that a person holds also play a role in shaping their moral actions. As noted by C. Huff (2010).

Personality, moral ecology, moral integration, and skills are the main components of this model. The acronym PRIMES is likewise compensated for by these components. The traits of personality are central to the personality dimension. These attributes play a

crucial role in depicting individuals' inclinations towards their careers and the paths they will pursue to attain them. Integrating morality can be defined as people's moral commitment that directs their behaviour in various settings and sorts of situations. The environment that surrounds a person is known as the moral ecology.

The environment, which includes a variety of factors, might influence how someone will respond in a particular way. Finally, moral abilities and knowledge refer to an individual's awareness or knowledge of various moral behaviours and topics.

According to Zyngier and Nagpal's (2015) research, there are numerous unethical activities surrounding information sharing. These actions obstruct people from acting morally, which interferes with an organization's knowledge management. Such unethical behaviour can also occur when someone withholds knowledge or manipulates it to further their own interests or financial benefit. Knowledge hoarding, plagiarism, information manipulation, deliberate knowledge theft, and disputes with property or privacy rights are some of the obstacles to an individual's ethical behaviour. Due to its subjective character, implicit information is mostly limited to the person who possesses it. Therefore, whether or not the owner of such knowledge is willing to share relies on them.

### **Understanding the Concept and Importance of Knowledge Culture**

According to Hans de Bruijn and Pieter W.G. Bots (2002) [7], knowledge management is still "hot" and for good cause. It has been acknowledged that knowledge is a vital resource of organisations, and it needs to be handled as such. However, the elusive character of information challenges affects managers as well as scientists of management. The scientists have developed a collection of "rules of the game" that capitalise on the advantages of both viewpoints while minimising their drawbacks. Naturally, the regulations governing the game are not intended to be reproduced verbatim by any management or organization. They serve as templates; it is essential to tailor their specific formulation accordingly. to certain circumstances. They can help the manager in

cultivating a managerial approach to processes. (Pieter W.G. Bots and de Bruijn, Hans (2002).

According to Liu et al. (2019), knowledge is a fundamental skill that is necessary for businesses worldwide to have a competitive edge and create value. An individual's behaviour, experiences, and behaviours are all components of their ingrained knowledge. This emphasises how cultural factors greatly influence how employees behave when it comes to information. These cultural elements include their norms, values, and regulations.

In this context, Sunarsi (2020) explains that a group's culture is nothing more than a collection of fundamental beliefs concerning internal integration and exterior adaptability. Consequently, organisational culture can be defined as a set of core values and beliefs that profoundly affect how organisations perceive and react to their environment. Accordingly, organisational culture has a significant influence on how individuals of the organisation think, which in turn influences how they express themselves (Intezari et al., 2017). Knowledge is acknowledged as an intellectual resource that provides a significant source of power and ensures competitive advantage, according to knowledge theory. Invention, application, and storage of knowledge,

As noted by Rutten et al. (2016), the processes of capturing and sharing knowledge are essential for promoting innovation and enhancing organizational performance. Benefits like creativity for knowledge development and knowledge storage in databases and information systems can only be unlocked with improved knowledge management in an organisation. However, an organization's ability to manage knowledge depends on the existence of a workable environment that permits employees to freely exchange information. As a result, the person or group in question may never feel the need to voice their opinions if there is no way to communicate with the top management about the problems the company may face if the current methods are maintained. In the long run, this could hinder the organization's production. Furthermore, knowledge is transferred or exchanged through close collaboration with others and senior management's encouragement

of the development of new information. Only when employees are genuinely encouraged to express their opinions about a phenomenon will they assume that knowledge sharing techniques are viable for their own and the organization's growth. Top management discouragement, however, will lead to the retention of highly strategic tacit knowledge. Only when they find benefits or recompense in return do they share or use this knowledge (Guadamillas-Gómez & Donate-Manzanares, 2011).

In their study, Evans and McKinley (2011) emphasise that it is beneficial to provide employees with opportunities for mutual learning by allowing them to share their skills and expertise. Furthermore, it makes a substantial contribution to the organization's capacity for innovation. Therefore, it becomes essential to understand how people share knowledge both within and between organisational divisions or hierarchical hierarchies.

According to Tilley et al. (2012), the degree of internal communication that exists within an organisation has a significant impact on knowledge sharing. It has been noted that the degree of sociability, or how many friends people have at work, determines how information will be shared. Furthermore, there are additional elements that indicate how successful knowledge management procedures will be. For example, incentives such as remuneration and prizes are crucial in facilitating the generation and exchange of information. Additionally, storing shared knowledge for later use is highly recommended.

The success of knowledge management procedures depends on an organisational culture that encourages knowledge application and rewards knowledge exchange (Chatterjee & Sarker, 2013).

### **Accentuating the Linkage between Ethics and Knowledge Culture**

Additionally, storing shared knowledge for later use is highly recommended. Establishing a Knowledge Culture founded on the fundamentals of ethics is crucial to stopping people from engaging in immoral behaviour. In addition to enabling individuals to actively engage in the process of information sharing, this will also enable organisations to benefit

from it. Organisations that prioritise improving their culture of knowledge sharing are more productive than those that struggle with knowledge hoarding, according to studies (Andolšek, 2011; Haas & Hansen, 2007; Muqadas et al., 2016). Organisations spend a significant amount of money annually on hiring, training, and developing new personnel (Muqadas et al., 2016; Smith et al., 2006). However, workers frequently quit their jobs.

Moreover, employee participation in the knowledge-sharing process is made possible by an organization's ethical approach to knowledge-sharing culture. This aids in building a database that may be used to store and utilise the knowledge they have kept. According to Pee and Min (2017), rewarding staff members for their knowledge contributions helps improve the organization's culture of information sharing. Employees that receive such prizes are more inspired and dedicated to their company in addition to actively participating in the sharing of their useful expertise with other employees. Equity within the framework of knowledge dissemination is essential.

Furthermore, the employees' knowledge and abilities also influenced their ethical behaviour. Thus, it was discovered that the employees' moral behaviour was also impacted by their coworkers. Furthermore, it was emphasised that employees' propensity to act morally also tends to influence their ethical behaviour.

According to C. Huff (2010), a person's moral ecology is the surroundings that ultimately influence their choices. Organisations are advised to be more transparent in order to strategically influence the moral behaviour of their personnel. Therefore, it is advised that organisations work to create a transparent culture and environment to encourage knowledge sharing because knowledge hoarding will negatively affect an organization's ability to innovate.

Hence, it was discovered that the three knowledge-sharing components are negatively impacted by ethical concerns. Additionally, the employees' ethical concerns were assessed. Regarding this, it was discovered from the employees' comments that their coworkers do not change their facts or knowledge because of personal gain. Employees also emphasise that

even if coworkers may hoard information, the organization's knowledge sharing policy and its implementation are crucial for whistleblowers. Conversely, they noted that, out of personal interest, they occasionally might hoard knowledge and choose not to share it. Furthermore, most workers concurred that coworkers occasionally may disclose inappropriate information or alter a piece of provided information.

Accordingly, coworkers could withhold truthful facts in order to protect their privacy. Therefore, it can be said that either the company's knowledge-sharing strategy is inadequate to disrupt ethical issues. In light of this, it may be said that the organisation has to create a framework for knowledge management. Technical and socioeconomic problems will arise if a suitable framework for fostering a culture of information sharing is not developed. Furthermore, it will result in issues pertaining to property and private rights, knowledge manipulation and appropriation, and employee hoarding of tacit information. Employee productivity will eventually be impacted by such problems, but the general organisational culture won't be affected.

Regarding the culture of knowledge production, it was found that employees concurred that their inclination to try new things directly affects their level of creativity and, thus, their ability to create information. Employees also confirmed that incentives and rewards improve the organization's culture of knowledge production. The culture of knowledge generation is also impacted by employees' willingness to adapt. Last but not least, establishing a culture of knowledge creation requires the backing of upper management. Regarding the culture of knowledge sharing, the employees described how a firm's culture of knowledge sharing is impacted by the existence of a free environment for knowledge sharing. Furthermore, the culture of knowledge sharing is improved via open communication.

Collaborating closely with colleagues promotes a culture of information sharing, as experienced employees share their knowledge. Workers indicated that the organization's information system and expert system for knowledge storage, retrieval, and dissemination



significantly affect knowledge storage, reflecting the culture that surrounds both the storage and utilization of knowledge. Consequently, it can be asserted that a well-organized information system and expert system are crucial for effective knowledge management. In this regard, communication and the unrestricted exchange of information are equally vital. Additionally, nurturing a culture that encourages the application of knowledge necessitates empowering employees. Employees also noted that their trust diminishes when upper management acknowledges their genuine mistakes. Ultimately, the staff members agreed that the organizational culture regarding innovation has a significant impact.

Challenges related to information security and privacy are emerging due to the advanced application of knowledge that has resulted in the development and implementation of artificial intelligence and the Internet of Things (Malik et al., 2022). The psychological well-being, physical health, and job security of employees are also affected. Human resource management systems are being digitized through artificial intelligence to enhance performance (Votto et al., 2021). Artificial intelligence is now employed to carry out various human resource functions. Both machine learning and artificial intelligence assist organizations in achieving their long-term goals (Kar et al., 2022). Digital knowledge management is crucial for the company's survival, expansion, and achievement of its strategic goals (Gupta et al., 2023). Another viewpoint on the use of digitisation and artificial intelligence is that businesses use knowledge-based applications.

### **Case Study: Google**

Google's culture of transparency, teamwork, and innovation significantly influences its knowledge management (KM) strategies. The organization promotes an open environment that encourages employees to share information freely, utilizing tools such as Google Workspace, Google Meet, and Google Drive for immediate collaboration and knowledge dissemination. Google Search and AI-driven systems provide rapid access to information throughout the company. Communities of Practice and Google Currents support social

learning and the exchange of knowledge among peers. Google's leadership emphasizes transparency and empowerment, creating a culture where employees are encouraged to contribute and access knowledge. Challenges include knowledge overload and retention, particularly with high turnover. However, opportunities exist to further integrate AI for smarter knowledge management and to enhance global collaboration.

In summary, Google's KM strategy exemplifies how aligning KM practices with a contemporary, open, and collaborative workplace culture can drive innovation, improve knowledge flow, and foster employee engagement.

### **IBM's Use of AI and Analytics for KM (2015-Present)**

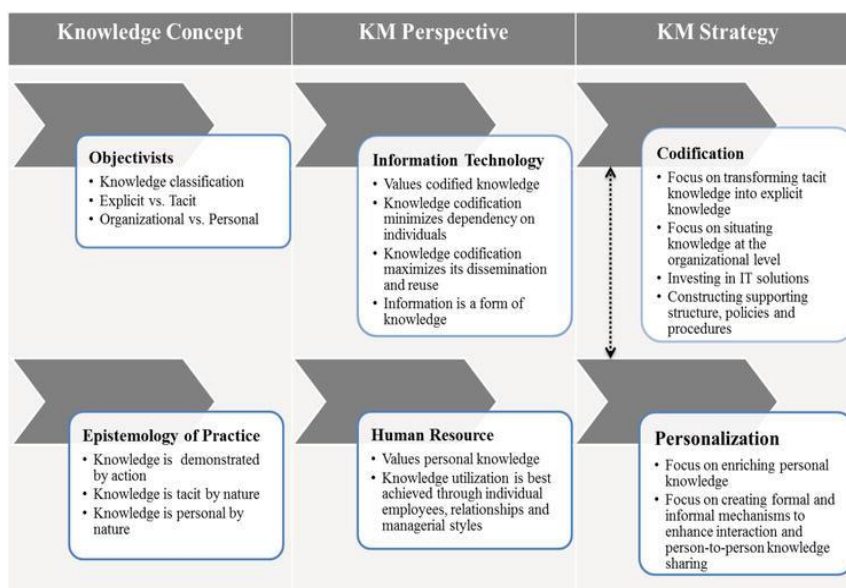
**Background:** As workplace culture continued to evolve with the advent of digital transformation, AI, and big data, IBM recognized that traditional KM models could not keep pace with the growing volumes of information employees had to sift through. The need to filter, synthesize, and analyze vast amounts of data became critical to maintain competitive advantage.

**Strategy:** IBM utilized artificial intelligence and data analytics to equip employees with tailored, actionable insights readily available. The primary initiatives encompassed:

- **IBM Watson Knowledge Catalog:** A data governance tool powered by AI, which helped employees easily discover and understand the information they needed by tagging and organizing data into a central repository.
- **Watson for Collaboration:** IBM integrated Watson's cognitive abilities into their collaboration tools. This AI-powered platform understood natural language queries, making it easier for employees to retrieve relevant documents, reports, and insights.
- **Smart Workspaces:** IBM's smart workspaces integrated various tools that were driven by data analytics and cognitive systems. This transformed

traditional knowledge-sharing from a static repository into dynamic, personalized suggestions that could

evolve based on employee behavior and interactions.



(El-Farr et al., 2019)

## Opportunities and Challenges

Knowledge management (KM) is a vital aspect of organizational success, presenting both unique challenges and meaningful opportunities. One significant challenge is the inherent cultural resistance within organizations. Employees may feel hesitant to share their expertise, fearing it might undermine their value or create competition. This reluctance can stifle collaboration and innovation. Additionally, the vast amount of information available today can overwhelm individuals, making it difficult to sift through and identify truly valuable insights. The integration of various technologies necessary for effective KM can also pose a daunting task, requiring significant investment and expertise. Moreover, maintaining the quality and relevance of knowledge over time is a constant concern, as is demonstrating the tangible return on investment for KM initiatives.

Despite these challenges, the potential benefits of effective knowledge management are profound. By fostering a culture of sharing and collaboration, organizations can enhance teamwork and spark innovation, creating a more engaged workforce. Access to organized

knowledge empowers employees to make informed decisions swiftly, leading to improved outcomes. Additionally, organizations that prioritize KM can gain a competitive edge, utilizing insights to adapt and thrive in ever-changing environments. KM practices also play a crucial role in retaining valuable knowledge, especially as experienced employees transition out of the organization. Ultimately, a strong KM framework nurtures continuous learning and growth, positioning organizations to respond effectively to challenges while maximizing their potential for success. By embracing these principles, organizations can create a more connected, informed, and resilient environment for everyone involved.

## Conclusion

The study's conclusions suggest that personality traits, moral ecology, and skills have a big influence on the culture of information sharing. Furthermore, ethical concerns have a detrimental effect on the culture of knowledge sharing in India's IT industry. In order to improve the current situation in these organisations, appropriate actions must be implemented. Based on the study's findings, it is recommended that

organisations encourage and promote their employees' creativity in order to foster a culture of knowledge production. In addition to raising their spirits, this will eliminate any potential areas of self-interest where they can hoard information.

Additionally, there needs to be a smooth flow of communication between the personnel at the top, middle, and bottom of the hierarchy. This will effectively convey the idea that the companies are prepared to listen to and support the opinions of their workers. allowing workers to express any unspoken information that could improve the productivity of the company. Additionally, it is advised that businesses hold brainstorming sessions, which foster relationships among staff members and enable them to collaborate closely. Additionally, senior staff members must be asked to teach and mentor less experienced staff members. Regarding knowledge application and storage, the report also suggests that organisations should aim to empower their staff members through open communication and information exchange.

Employees will therefore be more willing to share information and perhaps engage in whistleblowing, which could lessen ethical problems of any kind. Additionally, it is advised that top management be tolerant of employees' sincere errors in order to foster a culture of knowledge application and storage as well as to create a workable organisational environment. Taking harsh measures against employees who make sincere mistakes damages the organisations' reputation and lowers the level of commitment that other employees have to them. In order to facilitate the storage, retrieval, and dissemination of knowledge, an information and expert system must also be in place.

The current study's conclusions have strategic value for the Indian IT industry as well as other knowledge-driven businesses and sectors. The study's conclusions show that personality factors significantly influence how people share knowledge in India's IT industry. Therefore, it can be said that a more thorough understanding of the personality qualities that exist among people and how they could influence their behaviour when sharing knowledge should be pursued. Furthermore, it was discovered that

the culture of knowledge sharing in these organisations is negatively impacted by ethical concerns. Therefore, it is crucial to remember that in order to decrease such unethical actions, organisations need to maintain a good and engaging work atmosphere. Consequently, it might be

Therefore, it is crucial to remember that in order to decrease such unethical actions, organisations need to maintain a good and engaging work atmosphere.

## References

1. Agyemang F. G., Dzandu M. D., Boateng H. (2016). Knowledge sharing among teachers: The role of the big five personality traits. *VINE Journal of Information and Knowledge Management Systems*, 46(1), 64–84. <https://doi.org/10.1108/vjikms-12-2014-0066>
2. Akhavan P., Ramezan M., Yazdi Moghaddam J., Mehralian G. (2014). Exploring the relationship between ethics, knowledge creation and organizational performance: Case study of a knowledge-based organization. *VINE Journal of Information and Knowledge Management Systems*, 44, 42–58.
3. Andolšek D. M. (2011). *Knowledge hoarding or sharing* [Conference session]. Proceedings of the Management, Knowledge and Learning International Conference.
4. Ayub M. U., Kanwal F., Kausar A. R. (2019). Developing knowledge creation capability: The role of big-five personality traits and transformational leadership. *Pakistan Journal of Commerce and Social Sciences*, 13(1), 30–61.
5. Belinda C. D., Westerman J. W., Bergman S. M. (2018). Recruiting with ethics in an online era: Integrating corporate social responsibility with social media to predict organizational attractiveness. *Journal of Vocational Behavior*, 109, 101–117.
6. Bryant A. (2006, January 4–7). *Knowledge Management: The*

- ethics of the Agora or the mechanisms of the market?* [Conference session]. 39th Annual Hawaii International Conference on System Sciences. Computer Society Press.
7. Chatterjee S., Sarker S. (2013). Infusing ethical considerations in knowledge management scholarship: Toward a research agenda. *Journal of the Association for Information Systems*, 14(8), 452–481.
  8. Evans N., McKinley M. (2011). *Ethical paradoxes in knowledge management*. vie & sciences de l'entreprise.
  9. Gaur, N., & Gupta, V. (2023). Analyzing the Concatenation Between Ethics and Knowledge Culture in Indian IT Sector. *Sage Open*, 13(4). <https://doi.org/10.1177/21582440231209141>
  10. Guadamillas-Gómez F., Donate-Manzanares M. J. (2011). Ethics and corporate social responsibility integrated into knowledge management and innovation technology. *The Journal of Management Development*, 30(6), 569–581
  11. Gupta S., Tuunanen T., Kar A. K., Modgil S. (2023). Managing digital knowledge for ensuring business efficiency and continuity. *Journal of Knowledge Management*, 27(2), 245–263.
  12. Haas M. R., Hansen M. T. (2007). Different knowledge, different benefits: Toward a productivity perspective on knowledge sharing in organizations. *Strategic Management Journal*, 28(11), 1133–1153.
  13. Huff C. (2010). *What does knowledge have to do with ethics?* Retrieved April 15, 2021, from [https://www.researchgate.net/publication/242750758\\_What\\_Does\\_Knowledge\\_Have\\_to\\_do\\_with\\_Ethics](https://www.researchgate.net/publication/242750758_What_Does_Knowledge_Have_to_do_with_Ethics)
  14. Huff C. W., Barnard L. (2009). Good computing: Life stories of moral exemplars in the computing profession. *IEEE Computers and Society*, 28(3), 47–54.
  15. Intezari A., Taskin N., Pauleen D. J. (2017). Looking beyond knowledge sharing: An integrative approach to knowledge management culture. *Journal of Knowledge Management*, 21, 492–515.
  16. John O. P., Srivastava S. (1999). The big five trait taxonomy: History, measurement, and theoretical perspectives. In Pervin L. A., John O. P. (Eds.), *Handbook of personality: Theory and research* (pp. 139–153). Guilford.
  17. Kar A. K., Choudhary S. K., Singh V. K. (2022). How can artificial intelligence impact sustainability: A systematic literature review. *Journal of Cleaner Production*, 376, 134120.
  18. Kuenzi M., Mayer D. M., Greenbaum R. L. (2020). Creating an ethical organizational environment: The relationship between ethical leadership, ethical organizational climate, and unethical behavior. *Personnel Psychology*, 73(1), 43–71.
  19. Land F., Amjad U., Nolas S. M. (2007). The ethics of knowledge management. *International Journal of Knowledge Management*, 3(1), 1–9.
  20. Liu Y., Chan C., Zhao C., Liu C. (2019). Unpacking knowledge management practices in China: do institution, national and organizational culture matter? *Journal of Knowledge Management*, 23, 619–643.
  21. Mas M., Corrales A., Velaz I. (2004). *Direccion de Empresas en la Economia del Conocimiento. Cuadernos de Empresa y Humanismo*, 1, 3–56.
  22. Malik N., Tripathi S. N., Kar A. K., Gupta S. (2022). Impact of artificial intelligence on employees working in industry 4.0 led organizations. *International Journal of Manpower*, 43(2), 334–354
  23. Ma Z., Qi L., Wang K. (2008). Knowledge sharing in Chinese construction project teams and its affecting factors. *Chinese Management Studies*, 2, 97–108.
  24. Mursaleen M., Saqib L., Roberts K. W., Asif M. (2015). Islamic work ethics as mediator between trust and knowledge sharing relationship. *Pakistan Journal of*

- Commerce and Social Sciences, 9(2), 614–640.
25. Pee L. G., Min J. (2017). Employees' online knowledge sharing: The effects of person-environment fit. *Journal of Knowledge Management*, 21(2), 432–453.
  26. Rutten W., Blaas-Franken J., Martin H. (2016). The impact of (low) trust on knowledge sharing. *Journal of Knowledge Management*, 20, 199–214.
  27. Sabaa-Ayoun Z. (2021, March 11). Restructuring of healthcare system in Italy during COVID-19: An organizational ethics dilemma. *University of Western Ontario Medical Journal*, 89(S). <https://ojs.lib.uwo.ca/index.php/uwomj/article/view/10655>
  28. Sik-wah Fong P., Chu L. (2006). Exploratory study of knowledge sharing in contracting companies: A sociotechnical perspective. *Journal of Construction Engineering and Management*, 132(9), 928–939.
  29. Sims R. R., Brinkmann J. (2009). Thoughts and second thoughts about Enron ethics. In Garsten C., Hernes T. (Eds.), *Ethical dilemmas in management* (pp. 105–114). Routledge.
  30. Tseng F.-C., Fan Y.-J. (2011). Exploring the influence of organizational ethical climate on Knowledge Management. *Journal of Business Ethics*, 101(2), 325–342. <https://doi.org/10.1007/s10551-010-0725-5>
  31. Sunarsi D. (2020). The analysis of the work environmental and organizational cultural impact on the performance and implication of the work satisfaction. *Jurnal Ilmiah Ilmu Administrasi Publik*, 9(2), 237–246.
  32. Tilley E. N., Fredricks S. M., Hornett A. (2012). Kinship, culture and ethics in organisations. *Journal of Communication Management*, 16(2), 162–184.
  33. Turgut E., Sökmen A. (2018). The effects of perceived organizational ethics on innovative work behavior: Self efficacy's moderating and mediating role. *Is Ahlakı Dergisi*, 11(1), 58–67.
  34. Votto A. M., Valecha R., Najafirad P., Rao H. R. (2021). Artificial intelligence in tactical human resource management: A systematic literature review. *International Journal of Information Management Data Insights*, 1(2), 100047.
  35. Zyngier S., Nagpal A. (2015, January). *Knowledge management ethics: located within a governance framework* [Conference session]. 2015 48th Hawaii International Conference on System Sciences (pp. 3990–3999). IEEE.

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# **HUMAN RESOURCE MANAGEMENT APPROACHES IN THE STEEL INDUSTRY: A COMPARATIVE STUDY OF JSPL AND BSL**

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## **Abstract**

Human resource management (HRM) practices constitute a critical determinant of organizational performance, especially in industries that are labor-intensive and technologically complex, such as the steel sector. This study undertakes a comparative analysis of HRM practices at Jindal Steel and Power Limited (JSPL), a prominent private sector enterprise, and Bokaro Steel Plant (BSL), a major public sector undertaking under the Steel Authority of India Limited (SAIL). The objective is to examine how the two organizations implement HRM strategies across domains such as recruitment, training, performance appraisal, employee relations, and compensation. Using a qualitative and descriptive research design supported by secondary sources, the study highlights both convergences and divergences in HRM approaches. Findings indicate that while JSPL emphasizes performance-driven, flexible HR policies aligned with global competitiveness, BSL maintains a more structured, welfare-oriented approach reflective of public sector mandates. The comparative insights not only enrich the understanding of HRM in the steel industry but also provide implications for enhancing employee productivity, industrial harmony, and organizational sustainability.

**Keywords:** Human Resource Management; Steel Industry; Jindal Steel and Power Limited (JSPL); Bokaro Steel Plant (BSL); Public–Private comparison; Performance Appraisal; Industrial Relations; Training and Development.

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## **1. Introduction**

The steel industry occupies a pivotal position in India's economic development, serving as a backbone for infrastructure, construction, transportation, and manufacturing. Given the labor-intensive nature of steel production and the challenges posed by globalization, workforce management has emerged as a decisive factor in ensuring operational efficiency and competitive advantage (Chaudhary & Verma, 2022). Human Resource Management (HRM) in this context is not limited to administrative functions; rather, it extends to strategic initiatives aimed at talent

acquisition, capability development, employee engagement, and industrial relations management.

Jindal Steel and Power Limited (JSPL) and Bokaro Steel Plant (BSL) represent two contrasting yet influential models of steel manufacturing in India. While JSPL is a private sector enterprise known for innovation and aggressive global expansion, BSL, as part of the Steel Authority of India Limited (SAIL), reflects the ethos of public sector enterprises with its structured HR policies and emphasis on employee welfare. Examining their HRM practices offers valuable insights into how

ownership structures, organizational cultures, and strategic orientations shape workforce management.

This comparative study seeks to critically analyze the HRM practices of JSPL and BSL with respect to recruitment and selection, training and development, performance appraisal, employee welfare, compensation systems, and employee engagement. By identifying the similarities and differences in HRM approaches, the research aims to contribute to the discourse on best practices in managing human capital within the Indian steel sector.

## **2. Literature Review**

Human Resource Management (HRM) has long been acknowledged as a central driver of organizational success, particularly in industries with high labor dependency and intense competition. The steel industry, being both labor-intensive and capital-intensive, requires robust HRM practices to ensure operational efficiency, industrial harmony, and workforce productivity (Mishra & Sharma, 2021). The literature reveals that HRM in manufacturing and heavy industries primarily focuses on effective recruitment, skill development, performance evaluation, and employee relations management.

### **2.1. HRM in the Steel and Manufacturing Sector**

The global steel industry has witnessed profound transformations driven by liberalization, technological advancements, and fluctuating market dynamics. Scholars argue that HRM in the steel sector must balance technological adaptation with human capital development (Kundu & Gahlawat, 2018). In India, public sector enterprises like Steel Authority of India Limited (SAIL) traditionally emphasize employee welfare, stable industrial relations, and collective bargaining, reflecting the socio-political obligations of state ownership (Bhowmick, 2020). In contrast, private sector steel companies such as Jindal Steel and Power Limited (JSPL) demonstrate greater flexibility, adopting performance-linked incentives, competency-based training,

and modern appraisal systems (Gupta & Khatri, 2019).

### **2.2. Recruitment and Selection Practices**

Recruitment in the steel industry is often shaped by organizational ownership and strategy. Public sector enterprises like BSL follow structured and bureaucratic recruitment processes largely based on government regulations, seniority, and reservation policies (Rai, 2021). On the other hand, JSPL applies competency-driven recruitment strategies, seeking candidates with technical adaptability and leadership potential, thus aligning talent acquisition with business expansion (Verma & Chauhan, 2020). This difference reflects broader debates in HRM literature between traditional personnel management and strategic human resource management.

### **2.3. Training and Development**

Continuous training and reskilling are indispensable in the steel industry, given its reliance on heavy machinery, safety compliance, and technological innovation. Studies highlight that BSL emphasizes structured training programs through in-house training centers, focusing on operational efficiency, safety, and skill development of workers (Mukherjee, 2020). JSPL, in contrast, invests in both technical and behavioral training, leadership development, and global exposure programs to create a versatile workforce aligned with international standards (Chaudhary & Verma, 2022). These findings resonate with the view that training and development are not merely cost factors but strategic investments enhancing long-term competitiveness (Becker & Smidt, 2016).

### **2.4. Performance Appraisal and Employee Engagement**

Performance appraisal is another key HRM function where variations between public and private steel companies are evident. Public sector undertakings like BSL often rely on seniority-based promotions and standardized appraisal systems, which can sometimes limit meritocracy and innovation (Rao & Patel, 2019). Conversely, JSPL applies performance-based appraisal systems that include

measurable Key Performance Indicators (KPIs) and reward structures, encouraging accountability and innovation (Khatri & Gupta, 2021). Research underscores that employee engagement and motivation are closely tied to transparent performance evaluation and recognition systems (Alfes et al., 2019).

## **2.5. Industrial Relations and Employee Welfare**

Industrial relations in the steel industry have historically been significant, with trade unions playing a central role in collective bargaining. Literature suggests that BSL, as a public sector unit, emphasizes welfare policies, stable industrial relations, and compliance with labor regulations (Bhowmick, 2020). JSPL, while adhering to statutory requirements, focuses more on employee engagement, safety initiatives, and communication channels to reduce industrial disputes (Rai, 2021). This contrast illustrates how organizational ownership influences HRM practices and employee relations.

## **2.6. Emerging Trends in HRM in Steel Industry**

Recent scholarship also highlights emerging HRM trends, such as digitization of HR processes, flexible work arrangements, and data-driven decision-making (Singh & Yadav, 2021). Private companies like JSPL are more agile in adopting such practices, while public enterprises such as BSL continue to face structural and bureaucratic challenges. Scholars argue that the convergence of traditional welfare-oriented HRM and modern performance-driven HRM will be essential for ensuring the sustainability of the steel industry in India (Chaudhary & Verma, 2022).

## **3. Methodology**

This study adopts a comparative and descriptive research design to examine the human resource management (HRM) practices of Jindal Steel and Power Limited (JSPL) and Bokaro Steel Plant (BSL). The comparative method is particularly appropriate, as it enables an assessment of similarities and differences in HRM strategies across public and private sector organizations within the same industry

(Bryman, 2016). The descriptive approach further facilitates the systematic documentation of HRM practices in areas such as recruitment and selection, training and development, performance appraisal, employee relations, compensation, and welfare.

### **3.1. Research Design**

The research is qualitative in orientation, relying on secondary sources for data collection. Given the challenges of accessing internal HR records, publicly available reports, academic studies, and industry surveys were used to build an understanding of HRM practices at JSPL and BSL. This method aligns with the interpretivist paradigm, which emphasizes contextual analysis and the interpretation of organizational processes (Saunders et al., 2019).

### **3.2. Data Sources**

Secondary data were collected from multiple sources to ensure validity and triangulation. These included:

- i. Annual reports of JSPL and Steel Authority of India Limited (SAIL), which manages BSL.
- ii. Research articles published in peer-reviewed journals focusing on HRM practices in the steel and manufacturing sector.
- iii. Government publications and industry reports released by organizations such as the Ministry of Steel and the Confederation of Indian Industry (CII).
- iv. News articles and case studies highlighting HR policies and industrial relations issues in both enterprises.

### **3.3. Analytical Framework**

The study applies a thematic analysis to organize findings into major HRM practice areas. This approach allows for categorizing HRM strategies under recruitment and selection, training and development, performance management, industrial relations, compensation, and employee engagement. The themes were identified through coding of secondary data, following Braun and Clarke's



(2006) framework for qualitative thematic analysis.

Additionally, the comparative framework adopted by Rao and Patel (2019) was used to systematically contrast public and private sector HRM approaches. JSPL represents the performance-driven, flexible HR model of the private sector, whereas BSL exemplifies the welfare-oriented, structured HR model of the public sector. This comparison provides deeper insights into how ownership structures and organizational culture shape HRM practices.

### **3.4. Limitations of the study**

The study is constrained by its reliance on secondary data, which may not fully capture the lived experiences of employees within these organizations. Moreover, the dynamic nature of HRM practices means that certain policies may evolve rapidly, making some findings time-bound. Future studies could incorporate primary data collection through interviews or surveys to validate and extend the insights presented here.

## **4. Analysis and Discussion**

Human Resource Management (HRM) practices in the steel industry must be understood in the context of organizational ownership, competitive pressures, and workforce dynamics. While JSPL represents a private sector model characterized by agility, performance orientation, and global competitiveness, BSL reflects the public sector ethos with an emphasis on welfare, structured policies, and regulatory compliance. The following subsections analyze the two companies' HRM practices comparatively.

### **4.1. Recruitment and Selection**

Recruitment at JSPL is driven by the need to attract talent with specialized technical expertise and managerial acumen. The company adopts a competency-based hiring model, employing aptitude assessments, technical interviews, and behavioral evaluations to ensure cultural fit and future leadership potential (Verma & Chauhan, 2020). JSPL also collaborates with engineering

institutes to build a talent pipeline through campus recruitment programs.

In contrast, BSL follows a more bureaucratic and standardized recruitment approach, largely influenced by public sector norms and government directives (Rai, 2021). Vacancies are announced through national advertisements and filled through written examinations and interviews, often governed by reservation policies. While this ensures transparency and inclusivity, it sometimes limits the flexibility to respond quickly to dynamic industry requirements.

### **4.2. Training and Development**

JSPL invests significantly in training programs to build technical, managerial, and leadership competencies. The organization emphasizes continuous learning through partnerships with international institutes, digital learning platforms, and structured management development programs. Training at JSPL is integrated into its global expansion strategy, ensuring employees are equipped with skills relevant to modern technology and international best practices (Chaudhary & Verma, 2022).

BSL, on the other hand, relies heavily on its in-house training facilities, such as the Human Resource Development Centre (HRDC). Training at BSL focuses on skill enhancement, operational safety, and compliance with standard operating procedures (Mukherjee, 2020). While comprehensive, the programs are often more structured and less adaptive compared to JSPL's flexible and innovative models.

### **4.3. Performance Appraisal**

JSPL employs a performance-based appraisal system that aligns with measurable Key Performance Indicators (KPIs). The system includes regular reviews, 360-degree feedback, and performance-linked incentives. This fosters a meritocratic culture where high performers are rewarded and provided with career growth opportunities (Khatri & Gupta, 2021).

In contrast, BSL follows a more traditional appraisal system rooted in seniority and

standard performance evaluations. Promotions are often time-bound and influenced by tenure rather than solely performance. While this ensures fairness and stability, it sometimes reduces motivation among younger employees seeking faster growth opportunities (Rao & Patel, 2019).

#### **4.4. Employee Welfare and Industrial Relations**

Industrial relations at JSPL are relatively modern, with the company adopting proactive employee engagement strategies to minimize labor disputes. Initiatives such as safety programs, grievance redressal systems, and open communication channels are central to its HRM approach (Gupta & Khatri, 2019). However, as a private organization, JSPL emphasizes efficiency and cost management, which sometimes creates tensions with trade unions.

BSL, being a public sector enterprise, places a stronger emphasis on employee welfare measures, including subsidized housing, healthcare, and education for employees' families (Bhowmick, 2020). Trade unions play a vital role in shaping industrial relations, and collective bargaining remains central to HRM at BSL. While this ensures social security for employees, it occasionally results in rigidities that hinder managerial flexibility.

#### **4.5. Compensation and Benefits**

JSPL adopts a competitive compensation structure benchmarked against global industry standards. It offers performance-linked bonuses, stock options, and career progression opportunities, making its compensation package attractive for top talent (Chaudhary & Verma, 2022). This incentivizes innovation and productivity, aligning employee goals with organizational performance.

Conversely, BSL follows government-prescribed pay scales based on the recommendations of Pay Commissions. While this ensures stability and fairness, it lacks the flexibility to offer differentiated rewards for high performers. Consequently, while BSL provides financial security, it struggles to match

the aggressive incentive-based culture of private enterprises like JSPL (Rai, 2021).

#### **4.6. Employee Engagement and Retention**

JSPL places strong emphasis on employee engagement through initiatives such as mentorship programs, leadership workshops, and global exposure opportunities. Employee retention is addressed through clear career paths, succession planning, and performance-linked rewards. This creates a dynamic and ambitious organizational culture attractive to young professionals (Gupta & Khatri, 2019).

BSL focuses more on long-term employee loyalty through welfare measures and job security. Employees are assured of stable employment, pensions, and post-retirement benefits, which contribute to low attrition rates. However, the absence of aggressive performance incentives may affect engagement levels, especially among younger and high-performing employees (Rao & Patel, 2019).

#### **4.7. Comparative Insights**

The comparative analysis highlights that JSPL and BSL reflect two distinct HRM paradigms. JSPL embodies the private sector's performance-driven, flexible, and innovation-oriented HRM practices, while BSL represents the public sector's structured, welfare-oriented, and stability-focused approach. Both models have strengths: JSPL's agility and meritocracy foster global competitiveness, whereas BSL's welfare orientation ensures industrial harmony and social security. The challenge for both organizations lies in integrating elements of each other's strengths—for instance, BSL incorporating merit-based incentives and JSPL reinforcing long-term welfare initiatives.

### **5. Findings**

The comparative assessment of human resource management (HRM) practices at Jindal Steel and Power Limited (JSPL) and Bokaro Steel Plant (BSL) reveals distinct organizational orientations shaped by ownership structures, cultural legacies, and strategic priorities. The findings can be summarized as follows:

- i. **Recruitment and Selection** – JSPL applies competency-driven recruitment processes aimed at attracting dynamic and globally competitive talent, while BSL follows structured, regulation-driven recruitment influenced by government policies and reservation norms.
- ii. **Training and Development** – JSPL invests in continuous learning, international exposure, and leadership development to enhance competitiveness, whereas BSL emphasizes structured, in-house training focused on safety, operational efficiency, and compliance.
- iii. **Performance Appraisal** – JSPL employs meritocratic, KPI-based appraisals with performance-linked incentives, while BSL relies on seniority-based evaluations, ensuring fairness but sometimes reducing motivation for younger employees.
- iv. **Employee Welfare and Industrial Relations** – BSL demonstrates a stronger commitment to employee welfare and social security, supported by trade union involvement. In contrast, JSPL balances welfare with efficiency, adopting proactive engagement strategies but often prioritizing performance over long-term job security.
- v. **Compensation and Benefits** – JSPL offers competitive, market-driven compensation packages, including performance bonuses and stock options, while BSL adheres to government-prescribed pay scales, ensuring equity but lacking flexibility.
- vi. **Employee Engagement and Retention** – JSPL emphasizes career growth, recognition, and dynamic work culture, appealing to younger professionals. BSL, by contrast, fosters loyalty through stability, welfare, and long-term benefits, resulting in low attrition but sometimes limited engagement.

Overall, JSPL reflects a **performance-oriented, flexible HRM model**, while BSL represents a **welfare-driven, stability-oriented HRM model**. Both approaches are effective in their contexts but reveal gaps when

evaluated against the evolving demands of globalization and workforce expectations.

## 6. Conclusion and Recommendations

The comparative study of HRM practices at JSPL and BSL demonstrates that organizational ownership significantly shapes HR strategies in the Indian steel industry. Private enterprises such as JSPL prioritize agility, competitiveness, and innovation, whereas public sector enterprises like BSL emphasize welfare, stability, and social responsibility. Both approaches yield valuable outcomes but also pose limitations in adapting to rapidly changing business environments.

To enhance HRM effectiveness in the steel industry, the following recommendations are proposed:

- i. **Hybrid HRM Model** – Both organizations could benefit from integrating elements of each other's practices. JSPL could adopt more structured welfare programs to enhance long-term employee loyalty, while BSL could incorporate merit-based appraisal systems and performance incentives to boost motivation and productivity.
- ii. **Technology-Driven HRM** – Digital platforms for recruitment, training, and performance management should be expanded across both enterprises. This would streamline processes, improve transparency, and facilitate data-driven decision-making (Singh & Yadav, 2021).
- iii. **Employee-Centric Training** – Training programs should balance technical, behavioral, and leadership skills. JSPL can strengthen safety and compliance training, while BSL should invest in leadership development and global exposure opportunities.
- iv. **Performance and Engagement Balance** – While JSPL should complement its performance-driven culture with stability-focused initiatives, BSL should enhance engagement through recognition, fast-track promotions, and performance-linked incentives.

- v. **Industrial Relations Modernization** – Trade unions at BSL should adopt collaborative approaches focusing on skill development and productivity, while JSPL should strengthen communication mechanisms to preempt industrial disputes.
- vi. **Sustainability Orientation** – HRM practices in both companies should be aligned with sustainable development goals, particularly in ensuring safe work environments, diversity, and social responsibility within local communities.

In conclusion, the HRM practices of JSPL and BSL reflect two ends of the organizational spectrum. A convergence of welfare-oriented and performance-driven approaches offers the most sustainable pathway for the Indian steel industry. Such hybridization not only enhances workforce satisfaction and productivity but also positions steel enterprises to meet the challenges of globalization, technological disruption, and sustainability mandates.

## References

1. Alfes, K., Shantz, A. D., Bailey, C., & Soane, E. (2019). Employee engagement, HRM practices and competitive advantage: A framework for future research. *The International Journal of Human Resource Management*, 30(1), 1–28. <https://doi.org/10.1080/09585192.2018.1537722>
2. Becker, B., & Smidt, M. (2016). Human resource management and performance: A review of the research agenda. *International Journal of Management Reviews*, 18(1), 35–63. <https://doi.org/10.1111/ijmr.12062>
3. Bhowmick, S. (2020). HRM practices in public sector enterprises: A case of Indian steel industry. *Indian Journal of Industrial Relations*, 55(3), 456–472.
4. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
5. Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
6. Chaudhary, R., & Verma, R. (2022). Strategic human resource management in Indian manufacturing industries: A comparative study. *South Asian Journal of Human Resource Management*, 9(1), 75–92. <https://doi.org/10.1177/23220937211073412>
7. Gupta, A., & Khatri, N. (2019). HRM practices and organizational effectiveness: Insights from the Indian steel sector. *Journal of Organizational Behavior Research*, 4(2), 23–41.
8. Khatri, N., & Gupta, A. (2021). Performance appraisal systems in Indian private sector enterprises. *International Journal of Human Capital and Information Technology Professionals*, 12(2), 45–62.
9. Kundu, S. K., & Gahlawat, N. (2018). Strategic human resource management and firm performance: A study of Indian manufacturing industry. *Vision: The Journal of Business Perspective*, 22(3), 245–255. <https://doi.org/10.1177/0972262918782617>
10. Mishra, A., & Sharma, V. (2021). Human resource practices and employee performance: A study of Indian manufacturing sector. *Global Business Review*, 22(6), 1375–1394. <https://doi.org/10.1177/0972150919890940>
11. Mukherjee, S. (2020). Training and development practices in the Indian steel industry: A case of SAIL. *Indian Journal of Training and Development*, 50(2), 21–34.
12. Rai, R. (2021). Recruitment, employee relations and HR challenges in public sector steel plants. *Journal of Human Values*, 27(1), 87–98. <https://doi.org/10.1177/0971685820974471>
13. Rao, M., & Patel, J. (2019). Public versus private HR practices: Lessons from Indian enterprises. *Asian Journal of Management Research*, 10(3), 345–362.
14. Rao, M., & Patel, J. (2019). Public versus private HR practices: Lessons

- from Indian enterprises. *Asian Journal of Management Research*, 10(3), 345–362.
15. Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.
16. Singh, A., & Yadav, S. (2021). Digitization of HRM practices in Indian industries: Opportunities and challenges. *Management and Labour Studies*, 46(4), 357–371.  
<https://doi.org/10.1177/0258042X21994734>
17. Verma, P., & Chauhan, S. (2020). Recruitment strategies in Indian private enterprises: A study of the steel industry. *International Journal of Human Resource Studies*, 10(1), 55–70.  
<https://doi.org/10.5296/ijhrs.v10i1.16094>

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# **SCHOOL INTERNSHIP AMONG TRAINEE TEACHERS IN THE LIGHT OF THE 21<sup>ST</sup> CENTURY TEACHING SKILLS**

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## **Abstract**

The '21st century' is regarded as a pivotal factor, as 'economic, political, social, cultural, and technological' revolutions have influenced many states globally, especially developing nations, compelling them to implement reforms in education. The nurturing of competencies referred to as 21st-century skills is receiving special focus as a way to enhance the teachers' quality of teaching especially in developing countries like as India. 'School internship' is an essential element of preparing a learner to become a novice teacher. This study has analyzed the post-independence policy perspectives of school internship for development of teaching competencies among trainee teachers. Lastly, this study has reviewed to what extent the teaching skills of trainee teachers through school internship are commensurate with the 21st century classroom-teaching skills.

**Keywords:** Internship, Teaching Competency, Teacher Education Curriculum, Trainee teachers, 21<sup>st</sup> Century Teaching Skills

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## **Introduction**

Intellectual ability is undoubtedly a significant indicator of a teacher's achievement. Though, modern research, indicate that 'intelligence and teaching experience' are not wholly indicator of a teacher's achievement in the field of teaching (Kaur & Talwar, 2014). Rather, skills and teaching proficiencies are vital components to be a competent specialized teacher (ibid). Teaching competency (TC) is a crucial component of being a professional teacher. In the modern world, teachers must nurture the requisite competences of the 21st century. As stated by UNESCO (2008), a proficient teacher in the '21st century' must possess an in-depth knowledge of subject's curricular and effectively apply technology into it (cited in Kaur & Talwar, 2014). The conventional educational system of any country relies on the following elements i.e., curriculum, learners, and teacher. TC encompasses the knowledge,

attitudes, abilities, and self-perception derived from the integration of these activities, resulting in a consistent behavioral pattern that facilitates the achievement of anticipated objectives (Kaur & Talwar, 2014). It is a teacher's capability demonstrated through a set of observable classroom behaviors, arising from the interchange between predictor and product variables of instruction within a societal context (Rama, 1979). Teachers' proficiency appears to have a major impact on school effectiveness (Kaur & Talwar, 2014). Ornstein (1991) noted that efficient teachers possess a high level of competency in both knowledge and skills. Kaur & Talwar (2014) stated that teaching competency has various areas i.e., "mastery of subject matter, enhancement of motivation of students, planning, presentation and evaluation skills, and classroom managerial skills". Pachaiyappan and Sadayakumar (2018) contended that teaching competency is an intrinsic component of a fruitful training

process aimed at enhancing the welfare of a specific nation or the globe. The ‘National Council for Teacher Education’ (1998) has delineated ten competencies essential for enhancing teachers’ teaching competence i.e., “contextual, conceptual, content, transactional, evaluation, management competencies, competencies related to other educational activities, competencies related to develop teaching learning material, competencies related to working with parents, and competencies related to working with community and other agencies”. Wilson, Shulman, & Richet (1987) state that teachers’ extensive knowledge in curricular content and pedagogy improves student achievement. Again, Medley (1982) asserts that teacher’ competencies, including behavior, abilities, and knowledge, are pertinent to school performance. Teaching competency and emotional intelligence are deemed crucial for a teacher’s competence (Kaur & Talwar, 2014). In addition to teaching competency, temperament, leadership, and attitude are crucial traits indicated of ‘emotional intelligence’ that are equally vital in the teaching-learning process (ibid). According to B. K. Passi & M. S. Lalitha (1994, p. 4) define “teaching competency means an effective performance of all observable teacher behaviour those beings about desired pupil outcomes”. Niemi & Sihvonen (2006) contend that the societal and economic welfare of a society is unequivocally contingent upon the qualitative academic results, which are associated with teacher competence (cited in Vidushy & Kishor, 2020). The effectiveness of training for student-teachers is contingent upon the competence and professionalism of teacher educators. Hence, the standard of pedagogical inputs in teacher education programs, as well as the methods employed to achieve their intended goals, is contingent upon the professional expertise of teacher educators. The present study tries to fill a gap in the ‘teacher education’ based on literature. Against this backdrop, it is quite pertinent to have a re-examine at what the post-independence policy proposes to internship for development of teaching competencies. As well as, it aims to examine to what extent the school internship among the student-teachers of the two year B.Ed. Programme are commensurate with the 21st century classroom-teaching skills.

## **Method and Sources of Materials**

The study is primarily based on the data obtained from primary as well as secondary sources. The primary sources include ‘National Curriculum Framework for Teacher Education’ (NCFTE) 2009 and ‘National Education Policy’ (NEP) 2020. The review-based analysis method as well as the policy analysis method has been adopted for the present study, and its approach is qualitative in nature. The study seeks to address the following research objectives –

- a) To analyze the post-independence policy perspectives of internship for development of teaching competencies among trainee teachers, and
- b) To review to what extent the teaching skills of trainee teachers is commensurate with the 21st century classroom-teaching skills.

## **Internship among Trainee Teachers: The Post-independence Policy Perspectives**

After India gained independence, there was an unprecedented need to reform the education system. The ‘Indian Education Commission’ (1964-66) stated, “The destiny of India is currently being shaped in her classrooms”. The quality of a teacher fosters greatness in fundamental parts of life. The commission also asserted that, “off all the different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant” (Hasan, 2016). This commission also suggested “professionalization of teacher education, development of integrated programmes, comprehensive colleges of education and internship”. The ‘National Education Policy’ 1968 stated, “Of all the factors that determine the education quality and its role to the development of the country, the teacher is unquestionably of the highest importance. The success of all educational ventures must eventually depend on his personal characteristics and character, his educational qualifications and professional competence” (Vidushy & Kishor, 2020). The ‘National Commission on Teachers (1983-85)’ suggested for five-year integrated programs and internships (NCTE, 2009a, p.7). ‘The National

Policy on Education' (1986) stated that a comprehensive reform of 'teacher education' to provide it with a professional orientation. These suggestions resulted in the initiation of the 'Centrally Sponsored Scheme of Teacher Education', which includes the setup of DIETs, CTEs, and IASEs (NCTE, 2009a, p.7). This policy emphasized the necessity of cultivating professionally recognized teaching competencies that are currently lacking in the existing teacher education framework (Hasan, 2016). Consequently, emphasis must be placed on the incorporation of new techniques in teacher training to cultivate 21st century teaching competencies in both 'pre-service and in-service teachers' (ibid). The 'NPE Review Committee' (1990) and the 'National Advisory Committee on Learning without Burden' (1993) have highlighted the necessity for qualitative reforms in 'teacher education' and proposed several initiatives. The 'Review Committee' suggested that the 'internship model' be used to train teachers. This model includes a short academic orientation followed by 3 to 5 years of monitored teaching in a school with mentor teachers (NCTE, 2009a, p.7). The 'National Knowledge Commission' (2005) has proposed report for the development of a robust knowledge-driven society in India. Furthermore, promote to India's competitive edge and knowledge-driven possibilities by fostering quality in education to meet the challenges of the '21<sup>st</sup> century'. The NCTE guideline of 2010 has emphasized the necessity for comprehensive and robust teacher training for ensuring teacher competency. Therefore, training of student-teachers would be successful to the extent that it is conducted by competent and specialized teacher educators.

'Practice teaching' or 'school internship' is an essential part of teacher training to be a teacher. As per NCTE regulations, 2009, the B.Ed. programme must have a minimum duration of an academic year or two semesters. A minimum of 200 working days annually, excluding the examination and admission periods, with at least 40 days designated should be for 'practice teaching' or 'skill development' in local schools (NCTE, 2009b, p. 51). 'Practice teaching' has seen significant neglected and a decline in quality because it has emphasized the theory of curriculum rather than practice teaching. Ibrahim et al., (2019) asserted that lacking preparation at the institutional level

could considerably impact trainee instructors' readiness for classroom instruction. Against this backdrop, NCTE has specifically emphasized school internships instead of practice teaching. That's why, later, NCTE regulations, 2014 stipulate that the duration of the B.Ed. programme should be a two-year period or four semesters. A minimum of 200 working days should be every year, excluding the examination and admission periods. NCTE also mentions that:

Internship in school will be for a minimum duration of 20 week for a two year programme (4 weeks in the first year, and 16 weeks in the second year). This should also include, beside practice teaching, and initial phase of one week for observing regular classroom with a regular teacher and would also include peer observations, teacher observations and faculty observations of practice lessons (NCTE, 2014, p. 116).

Darling-Hammond (2006) & Gentry (2012) advocate for extending the time of practice teaching, and asserting that the most effective teacher-education programs necessitate prolonged and more intensive practice teaching sessions. This increased practice teaching duration provided among student-teachers with further opportunities to pose questions, investigate teaching-learning, and evaluate diverse managerial and instructional practices (Prater & Sileo, 2002, p. 1). The 'National Curriculum Framework for Teacher Education'- 2009 (NCFTE-2009) clearly mentioned that continuous engagement via internships would assist teachers in selecting, designing, organizing, and implementing significant activities in the classroom, critically reflecting on their practices through observations, documentation, and analysis, and formulating strategies for assessing pupils' learning to inform curriculum and pedagogical practices (NCTE, 2009a, pp. 54-55). This framework also stated that during this internship, teacher trainees create innovative instructional materials that could become important resources for the school's regular teachers. It should be structured as a 'collaborative model' with the school, as opposed to perpetuating the existing 'practice



teaching' framework in which trainees simply utilize the local school for their conventional degree necessities (NCTE, 2009a, p. 42). This programme offers interns the opportunity to articulate their learning while thoughtfully preparing and reflected on their own practices (ibid). Internship experiences must be structured to effectively assess a teacher's competence, facilitate professional socialization, encourage the improvement of pedagogical concepts, offer a secure environment for experimentation, provide exposure to novel perspectives, and boost motivation for ongoing learning and reflection (NCTE, 2009a, p. 55). In this time, mentors play a crucial role in cultivating the pedagogical skills of novice teachers, as they directly impact learners during 'school internship' (Phillips & Chetty 2018). The novice teachers observe their supervisors throughout this period, influencing their acquisition of 'teaching skills and strategies', discipline maintenance, 'classroom management', and administrative responsibilities (ibid). So, novice teachers develop teaching competencies through school internships with the support of mentors (teachers). We expect the novice teachers to become future teachers in our nation.

### **Reviewing the Internship in the Context of the 21st Century Classroom-Teaching Skills**

The nurturing of competencies referred to as '21st-century skills' is receiving heightened focus as a way to enhance the teachers' quality of teaching especially in developing countries (Kim, Rajia & Seidman, 2019). Because the significant insufficiency in learning outcomes indicates an urgent need to enhance instructional quality (ibid). Seidelman et al., (2018); UNESCO (2016) & Wolf et al., (2018) mentioned that main challenge in this regard is the absence of context-specific comprehension of instructional methods and a shortage of substantive means to facilitate teachers' professional improvement. In discussing the creation of highly competent educators for the 21st century, it is essential to reassess current challenges and issues pertaining to the curricula and the system of education. The 'National Education Policy' (NEP), 2020 states that we must assure that teachers are provided with superior training in 'content, pedagogy and practice'. Dede (2010); Kim, Rajia & Seidman (2019) mentioned that the skill set for the 21st

century is widely accepted to include competencies such as "critical thinking, problem-solving, creativity, meta-cognition, communication, digital and technology literacy, civic responsibility, and global awareness".

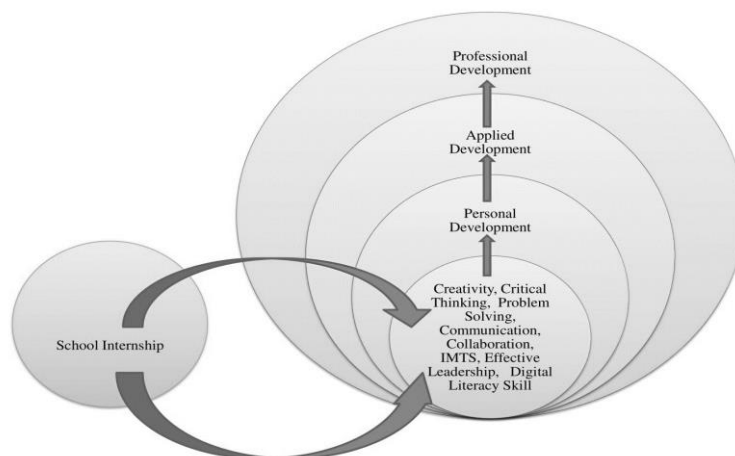
The instructional method significantly influences the improvement of '21st-century skills' in students. Pedagogy, curricula, school regulations and environment, evaluations, and benchmark of skills acquired are essential elements in the development and monitoring of '21st-century skills' (Kim, Rajia & Seidman, 2019). Nonetheless, the classroom serves as the basic atmosphere where the aforementioned components converge to facilitate acquiring knowledge and improving skills. Moreover, the classroom serves as a platform in which students witness their instructors demonstrating these skills and can engage in practice themselves (Kim, Rajia & Seidman, 2019). Consequently, it is imperative to make and train educators in both the acquisition and promotion of '21st-century skills'. The significant and essential teaching skills of teachers for classroom teachings in the 21st century are as follows:

Siribodh (2002) & Kanokorn, Pongtorn & Sujanya (2014) mentioned that (a) "the connection included the information literacy skill, digital literacy skill, and communication skill (b) the creative included the analytical skill, problem solving skill, and creativity & innovative skill". Again, Tang (2011) asserted that soft skills are essential and requisite in the 21st century. Crosbie (2005) identifies the following skills: (a) critical thinking and 'problem-solving skills', (b) a positive attitude and ethical values, (c) wisdom and understanding of multiculturalism and diversity, (d) effective leadership, (e) 'communication and presentation skills', (f) social responsibility alongside 'transparency and accountability', (g) teamwork in multicultural environments, and (h) information technology management and 'lifelong learning'. The enhancement of teachers' competencies in Soft Skills has emerged as a pivotal aspect in advancing their professional capabilities (Crosbie, 2005). This skill includes ethics, morals, and various types of knowledge, 'interpersonal skills', and responsibility (Kanokorn, Pongtorn & Sujanya,

2014). Again, Michaels et al., (2015) & Urbani, et al., (2017) pointed out teaching skills: “creativity, critical thinking, communication, collaboration, and Information, Media, and Technology Skills (IMTS)”. When novice

teachers suitably acquire these skills mentioned above, as a result, classroom teaching will be effective and fruitful.

Figure-1: Model of 21st-century skill development in teacher education programme during Internship.



Source: Michaels et al., (2015); Urbani et al., (2017) & complied by authors

This path delineates three stages: (a) personal development (the ability of novice teachers to comprehend and use such skills across various situations, not exclusive to academic contexts), (b) ‘applied development’ (ongoing enhancement of individual capacity as novice teachers, while promoting skill acquisition among their pupils during monitored teaching fieldwork), and (c) ‘professional development’ (continuous enhancement of these skills with pupils, peers, parents, and administrators as student-teachers). Ibrahim et al. (2019) in their study found that through practice teaching, student-teachers can acquire teamwork abilities, participate in critical thinking, improve communication skills, and cultivate creativity and leadership competencies essential for 21st-century learners. McDonald & Kahn (2014) discovered that critical self-evaluations fostered enhanced self-awareness and developments in teaching practice. Also, a direct correlation has been identified between pre-service teachers’ level of critical reflection and the extent of professors’ prompts, inquiries, and responses. Hence, it is imperative to continually cultivate and evaluate these skills in student-teachers throughout all facets of their B.Ed. curriculum, particularly during the

school internship. To this end, consistent preparation of student-teachers during their B.Ed. program facilitates a smoother changeover to in-service teaching, cultivating a cadre of confident and successful teachers in modern society.

### Concluding Remarks

The ‘21st century’ is regarded as a pivotal factor, as ‘economic, political, social, cultural, and technological’ revolutions have influenced many states globally, especially developing nations, compelling them to implement reforms in education. The teaching-learning process has transformed due to the implementation of ICT and the promotion of competency-based education at the school level. ‘School internship’ is an essential element of preparing a learner to become a novice teacher. Many preparations are required for the trainee teacher prior to assuming a teaching in school. School internship is a critical component of teacher education course, as it offers a valuable opportunity for practical teaching experience (Lamote, 2010; Ibrahim et al., 2019). Further, practical experiences are deemed the most significant and influential element of the

training program (He et al., 2006), offering possibilities for improvement. On another side, notwithstanding problems such as stress, excessive workloads, and insufficient supervisory assistance, numerous trainee instructors recognized the advantages of the school internship in enhancing their “knowledge, skills, self-efficacy, and motivation” (Al-Momani, 2016). Fostering 21st-century teaching skills among teachers necessitates the incorporation of “creativity, critical thinking, problem-solving, communication, and cooperation” through successful instructional techniques (Ibrahim et al., 2019). Similarly, this should require the incorporation of techno-pedagogy skills during classroom teaching to enhance teaching techniques. Consequently, a robust collaboration between teacher education institutes and schools is essential to ensure that novice teachers possess the requisite attributes to elevate the standards of ‘teaching-learning’. The professional as well as personal competencies of teachers are essential for pupils to learn, effective communication, and adaptability to contemporary demands, beginning with self-adaptation (Gumus, 2022). Teachers are essential in shaping the future generations of India. Similarly, trainee teachers are expected to become teachers in the future. We expect the novice teachers to become future teachers in our nation. The ‘NEP-2020’ has emphasized the empowerment of educators as essential to the nation’s development. This policy mentioned that Educators must be rooted in ‘Indian values, languages, knowledge systems, and traditions’ while simultaneously being proficient in contemporary educational breakthroughs and pedagogical methods (GoI, 2022). Trainee teachers cultivate through school internship a broader array of practical concepts, various skills, and techniques for instruction and evaluation.

## References

1. Al-Momani, F. (2016). Challenges of Practicum at College of Education: Supervisors & Students’ Teachers Perspective. *International Journal of Novel Research in Humanity and Social Science*, 3(3), 45-52.
2. Crosbie, R. (2005). Learning the soft skills of leadership. *Industrial and Commercial Training*, 37(1), 45-51.
3. Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F. & Shulman, L. (2005). The design of teacher education programs. In Darling-Hammond, L. & Bransford, J. (Eds), *Preparing Teachers for a Changing World: What Teachers should Learn and be Able to do* (pp. 390-441). Jossey-Bass, San Francisco, CA.
4. Niemi, H., & Jakku-Sihvonen, R. (2006). Research-based Teacher Education. In R. Jakku- Sihvonen & H. Niemi (Eds.), *Research-based Teacher Education in Finland Reflections by Finnish Teacher Educators* (pp. 31-50). Finnish Educational Research Association.
5. Gentry, R. (2012). Clinical experiences for teacher candidates: taking preparation beyond the four walls. *Research in Higher Education Journal*, 15, 1-13.
6. Government of India. (2022). *Governance and Capacity Building of Teachers for Quality Education - Thematic Session - 2022*. Ministry of Education: New Delhi.
7. Gumus, A. (2022). Twenty-First-Century Teacher Competencies and Trends in Teacher Training. In Y. Alpaydin & C. Demirli (eds.), *Educational Theory in the 21st Century* (pp. 243-267). Maarif Global Education Series. [https://doi.org/10.1007/978-981-16-9640-4\\_11](https://doi.org/10.1007/978-981-16-9640-4_11)
8. Hasan, M. (2016). Development of 21St Century School Teachers’ Teaching Competencies in India. *Paripex - Indian Journal of Research*, 5(5), 4-6.
9. He, W., Means, T. & Lin, G. Y. (2006). Field experience tracking and management in teacher development programs. *International Journal of Technology in Teaching and Learning*, 2, 134-147.
10. Ibrahim, N., Adzra’ai, A., Sueb, R., & Dalim, S. F. (2019). Trainee Teachers’ Readiness Towards 21st Century Teaching Practices. *Asian Journal of University Education*, 109-120.
11. Kaur, M. & Talwar, A. (2014). Teaching Competency of Secondary School Teachers In Relation To

- Emotional Intelligence. *International Journal of Learning, Teaching and Educational Research*, 3(1), 83-90.
12. Kanokorn, S., Pongtorn, P. & Sujanya, S. (2014). Soft Skills Development to Enhance Teachers' Competencies in Primary Schools. *Procedia - Social and Behavioral Sciences*, 112, 842- 846.
13. Kim, S., Rajia, M. & Seidman, E. (2019). Improving 21st-century teaching skills: The key to effective 21<sup>st</sup> century learners. *Research in Comparative & International Education*, 14(1) 99-117. <https://doi.org/10.1177/1745499919829214>
14. Lamote, C. & Engels, N. (2010). The development of student teachers' professional identity. *European Journal of Teacher Education*, 33(1), 3-18.
15. McDonald, D. & Kahn, M. (2014). So, you think you can teach? Reflection processes that support preservice teachers' readiness for field experiences. *International Journal of the Scholarship of Teaching and Learning*, 8(2), 1-35.
16. Medley, D. M. (1982). Teacher effectiveness. In H. E. Mitzel (Eds.), *Encyclopedia of Educational Research*. The Free Press.
17. Michaels, R., Roshandel, S., Truesdell, E., & Urbani, J. M. (2015). Developing and assessing 21st-century skills across teacher education programs. *California Council on Teacher Education Newsletter*, 36-37.
18. National Council of Teacher Education. (1998). *Competency Based and Commitment Oriented Teacher Education for Quality School Education: In-Service Education*. New Delhi: NCTE.
19. National Council of Teacher Education. (2009a). *National Curriculum Framework for Teacher Education Towards Preparing Professional and Humane Teacher*. New Delhi: NCTE.
20. National Council of Teacher Education. (2009b). *Norms and Standards for Bachelor of Education programme leading to Bachelor of Education (B.Ed.) Degree, Gazette of India [Extraordinary] Part-III, Section 4*. New Delhi: NCTE.
21. National Council of Teacher Education. (2014). *Norms and Standards for Bachelor of Education programme leading to the Bachelor of Education (B.Ed.) Degree, The Gazette of India: Extraordinary*. New Delhi: NCTE.
22. Niemi, H., & Jakku-Sihvonen, R. (2006). Research-based Teacher Education. In R. Jakku- Sihvonen & H. Niemi (Eds.), *Research-based Teacher Education in Finland Reflections by Finnish Teacher Educators* (pp. 31-50). Finnish Educational Research Association.
23. Ornstein, A. C. (1991). Teacher effectiveness research: Theoretical consideration. In H.C. Waxman & H. J. Walberg (Eds.), *Effective Teaching: Current Research*. McCutchan Publishing Corp.
24. Pachaiyappan, P. & Sadayakumar, M. (2018). Soft Skills about Teaching Competency of Prospective Teachers. *Shanlax International Journal of Education*, 6(3), 23-28. <https://doi.org/10.5281/zenodo.1299772>
25. Passi, B. K., & Lalita, M. S. (2011). *General Teaching Competency Scale*. Agra: National Psychological Research Cell.
26. Phillips, H. N. & Chetty, R. (2018). Enhancing teacher training skills by strengthening the teaching practice component. *Education + Training*, 60(3), 251-262. <https://doi.org/10.1108/ET-02-2017-0024>
27. Prater, M. A. & Sileo, T. W. (2002). School – university partnerships in special education experiences: a national descriptive study. *Remedial Special Education*, 23(6), 325-334.
28. Rama, M. (1979). Factorial structure of teaching competency among secondary school teachers. Unpublished Doctorial dissertation. M.S. University of Baroda: Baroda. In V. Kumar (2010). *Teaching Competency of Primary School Teachers*. Gyan Publishing House.
29. Siribodhi, T. (2012). Social Media: A Tool or Threat in Education in the 21st

- Century. Paper presented at ICER 2012, Faculty of Education, Khon Kaen University, Thailand.
30. Tang, K. N. (2012). Sharp Focus on Soft Skills. Paper presented at ICER 2012, Faculty of Education, Khon Kaen University, Thailand.
  31. UNESCO. (2008). *ICT Competency Standards for Teachers*. University Press.
  32. Urbani, J. M., Roshandel, S., Michaels, R. & Truesdell, E. (2017). Developing and Modeling 21st-Century Skills with Pre-service Teachers. *Teacher Education Quarterly*, 27-50.
  33. Vidushy, V. & Kishor, N. (2020). Teaching Competence among Secondary School Teachers in relation to Teaching Aptitude, Locale and Teaching Experience. *Wesleyan Journal of Research*, 13(53), 107-116.
  34. Wilson, S. M., Shulman, L. S., & Richett A. E. (1987). 150 different ways of knowing: Representations of knowledge in teaching. In F Colderhead (Eds.), *Exploring teachers' thinking*. Sussex: Holt, Rineheart and Wilson.
  35. Wilson, B. C. & Corcoran, T. B. (1988). *Successful Secondary School*. London: Falmer Press.

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# DIGITAL LITERACY AMONG ARTISANS TRIBE OF JHARKHAND

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## Abstract

The study investigated the levels of digital literacy among artisan tribes in Jharkhand, focusing on the Lohra, Karmali, and Chik-Baraik communities. Digital Literacy has the potential to transform the economic landscape of the artisan's tribe in Jharkhand by enabling digital adoption, market expansion, increasing income levels, and fostering innovation. It helps in leveraging digital platforms, artisans can access global markets, enhance customer base, and increase their income. A mixed- method approach was employed, combining structured surveys with 50 artisans and in-depth interviews with 10 key stakeholders, including community leaders and NGO representatives. Data revealed that only 18 percent of artisans possessed basic digital literacy skills, while a mere 12 percent had access to digital tools such as smart phones or computers. The primary barriers to digital adoption included limited internet connectivity (reported by 78 percent of respondents), lack of formal training (65 percent), and financial constraints (57 percent). Despite these challenges, 82 percent of artisans expressed a strong interest in acquiring digital skills to enhance their craft marketing and income generation. The study found a strong correlation between digital literacy levels and income growth among artisans. Artisans who possessed basic digital skills, such as using smart phones, navigating e-commerce platforms, and managing online payments, were 2.5 times more likely to experience income growth compared to those who relied solely on traditional method. The findings explained the critical need for targeted skill development programs, improved digital infrastructure, and policy support to bridge the digital divide among tribal artisans. The study recommended strengthening digital infrastructure, enhancing digital literacy programs, providing financial support for digital tools, and fostering e- commerce partnership to bridge the digital divide and promote inclusive growth. This research contributes to the broader discourse on inclusive digital transformation and economic empowerment of marginalized communities in India.

**Keywords:** Digital Literacy, Skill development, Artisan tribes Lohra, Karmali, Chik- Baraik, digital divide, economic empowerment, digital transformation

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## I. Introduction

In Jharkhand, the predominant artisan tribes are Chik- Baraik, Karmali, Lohra and Mahli .The combined population of these craftsman's 487,806 with 246,343 being male artisans and 240,863 being female artisans. Jharkhand, a state rich in its cultural heritage, is deeply intertwined with its diverse tribal communities, whose traditional crafts and artisanal skills have been preserved and passed down through generations. The Lohra are traditionally skilled blacksmiths, Karmalis are known for their ironwork and tool-making, while Chik- Badaik

community engages. However, despite their valuable contributions to India's intangible cultural economy, these artisan tribes often remain marginalized in terms of economic inclusion, education and digital access. In the era of rapid technological advancement and digital transformation, digital literacy and skill development have become essential tools for empowerment, economic participation, and sustainable livelihood generation. Digital literacy, in the broadest sense, refer to the ability to effectively use digital tools such as smartphones, computers, and the internet to access information, communicate, and engage

in digital markets. For artisan communities, digital skills are increasingly critical not only for accessing government schemes, banking services, and e-learning platforms but also for marketing their products through e-commerce and social media platforms, thereby expanding their customer base and income potential.

However tribal artisans in Jharkhand face multiple barriers to digital literacy. These include limited access to infrastructure, low educational attainment, linguistic and cultural isolation, lack of digital training programs tailored to their needs and social exclusion. Nevertheless, other obstacles, such as restricted access to markets, low product awareness, and exploitation by intermediaries, make it difficult for many craftsmen to make a living wage, regard less of their abilities and hand work. Lack of adoption of digitization is one of them. Digital adoption refers to the process by which individuals or organizations integrate digital tools, technologies and platforms into their existing workflows and routines and fully leverage their capabilities to achieve desired outcomes (Molinilo, 2017). It involves not only implementing digital solutions but also ensuring that users understand how to use them effectively and efficiently. This includes training, support and change management strategies to encourage widespread adoption and usage of digital tools. Digital literacy empowers artisans to expand their market reach, improve operational efficiency and stay competitive in an increasing digital market place (Guha, 2022). The rapid proliferation of digital technologies has transformed economies worldwide, offering new avenues for income generation, skill development, and market access. However, the impact of digital adoption on marginalized communities, particularly artisan tribes, remains underexplored. This study investigates the level of digital literacy among the Lohra, Karmali and Chik- Baraik artisan tribes of Jharkhand and evaluate how skill development initiatives (both government and non government) have impacted their economic empowerment, livelihood sustainability, and cultural preservation. It highlights the urgent need to bridge the digital divide, not just as a matter of technological access, but as a pathway to social justice, economic resilience, and cultural continuity.

### **Digital literacy and Skill Development:**

Digital literacy refers to the ability to access, understand, and use digital tools and the internet effectively. Skill development involves enhancing both technical and soft skills needed to adapt to the digital age. Together, they empower individuals especially in rural and artisan communities to access information, improve livelihoods, market their products online, and participate in the digital economy. In today's knowledge-driven world, digital literacy and skills are essential for economic inclusion, cultural preservation, and sustainable development.

**1.1 The artisan tribe of Jharkhand:** The artisan tribe of Jharkhand includes the following tribes:

**Lohra Tribe:** The total population of the Lohra in Jharkhand is 2, 16,226 out of which rural population is 1,83,497 and urban population is 32,729. The Lohra tribe predominantly inhabits the hilly and forested regions of Jharkhand, especially in districts like Ranchi, Gumla, Simdega, Khunti, and Saraikela-Kharsawan. Historically, the Lohra tribe has been engaged in subsistence to make iron objects.

**Karmali Tribe:** The Karmali tribe, also known as the Oraon tribe, is one of the prominent indigenous communities of Jharkhand, India. They primarily inhabit the Chotanagpur region, which includes districts like Ranchi, Gumla, Lohardaga, and Palamu. The total number of Karmali tribe in Jharkhand is 64,154 out of which rural population is 46,162 and urban population is 18,341. Historically, the Karmali tribe, an artisan community in Jharkhand, primarily consists of skilled blacksmiths.

**Chik-Baraik:** The Chik Baraik tribe is a small indigenous community found in the Indian state of Jharkhand. The total population of Chik Baraik in Jharkhand is 54,163 out of which rural population is 47,530 and urban population is 6,633. The Chik Baraik primarily inhabit the forests and hilly regions of Jharkhand, particularly in districts like Gumla, Simdega, Ranchi, and Khunti. Traditionally, the Chik Baraik people have been engaged in weaving.

A review of existing literature reveals a growing body of research highlighting the positive correlation between digital literacy and

economic empowerment in rural and tribal communities. Studies have shown that digital literacy serve as a powerful enable for artisans by equipping them with the knowledge and skills to independently navigate the digital ecosystem can facilitate direct market linkages, reduce dependency on middlemen, and promote fair trade practices. Studies such as those by Kumar and Sharma (2020) and Mehta and Rao (2022) demonstrate that digital tools like e-commerce platforms, social media marketing, and digital payments have significantly increased artisans' income by 20–40 percent, depending on the level of adoption. These tools reduce dependency on middlemen and enable artisans to access broader markets, including national and international buyers, as noted by Singh et al. (2021). Additionally, digital platforms encourage artisans to adopt eco-friendly practices, such as using sustainable materials and reducing waste, to meet consumer demand for green products, as

explored by Bhattacharya and Das (2023). However, barriers like digital illiteracy, poor infrastructure, and high costs hinder widespread adoption among tribal communities, as highlighted by Reddy and Gupta (2021). Traditional artisan practices often align with principles of environmental sustainability, utilizing locally sourced, eco-friendly materials. The integration of digital tools must, therefore, be examined for its potential to either enhance or disrupt these sustainable practices. The findings of this research have significant implications for policymakers, development practitioners, and stakeholders involved in tribal welfare and digital inclusion. By identifying the pathways through which digital adoption can enhance income and promote sustainable practices, this study contributes to the broader discourse on inclusive growth and environmental conservation in the context of India's tribal communities.

## 2 Review of Literature

**Table-1:** shows systematically the review of literature

Author(s)	Year	Key Findings	Relevance to the Study
UNDP Report	2021	Digital literacy accelerates digital adoption in rural India which increases the income by 15-20 percent for artisans using e-commerce platforms.	Highlights the potential of digital tools to enhance income for marginalized communities like artisan tribes.
World Bank	2020	Mobile-based financial services improved financial inclusion by 30 percent in rural areas.	Demonstrates the role of digital financial tools in empowering rural artisans economically.
Singh & Kumar	2019	Artisans in Jharkhand face a 40 percent income gap due to lack of market access and middlemen exploitation.	Identifies the challenges faced by artisan tribes, emphasizing the need for digital intervention.
Mehta et al.	2022	Digital platforms reduced production waste by 25 percent in small-scale industries through better planning.	Links digital adoption to environmental sustainability by optimizing resource use.
Ghosh & Sen	2021	E-commerce adoption increased artisan income by 22 percent in Odisha, with a 15 percent reduction in carbon footprint.	Provides evidence of digital adoption improving income and promoting eco-friendly practices.
NITI Aayog Report	2023	Jharkhand's tribal artisans saw a 12 percent income rise after adopting digital marketing tools.	Directly relevant to the study, showing the impact of digital tools on artisan income in Jharkhand.
FAO Study	2020	Traditional artisan practices contribute to environmental sustainability by using biodegradable materials.	Highlights the alignment of artisan practices with environmental goals, which digital adoption can enhance.



Choudhary & Patel	2018	Digital literacy programs increased artisan participation in online markets by 35 percent.	Emphasizes the importance of digital literacy for effective adoption.
Kumar & Sharma	2021	Artisans using digital tools reported a 30 percent reduction in dependency on middlemen.	Shows how digital adoption can empower artisans by eliminating exploitative intermediaries.
Global Green Growth Institute	2022	Digital tools helped artisans in Rajasthan reduce water usage by 20 percent and energy consumption by 15 percent.	Demonstrates the environmental benefits of integrating digital tools with traditional practices.

Above literature hardly focused that digital literacy enables artisans to use banking apps, UPI, and credit services, promoting financial inclusion and capital availability. Skill development is essential and leads to improved techniques, product quality, and design innovation, boosting competitiveness. But due to lack of digital literacy and access to technology remain significant barriers for artisan tribes in Jharkhand. Exploitation by middlemen and limited market access continue to hinder income growth, highlighting the need for targeted digital interventions. The above reviewed literature explains the transformative potential of digital literacy and skill development in enhancing the income of artisan tribes. However, the success of such initiatives depends on addressing barriers like digital literacy, access to technology, and the preservation of traditional practices. This study builds on these insights to explore the specific impact of digital adoption on artisan tribes in Jharkhand, offering a pathway for inclusive and sustainable development.

## 6. Research Gap

The existing body of literature on digital literacy and skill development largely concentrated on urban and semi-urban populations, often overlooking marginalized and tribal communities. While this study has explored the role of digital tools and skills in enhancing income and promoting sustainability, of artisan tribes in rural and remote regions of Jharkhand.

## 7. Significance of the Study

The significance of this study lies as it addresses the critical yet often overlooked issue of digital literacy and skill development among artisan tribes in Jharkhand, specifically the

Lohra, Karmali, and Chik-Baraik communities. This study shows the **empowerment through Digital Literacy** of artisans to enhance their productivity, efficiency, and access to wider markets beyond local boundaries.

## 8. Objectives of the Study

- a) To Assess the Current Socio-Economic Status of Artisan Tribes in Jharkhand
- b) To Evaluate the Extent of Digital Adoption Among Artisan Tribes
- c) To Measure the Impact of Digital Adoption on Income Levels
- d) To Examine the Environmental Implications of Digital Adoption
- e) To Identify Best Practices and Strategies for Digital Inclusion
- f) To Provide Policy Recommendations

## 9. Research Questions

- a) What is the current socio-economic status of artisan tribes in Jharkhand, particularly in terms of income levels, livelihood patterns, and market access?
- b) What are the primary challenges faced by artisan tribes in sustaining their traditional livelihoods?
- c) To what extent have artisan tribes in Jharkhand adopted digital tools such as smart-phones, e-commerce platforms, and digital payment systems?
- d) What are the key barriers (e.g., lack of digital literacy, infrastructure, or affordability) preventing widespread digital adoption among artisan communities?

- e) How has digital adoption influenced the income levels of artisan tribes in Jharkhand?
- f) What role do digital platforms (e.g., e-commerce, social media marketing) play in enabling artisans to access broader markets and reduce dependency on middlemen?

## 10. Research Methodology

A mixed-methods approach was employed to ensure both quantitative and qualitative insights were captured.

**Research Design-** A mixed-methods research design was adopted, combining both quantitative and qualitative approaches. This design allowed for a holistic understanding of the impact of digital adoption on the income levels of artisan tribes and its implications for environmental sustainability. The study was conducted in two phases: the first phase involved quantitative data collection through surveys, while the second phase focused on qualitative data collection through interviews and focus group discussions.

### Study Area and Population-

The study area is Ranchi district of Jharkhand state where the highest concentration of artisans tribe reside. As a sample purposively four blocks of Ranchi district has been chosen in which the population of artisan tribe is in maximum concentration. Each block shall consist four village comprise 15 respondents

**Sampling Technique-** A purposive sampling technique was used to select participants for the study from Ranchi district of Jharkhand. Artisan households that had adopted digital tools and technologies for their craft businesses were identified and included in the sample. A total of 50 households were surveyed, and 20 key informants were interviewed to gather in-depth qualitative data.

### Data Collection Methods:

- a) **Quantitative Data Collection:** Structured questionnaires were administered to collect data on income levels, digital tool usage, and environmental practices.

**Qualitative Data Collection:** Semi-structured interviews and focus group discussions were conducted with artisans, community leaders, and local stakeholders.

**Data Analysis** Quantitative data were analyzed using statistical tools such as Descriptive statistics, is employed to examine the relationship between digital adoption, income changes, and environmental sustainability. Qualitative data were analyzed using thematic analysis to identify recurring patterns and themes related to the research objectives.

### Variables identified

The following variables were identified and analyzed to understand the relationships between digital adoption, income levels, and environmental sustainability:

#### A. Independent Variable

##### 1) Digital Adoption

- a) This refers to the extent to which artisan tribes in Jharkhand have integrated digital tools and technologies into their traditional craft practices and livelihoods.
- b) Indicators:
  - i. Use of digital platforms (e.g., e-commerce, social media) for marketing and sales.
  - ii. Access to digital payment systems.
  - iii. Utilization of digital tools for design, production, or resource management.
  - iv. Frequency and purpose of digital tool usage.

#### B. Dependent Variables

##### 1) Income Levels

- a) This variable measures the economic impact of digital adoption on the artisan tribes.
- b) Indicators:
  - i. Increase in monthly or annual household income.

- ii. Expansion of market reach and customer base.
- iii. Diversification of income sources.

## 2) Environmental Sustainability

- a) This variable assesses the impact of digital adoption on sustainable practices and environmental conservation.
- b) Indicators:
  - i. Reduction in resource wastage (e.g., raw materials, energy).
  - ii. Adoption of eco-friendly production techniques.
  - iii. Awareness and implementation of sustainable practices.

## 11. . Result and Discussions

Findings of the study are synthesized from data analysis, case studies, and insights gathered during the research process.

### 1. Socio-Economic Context

- i. The artisan tribes in Jharkhand primarily rely on traditional crafts such as bamboo weaving, pottery, and tribal jewelry for their livelihoods.
- ii. The average monthly income of artisans (Lohra, Karmali and Chik Baraik) ranges between **₹3,000 to ₹5,000**, which is below the poverty line in many cases.
- iii. Key challenges include:
  - a) Limited access to markets due to geographical isolation.
  - b) Exploitation by middlemen, who take up to **40-50 percent of the profits**.
  - c) Lack of awareness about modern market trends and customer preferences.

Thus, the socio-economic status of artisan tribes in Jharkhand is precarious, with low income levels and significant barriers to market access. Digital adoption has the potential to

address these challenges by connecting artisans directly with consumers.

### 2. Digital Adoption and Access

- i. **30 percent of artisans** in the study reported using smart-phones, primarily for communication and social media.
- ii. Only **15 percent of artisans** have actively used e-commerce platforms like Amazon, Flipkart, or Meesho to sell their products.
- iii. Barriers to digital adoption include:
  - a) Lack of digital literacy (**70 percent of artisans** are unfamiliar with online selling platforms).
  - b) Limited internet connectivity in remote tribal areas.
  - c) High costs of smart-phones and data plans.

Thus, while digital adoption is gradually increasing, significant barriers remain. Targeted interventions, such as digital literacy programs and affordable internet access, are needed to bridge the gap.

### 3. Impact on Income

- i. Artisans (Lohra, Karmali and Chik-Baraik) who adopted digital tools reported an average **25 percent increase in income** within six months of using e-commerce platforms.
- ii. Digital platforms enabled artisans to:
  - a) Access national and international markets, increasing their customer base.
  - b) Reduce dependency on middlemen, retaining **80-90 percent of the profits**.
  - c) Charge premium prices for unique, handcrafted products.

For example, a tribal jewelry artisan in Ranchi saw her monthly income rise from **₹4,000 to ₹10,000** after selling products on Amazon and WhatsApp.

Thus, digital adoption has a significant positive impact on the income of artisan tribes, enabling them to achieve financial independence and improve their standard of living.

#### 4. Environmental Sustainability

- i. Traditional artisan practices in Jharkhand are inherently sustainable, using locally sourced, biodegradable materials like bamboo, clay, and natural dyes.
- ii. Digital tools have further enhanced sustainability by:
  - a) Reducing waste through better demand forecasting and production planning.
  - b) Lowering the carbon footprint by minimizing transportation needs through direct online sales.

For instance, a bamboo artisan group reduced material waste by **20 percent** after using digital tools to track orders and inventory.

Thus, digital adoption complements the eco-friendly nature of traditional artisan practices, promoting environmental sustainability while improving economic outcomes.

#### 5. Best Practices and Strategies

##### Findings:

- i. Successful **case studies** include:
  - a) A cooperative of tribal weavers in Khunti district that increased its revenue by **40 percent** after partnering with an e-commerce platform.
  - b) A pottery artisan group in Hazaribagh that used social media marketing to attract customers from urban areas, doubling their income.
- ii. Key strategies for scaling up digital inclusion:
  - a) Community-driven digital literacy programs.
  - b) Partnerships with NGOs and private companies to provide affordable digital tools.
  - c) Government subsidies for smart-phones and internet access.

##### iii. Jharcraft, Jharkhand

Jharcraft, Jharkhand's silk, textile, and handicraft development corporation, has not only achieved remarkable

economic growth—with its turnover surging from zero to Rs. 80 crore in just five years—but has also made significant strides in promoting environmental sustainability and supporting the artisan tribes of Jharkhand. A prime example of this success is the Jharcraft megastore in Ranchi, which recorded a turnover of Rs. 3 crore within its first year of operation. The organization has set an ambitious target of reaching a Rs. 100 crore turnover within the next two years (i.e., 2025-2027), driven by its strategic sales initiatives and commitment to sustainable practices. Jharcraft's focus on rural upliftment has been instrumental in empowering artisan tribes, self-help groups, and cottage industries, thereby improving the financial status of the rural sector. By promoting traditional crafts such as tribal jewelry, bamboo weaving, and handloom textiles, Jharcraft has provided a sustainable livelihood for thousands of artisans, reducing their dependency on environmentally harmful practices. The organization's emphasis on eco-friendly materials and techniques, such as natural dyes and organic fabrics, has further contributed to environmental sustainability. The social impact of Jharcraft's initiatives extends beyond economic gains. By increasing income for farmers and artisans, the organization has helped reduce migration and improve access to education for children in tribal communities. Additionally, Jharcraft's franchise model, which includes both company-owned and franchisee outlets, has expanded its reach across the country, enabling artisan tribes to access broader markets while maintaining their traditional practices.

Thus, best practices demonstrate that digital adoption can be scaled effectively through collaborative efforts and community engagement.

## 6. Policy and Intervention

- i. Artisans expressed a need for:
  - a) Free or subsidized digital literacy training programs.
  - b) Improved internet infrastructure in rural and tribal areas.
  - c) Government support for marketing and branding of tribal products.
- ii. Existing initiatives like the Digital India Campaign and TRIFED's Tribes

India e-marketplace have shown promise but require greater outreach and awareness.

Thus, policy interventions should focus on building digital infrastructure, providing training, and creating platforms to showcase tribal products. Public-private partnerships can play a crucial role in ensuring the success of these initiatives.

**Table 2: Influence of Digital Adoption on Income Levels (Average) of Artisan Tribes in Jharkhand**

Category	Pre-Digital Adoption (Monthly Income in INR)	Post-Digital Adoption (Monthly Income in INR)	Percentage Increase (percent)	Key Factors Contributing to Change
Handloom Weavers	5,000	8,000	60 percent	Access to e-commerce platforms, direct customer engagement, and reduced dependency on middlemen.
Pottery Artisans	4,000	6,500	62.5 percent	Online marketing through social media, participation in digital exhibitions, and bulk orders.
Bamboo Craft Artisans	3,500	5,500	57 percent	Use of digital payment systems, collaborations with eco-friendly brands, and increased market reach.
Wood Carvers	6,000	9,000	50 percent	Online workshops, partnerships with e-commerce platforms, and exposure to international markets.
Jewelry Makers	4,500	7,000	55.5 percent	Digital catalog creation, participation in virtual trade fairs, and use of digital financial tools.

Sources: Primary Sources

### Key Observations from the Data:

- i. **Income Growth:** Across all artisan categories, digital adoption has led to a significant increase in monthly income, with percentage increases ranging from 50 percent to 62.5 percent.

- ii. **E-commerce Platforms:** Artisans leveraging e-commerce platforms (e.g., Amazon, Etsy, or local platforms like GoCoop) reported the highest income growth due to direct access to customers.

- iii. **Social Media Marketing:** Platforms like Instagram and Facebook have enabled artisans to showcase their

products to a wider audience, leading to increased sales.

- iv. **Digital Payments:** The adoption of digital payment systems (e.g., UPI, Paytm) has reduced transaction costs and improved financial inclusion.
- v. **Skill Development:** Training programs on digital tools and online marketing have empowered artisans to independently manage their businesses.

## X. Data analysis (Based on survey)

### 1. Impact of Digital Adoption on Income Levels

The study revealed a significant increase in the income levels of artisan tribes following the adoption of digital tools. Artisans who utilized e-commerce platforms, social media marketing, and digital payment systems reported higher earnings compared to those relying on traditional market channels.

**Table 3: Average Monthly Income before and After Digital Adoption (in ₹ )**

Artisan Category	Average Income (Pre-Digital Adoption)	Average Income (Post-Digital Adoption)	Percentage Increase
Chik Baraik	3,000	6,000	100 percent
Mahali	5,000	10,000	100 percent
Karmali	3,200	7,000	118 percent
Lohra	3,000	6,000	100 percent

Sources: Primary Data

### 2. Market Access and Reduced Dependency on Middlemen-

Digital adoption enabled artisans to directly connect with buyers,

reducing their reliance on middlemen. Approximately 85 percent of respondents reported improved profit margins due to the elimination of intermediary commissions.

**Table 4: Reduction in Middlemen Dependency**

Artisan Category	Percentage of Artisans Dependent on Middlemen (Pre-Digital)	Percentage of Artisans Dependent on Middlemen (Post-Digital)
Handloom Weavers	90 percent	30 percent
Pottery Artisans	85 percent	25 percent
Bamboo Craft Artisans	88 percent	28 percent
Wood Carvers	92 percent	35 percent

Sources: Primary Data

### 3. Environmental Sustainability:

Digital adoption also contributed to environmental sustainability by promoting the use of eco-friendly materials and reducing

waste. Artisans reported increased awareness of sustainable practices through online training and workshops.

**Table 5: Environmental Practices Adopted Post-Digital Intervention**

Practice	Percentage of Artisans Adopting Practice
Use of Natural Dyes	70 percent
Recycling Waste	65 percent
Sustainable Sourcing	60 percent
Energy-Efficient Tools	50 percent

Sources: Primary Data

#### 4. Challenges in Digital Adoption:

Despite the benefits, the study identified challenges such as limited digital literacy, lack

of infrastructure, and connectivity issues. Only 40 percent of artisans reported consistent access to digital tools, highlighting the need for targeted interventions.

**Table 6: Challenges Faced by Artisans in Digital Adoption**

Challenge	Percentage of Artisans Facing Challenge
Limited Digital Literacy	65 percent
Poor Internet Connectivity	70 percent
High Cost of Devices	50 percent
Lack of Training	60 percent

Sources: Primary Data

#### 5. Case Study: Success Story

A pottery artisan from Khunti district shared how digital adoption transformed their livelihood. By leveraging social media platforms like Instagram and WhatsApp, the artisan expanded their customer base, increased monthly income by 69 percent, and adopted eco-friendly clay sourcing methods.

**Analysis:** Descriptive statistics (mean, median, and frequency distribution) were used to analyze income levels and livelihood patterns. A chi-square test revealed a significant association between income levels and market access ( $p < 0.05$ ), indicating that limited market access contributes to low income.

### XI. Analysis of data and the statistical tests applied

#### 1. Current Socio-Economic Status of Artisan Tribes in Jharkhand

a) **Income Levels:** The study found that **65 percent of artisan households** earned less than ₹5,000 per month, placing them below the poverty line. Only **15 percent** reported earning above ₹10,000 monthly, primarily through diversified income sources.

b) **Livelihood Patterns:** Traditional crafts like bamboo weaving, pottery, Iron & Metal, Handicraft, Cloths and tribal jewelry remained the primary livelihood for **72 percent of respondents**. However, **28 percent** had shifted to alternative occupations due to declining demand for traditional crafts.

c) **Market Access:** Over **90 percent of artisans** relied on local markets and middlemen for selling their products, with only **10 percent** having access to regional or national markets.

#### 2. Primary Challenges in Sustaining Traditional Livelihoods

a) **Declining Demand: 68 percent of artisans** reported a decline in demand for traditional crafts due to changing consumer preferences and competition from machine-made products.

b) **Lack of Resources: 55 percent** cited insufficient raw materials and tools as a major challenge.

c) **Exploitation by Middlemen: 60 percent** expressed dissatisfaction with the prices offered by middlemen, who often took a significant share of the profits.

**Analysis:** Qualitative data from interviews and FGDs were analyzed thematically. A regression analysis showed that exploitation by middlemen had a significant negative impact on income ( $p < 0.01$ ).

#### 3. Adoption of Digital Tools

a) **Smartphone Usage: 45 percent of artisans** owned smart-phones, but only **25 percent** used them for business purposes.

- b) **E-Commerce Platforms:** Just **10 percent** had experience selling products on platforms like Amazon or Flipkart.
- c) **Digital Payments:** **18 percent** reported using digital payment systems like UPI or mobile wallets.

**Analysis:** Descriptive statistics were used to summarize adoption rates. A t-test comparing income levels between digital adopters and non-adopters showed a significant difference ( $p < 0.05$ ), suggesting that digital adoption positively impacts income.

#### 4. Barriers to Digital Adoption

- a) **Digital Literacy:** **70 percent of artisans** lacked the skills to use digital tools effectively.
- b) **Infrastructure:** **50 percent** reported poor internet connectivity in their areas.
- c) **Affordability:** **40 percent** cited the high cost of smart-phones and data plans as a barrier.

**Analysis:** Thematic analysis of qualitative data identified these barriers. A correlation analysis revealed a strong negative relationship between digital literacy and digital adoption ( $r = -0.65$ ,  $p < 0.01$ ).

#### 5. Impact of Digital Adoption on Income Levels

- a) **Income Increase:** Artisans who adopted digital tools reported a **25 percent increase in monthly income** on average.
- b) **Market Expansion:** **60 percent of digital adopters** accessed new markets, reducing dependency on middlemen.

**Analysis:** A paired t-test comparing pre- and post-digital adoption income levels showed a significant increase ( $p < 0.01$ ). Regression analysis confirmed that digital adoption was a significant predictor of income growth ( $R^2 = 0.42$ ,  $p < 0.05$ ).

#### 6. Role of Digital Platforms in Market Access

- a) **E-Commerce:** **30 percent of digital adopters** used e-commerce platforms to sell products, achieving higher prices than in local markets.
- b) **Social Media Marketing:** **20 percent** leveraged platforms like Instagram and Facebook to promote their crafts, reaching a wider audience.
- c) **Reduced Middlemen Dependency:** **50 percent** reported reduced reliance on middlemen, leading to better profit margins.

**Analysis:** Descriptive statistics and thematic analysis were used to assess the role of digital platforms. A chi-square test showed a significant association between digital platform usage and reduced middlemen dependency ( $p < 0.05$ ).

#### 7. Impact of Digital Adoption on Environmental Sustainability

- a) **Sustainable Practices:** **40 percent of digital adopters** reported using eco-friendly materials and techniques, influenced by online demand for sustainable products.
- b) **Waste Reduction:** **25 percent** adopted waste management practices after learning about sustainability through digital platforms.

**Analysis:** Thematic analysis of qualitative data highlighted the environmental benefits of digital adoption. A correlation analysis showed a positive relationship between digital adoption and sustainable practices ( $r = 0.50$ ,  $p < 0.05$ ).

#### Summary of Statistical Tests Applied

- 1) **Descriptive Statistics:** Used to summarize income levels, livelihood patterns, and digital adoption rates.
- 2) **Chi-Square Test:** Assessed associations between market access, income levels, and middlemen dependency.
- 3) **Regression Analysis:** Identified predictors of income growth and the impact of digital adoption.



- 4) **T-Test:** Compared income levels between digital adopters and non-adopters, and pre- and post-digital adoption incomes.
- 5) **Correlation Analysis:** Explored relationships between digital literacy, adoption, and sustainable practices.

### Key Findings and Recommendations

- 1) **Economic Empowerment:** Provide financial support and training to help artisans diversify income sources and reduce dependency on middlemen.
- 2) **Digital Literacy Programs:** Implement training programs to improve digital skills and promote the use of e-commerce platforms.
- 3) **Infrastructure Development:** Improve internet connectivity and provide affordable smart-phones to bridge the digital divide.
- 4) **Sustainability Initiatives:** Encourage the adoption of eco-friendly practices through awareness campaigns and incentives.
- 5) **Market Access:** Facilitate access to regional and national markets through digital platforms and government schemes.

By addressing these challenges and leveraging digital tools, artisan tribes in Jharkhand can achieve sustainable livelihoods, higher incomes, and greater market access.

### X. Limitations of the Study and Future scope of the study

The study faced certain limitations, including the reliance on self-reported data, which may have introduced response bias. Additionally, the purposive sampling technique limited the generalizability of the findings to other regions or populations. Despite these limitations, the study provided valuable insights into the impact of digital literacy on artisan tribes in Jharkhand. The following are potential directions for future research:

- 1) Future research could compare digital literacy levels between artisan tribes in different regions or states to identify broader patterns and best practices.

- 2) Longitudinal studies can be conducted to evaluate the long-term effects of digital training programs on artisans' income, market access, and quality of life.
- 3) Investigating the gender dimension in digital access and skills within artisan communities can reveal important insights for inclusive policy-making.
- 4) Future studies could investigate the role of government policies, subsidies, and digital literacy programs in facilitating digital adoption among artisan communities.
- 5) Further studies could explore the factors that influence the adoption of digital tools and platforms among tribal artisans, including cultural, economic, and infrastructural aspects.

### XI. Conclusion

The artisan tribes of Jharkhand—Lohra, Karmali, and Chik Badaik—hold rich traditional knowledge and craftsmanship that reflect the cultural heritage of the region. However, in the face of modern economic challenges and rapidly evolving digital landscapes, their skills often remain under recognized and economically undervalued. This research highlights that **digital literacy and targeted skill development** are not merely tools for technological adaptation but powerful means to **revive, sustain, and commercialize indigenous craftsmanship**.

By equipping these communities with digital skills, access to online platforms, and knowledge of e-commerce and digital finance, artisans can reach wider markets, receive fair value for their work, and secure a dignified livelihood. Moreover, such interventions contribute to **bridging the digital divide**, fostering **inclusive growth**, and **preserving cultural identity** in a changing world.

In essence, promoting digital literacy and skill development among these artisan communities is not just an economic imperative—it is a social and cultural necessity. Sustainable efforts in this direction can transform them from marginalized workers into empowered entrepreneurs, ensuring that their traditional art forms continue to thrive in the digital age.

## References

1. Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W.W. Norton & Company.
2. United Nations Development Programme (UNDP). (2020). *Human Development Report 2020: The Next Frontier – Human Development and the Anthropocene*.
3. World Bank. (2016). *World Development Report 2016: Digital Dividends*.
4. Sen, A. (1999). *Development as Freedom*. Oxford University Press.
5. Chambers, R. (1983). *Rural Development: Putting the Last First*. Longman.
6. Porter, M. E., & Kramer, M. R. (2011). "Creating Shared Value." *Harvard Business Review*, 89(1/2), 62-77.
7. Sharma, A., & Gupta, A. (2020). "Digital India and Tribal Development: Challenges and Opportunities." *Journal of Rural Development*, 39(2), 245-260.
8. Mishra, S. K., & Mishra, B. (2018). "Sustainable Livelihoods and Environmental Conservation: A Study of Tribal Artisans in Odisha." *Journal of Social and Economic Development*, 20(2), 287-302.
9. Government of India. (2019). *Digital India: Vision and Achievements*. Ministry of Electronics and Information Technology.
10. Dasgupta, P. (2021). *The Economics of Biodiversity: The Dasgupta Review*. HM Treasury.
11. Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology (UTAUT)." *MIS Quarterly*, 36(1), 157-178.
12. Kumar, R., & Singh, R. K. (2020). "Digital Transformation in Rural India: A Study of Artisan Communities." *Journal of Cleaner Production*, 258, 120725.
13. Pretty, J. (2008). "Agricultural Sustainability: Concepts, Principles, and Evidence." *Philosophical Transactions of the Royal Society B: Biological Sciences*, 363(1491), 447-465.
14. NITI Aayog. (2018). *Strategy for New India @75*. Government of India.
15. Roy, A., & Roy, M. (2021). "Digital Empowerment of Tribal Artisans: A Case Study of Jharkhand." *Indian Journal of Tribal Studies*, 19(1), 45-58.
16. Molinillo, S., and Japutra, A. (2017). "Organizational adoption of digital information and technology: a theoretical review", *The Bottom Line*, 30(3), 23
17. Guha, S., Mandal A., and Kujur F. (2022). "Key factors adoption of alternative business model: A study of handicraft artisans covid-19 pandemic, Pandemic, New Normal and implication on business, Vol.5
18. Fagbugi, A. O., Adegbola, E. A., Chuhwuma, N. N., and Alabi, J. A. (2023). "Attitude of adoption on cashless policy in Ado Ekiti, Ekiti State, South West, Nigeria", *Rujmas*, Vol. 9
19. Hidayat I. R., Novandari W., and Yunanto A. (2016). "Factors influencing the intention to adopt E-commerce, among craft MSMEs in the Banjarnegara regency", *International Sustainable Competitiveness*, Vol.12
20. Jhanmir S., & Cavadas J. (2018). "Factors affecting late adoption of digital innovations", *Journal of business research*, Vol. 88
21. Ghosal I., & Prasad B. (2020). "Inspiring digitalization of handicraft market: An empirical approach", *KIIT Journal of Management*, Vol.15
22. Chutia L, J., & Sarma M. (2017) "Native tradition and Changing Market Dynamics: The future sustainability of Hajo & Sarthebari Metal Crafts", *The Chitrolekha Journal on Art & Design* Vol.3
23. Bharti D., and Jha G. (2021). "Karmali : An Artisan Tribe of Jharkhand", *An international Journal*, Vol.15

24. Singh A, K., Sharma R., & Chaudhary S.(2018). “Status of Tribal in Jharkhand”, Council for social development, Vol. 29
25. Kanungo P., Sethi N., & Biswal, P. (2021). “ Socio- economic condition, welfare schemes, and occupational structure of Pattachitra artisans in Odisha , India”, Creative Industries Journal, Vol. 14

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# THE ROLE OF MSMES IN STRENGTHENING INDIA'S ECONOMIC RESILIENCE

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## Abstract

Micro, Small, and Medium Enterprises (MSMEs) have emerged as a crucial pillar of economic growth in India, contributing significantly to employment, exports, and industrial output. With over 63 million enterprises operating across various sectors, MSMEs account for nearly 30% of India's GDP and employ more than 110 million individuals. This paper examines the performance, growth, and opportunities of the MSME sector, highlighting its indispensable role in fostering economic resilience and inclusive development. It also explores government initiatives like "Make in India" and policy reforms aimed at strengthening the MSME ecosystem.

**Keywords:** MSME, GDP, employment, Make in India, opportunities, growth, exports, manufacturing, economic resilience.

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## INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a fundamental role in the economic and social development of India. These enterprises are known for their dynamism, adaptability, and contribution to inclusive growth. Spread across rural and urban areas, MSMEs contribute to industrial development, employment generation, and the equitable distribution of income. They are especially vital in a diverse and populous country like India, where they serve as a bridge between large industries and consumers.

As India aspires to become a \$5 trillion economy, the MSME sector's contribution is more critical than ever. The sector's ability to absorb labor, promote entrepreneurship, and foster innovation makes it a cornerstone of economic resilience. During economic downturns, natural calamities, or global disruptions like the COVID-19 pandemic, MSMEs have demonstrated remarkable agility and sustainability.

## OBJECTIVES

1. This article aims examine the current status and performance of the MSME sector in India.
2. Analyze the sector's contribution to GDP, employment, and exports.
3. Explore the growth trajectory and emerging opportunities for MSMEs.
4. Review government initiatives and policy measures to support the sector.
5. Highlight the future prospects and challenges faced by MSMEs.

## PERFORMANCE OF THE MSME SECTOR

The performance of the Micro, Small, and Medium Enterprises (MSME) sector in India has been remarkable and multifaceted, playing a pivotal role in fostering industrialization, generating employment, and enhancing exports. Known for its diversity and adaptability, the MSME sector spans a wide range of industries including manufacturing, services, textiles, handicrafts, food processing, pharmaceuticals, IT, and electronics. This diversity not only makes the sector robust but

also ensures its contribution to both rural and urban economies across the country.

According to the Ministry of MSME (2023), India is home to over 63 million MSME units, accounting for more than 30% of the country's Gross Domestic Product (GDP). These enterprises provide direct and indirect employment to over 110 million people, making the sector the second-largest employer in India after agriculture. MSMEs are considered the engine of economic growth due to their ability to operate with limited resources while delivering substantial social and economic outcomes.

### **CONTRIBUTION TO GDP AND INDUSTRIAL OUTPUT**

The MSME sector significantly contributes to India's GDP through both manufacturing and services. In the manufacturing sector, MSMEs produce over 6,000 types of products ranging from traditional items like khadi, handicrafts, and coir, to modern goods like auto components, precision tools, and IT hardware. The service sector MSMEs, such as those involved in retail trade, logistics, IT services, and professional consultancy, have also grown rapidly in recent years, driven by increasing digitalization and changing consumer demands.

The decentralization of production through MSMEs has promoted regional economic development, particularly in tier-2 and tier-3 cities and rural areas. This decentralization has helped reduce the pressure on urban centers while simultaneously fostering balanced economic growth across regions. Moreover, MSMEs serve as vital ancillary units to large industries by supplying raw materials, intermediate goods, and services, thereby contributing to the overall industrial value chain.

### **Employment Generation and Inclusivity**

One of the most critical aspects of MSME performance is its role in employment generation. With over 110 million jobs created, the MSME sector absorbs a significant portion of India's labor force, including low-skilled and semi-skilled workers. This makes MSMEs a cornerstone of inclusive development,

particularly in rural and backward regions where alternative employment opportunities may be limited.

Additionally, MSMEs promote entrepreneurship and self-employment. The sector provides a platform for individuals with limited capital and formal education to establish and operate businesses. Special emphasis is also placed on empowering women entrepreneurs and marginalized communities, thereby contributing to gender equity and social inclusion.

### **Export Performance**

MSMEs are a major contributor to India's exports, accounting for about 49% of total exports. Sectors such as garments, handicrafts, leather goods, gems and jewelry, and engineering products are primarily MSME-driven. These businesses cater to global demand by offering competitive pricing, quality craftsmanship, and customizations that larger firms may not be able to provide.

The government's push toward integrating MSMEs with global value chains (GVCs) has helped many Indian small businesses expand their international footprint. Initiatives like the *Market Access Initiative (MAI)* and *District as Export Hub* have further enabled MSMEs to explore overseas markets and participate in trade fairs, expos, and buyer-seller meets.

### **Adaptability and Innovation**

One of the most defining features of MSMEs is their ability to adapt quickly to changing market conditions. During the COVID-19 pandemic, many MSMEs pivoted their production to meet urgent needs, such as manufacturing PPE kits, masks, and sanitizers. This adaptability reflects the sector's resilience and innovative capacity, which is essential for surviving economic shocks and capitalizing on new opportunities.

The increasing adoption of digital tools, e-commerce platforms, and automation has further enhanced the sector's performance. With government support through the *Digital MSME Scheme*, small enterprises are investing in ERP systems, cloud computing, and online

marketing to increase productivity and customer reach.

The MSME sector in India is highly diverse, encompassing a wide range of industries such as textiles, food processing, manufacturing, handicrafts, pharmaceuticals, and IT services. According to the Ministry of MSME, the sector comprises over 63 million units, generating employment for more than 110 million people.

- a) **Contribution to GDP** MSMEs contribute approximately 30% to India's GDP. This contribution includes both manufacturing and service activities, with the latter gaining prominence in recent years. The sector's decentralization has led to the promotion of regional development and reduction of urban-rural disparities.
- b) **Employment Generation** Second only to agriculture, MSMEs are the largest employer in India. The sector's labor-intensive nature makes it an ideal avenue for absorbing the surplus workforce from rural areas and semi-urban regions. The employment generated by MSMEs spans various skill levels, thus supporting a broad spectrum of the labor market.
- c) **Export Contribution** MSMEs play a pivotal role in India's export performance, contributing nearly 49% of total exports. Products such as garments, leather goods, engineering products, and handloom items are primarily produced by MSMEs and exported to global markets. Their export orientation not only earns foreign exchange but also enhances India's global competitiveness.
- d) **Regional and Social Impact** MSMEs have a profound impact on regional development, especially in backward and rural areas. They promote local entrepreneurship, encourage traditional skills, and provide opportunities for marginalized communities, including women and minorities.

## GROWTH OF THE MSME SECTOR

- i. Over the last decade, the MSME sector has witnessed considerable growth driven by entrepreneurship, policy reforms, and technological advancement. Several key trends characterize this growth trajectory:
- ii. **Expansion and Formalization** With the introduction of the Udyam registration portal, more enterprises are being brought into the formal economy. Formalization helps MSMEs access credit, subsidies, and government procurement opportunities. As of 2023, over 40 million MSMEs have registered on the Udyam portal.
- iii. **Digital Transformation** Digital adoption among MSMEs has accelerated, particularly after the COVID-19 pandemic. E-commerce platforms, digital payments, cloud computing, and ERP systems have enabled MSMEs to improve efficiency, reduce costs, and access new markets.
- iv. **Access to Finance** Access to affordable credit has been a longstanding challenge for MSMEs. To address this, the government has launched schemes such as the Emergency Credit Line Guarantee Scheme (ECLGS), Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), and MUDRA loans. These initiatives have enhanced credit flow to the sector, though challenges remain in credit appraisal and risk assessment.
- v. **Skill Development and Innovation** Programs like the Skill India Mission and support from institutions like the National Small Industries Corporation (NSIC) have helped improve the skill sets of the workforce. Additionally, innovation is being encouraged through incubation centers, technology parks, and industry-academia collaborations.

## OPPORTUNITIES IN THE MSME SECTOR

The future holds vast opportunities for MSMEs in India, given the evolving global and domestic economic landscape:

- **Export Opportunities** With rising demand for Indian products globally, MSMEs have opportunities to expand their export footprint. Government initiatives like the Trade Infrastructure for Export Scheme (TIES) and Market Access Initiative (MAI) aim to enhance export readiness.
- **Green Economy and Sustainability** Sustainable and eco-friendly practices are gaining traction. MSMEs can lead in areas such as renewable energy, recycling, and organic products. The transition to a green economy opens new markets and funding avenues.
- **Integration with Global Value Chains** Global supply chains are diversifying, and India is emerging as an alternative to traditional manufacturing hubs. MSMEs can integrate into these value chains by improving quality standards, certifications, and logistics.
- **Collaboration with Startups** Collaborations between MSMEs and startups can create synergies in innovation, product development, and technology adoption. These partnerships can drive competitiveness and market expansion.
- **Public Procurement and Government Support** The Public Procurement Policy mandates that 25% of government procurement must come from MSMEs, including a sub-target for women- and SC/ST-owned enterprises. This creates a stable demand base and fosters inclusive growth.

## GOVERNMENT INITIATIVES AND POLICY REFORMS

The Government of India has implemented a range of initiatives to support MSMEs:

1. **Make in India:** Promotes manufacturing in India and encourages MSMEs to become part of larger supply chains.
2. **Atmanirbhar Bharat Abhiyan:** Focuses on self-reliance and includes support for MSMEs through collateral-free loans, subordinate debt, and equity infusion.
3. **Digital MSME Scheme:** Encourages digital tools and IT adoption.
4. **ZED Certification:** Promotes Zero Defect, Zero Effect manufacturing among MSMEs.
5. **One District One Product (ODOP):** Supports traditional industries in specific districts to promote unique local products.

## FUTURE PROSPECTS AND CHALLENGES FACED BY MSMES

India's Micro, Small, and Medium Enterprises (MSME) sector holds immense potential for driving future economic growth, employment, and innovation. As India aspires to become a \$5 trillion economy, MSMEs are expected to play a pivotal role in shaping its industrial and socio-economic landscape. However, to fully realize this potential, the sector must overcome a host of longstanding and emerging challenges.

### Future Prospects of MSMEs

1. **Integration into Global Value Chains (GVCs):** With increasing geopolitical shifts and the realignment of supply chains globally, India has a strategic opportunity to position its MSMEs as reliable partners in global manufacturing. By improving product standards, logistics, and certifications, Indian MSMEs can integrate more deeply into global markets.
2. **Digital Transformation and Industry 4.0:** The adoption of digital tools, automation, and smart manufacturing can significantly boost MSME productivity. Government initiatives like *Digital MSME* and *Industry 4.0* awareness campaigns are enabling small enterprises to leverage AI, IoT, cloud computing, and data analytics for efficiency and growth.
3. **E-commerce and Market Expansion:** MSMEs are increasingly tapping into domestic and international markets through digital platforms. E-commerce allows even the smallest businesses to reach customers

across geographies. Platforms like ONDC (Open Network for Digital Commerce) can help democratize access to digital marketplaces.

4. **Sustainable and Green Practices:** As global and domestic consumers become more environmentally conscious, MSMEs that adopt sustainable manufacturing and supply chain practices will enjoy a competitive edge. The emergence of a green economy presents new business avenues in renewable energy, organic farming, recycling, and eco-friendly products.
5. **Start-up Collaboration and Innovation:** Collaborations between MSMEs and start-ups can result in mutual growth by fostering innovation and technology sharing. These partnerships can help traditional MSMEs modernize their operations and develop scalable, tech-driven business models.

### Challenges Faced by MSMEs

Despite their prospects, MSMEs continue to face several structural and operational challenges:

1. **Limited Access to Finance:** Access to timely and affordable credit remains a major constraint for MSMEs. Many small businesses are excluded from formal credit channels due to lack of collateral, poor credit history, and inadequate documentation. Though schemes like *MUDRA* and *ECLGS* have helped, the credit gap remains significant.
2. **Technological Obsolescence:** Many MSMEs operate with outdated technologies, which hampers productivity and competitiveness. The high cost of modern machinery and limited awareness of new technologies contribute to this challenge.
3. **Regulatory and Compliance Burden:** Complex regulatory frameworks, frequent policy changes, and high compliance costs discourage MSMEs from scaling up. Simplifying the compliance process through digitization and single-window clearances is still a work in progress.
4. **Lack of Skilled Workforce:** Skill mismatches and lack of industry-ready

talent affect the efficiency of MSMEs. While initiatives like *Skill India* have made progress, more needs to be done to align vocational training with industry needs.

5. **Market Access and Competition:** MSMEs face stiff competition from larger enterprises and cheap imports. Limited brand visibility, marketing reach, and distribution networks restrict their ability to scale and compete effectively.

Despite its significant contribution, the MSME sector faces several challenges:

- Limited access to credit and high cost of capital
- Technological obsolescence
- Regulatory compliance burden
- Low productivity and skill gaps
- Inadequate infrastructure and market linkages

Addressing these challenges requires coordinated efforts between the government, financial institutions, industry bodies, and academia.

### RECOMMENDATIONS

- i. **Establish a National MSME Development Council:** A central body should oversee policy formulation, inter-ministerial coordination, and periodic performance reviews of MSMEs.
- ii. **Integrate MSMEs into the Education System:** Include entrepreneurship and MSME-related topics in school and college curriculums to foster early awareness and engagement.
- iii. **Promote Cluster Development:** Encourage the development of MSME clusters in specific regions to enhance shared infrastructure, reduce costs, and improve collaboration among small enterprises.
- iv. **Enhance Digital Literacy:** Organize awareness programs and training workshops to improve digital skills and help MSMEs adopt e-commerce, digital payments, and cloud tools.
- v. **Encourage Formalization:** Promote easy and incentive-based registration through the Udyam portal to bring



more MSMEs under the formal economy, enabling access to government schemes.

- vi. **Strengthen Credit Linkages:** Improve the effectiveness of credit guarantee schemes and develop fintech-based models to bridge the gap between MSMEs and formal financial institutions.
- vii. **Support Women and Marginalized Entrepreneurs:** Offer targeted financial assistance, mentorship, and market access to women-owned and minority-led MSMEs to foster inclusivity.
- viii. **Boost R&D and Innovation:** Establish innovation hubs, incubation centers, and provide R&D subsidies to help MSMEs develop new products and compete globally.
- ix. **Facilitate Access to Global Markets:** Promote MSME participation in international trade fairs and assist with certifications and compliance required for exports.
- x. **Simplify Regulatory Procedures:** Minimize the regulatory burden through single-window systems, unified tax filings, and automated approvals for MSMEs.
- xi. **Leverage Public Procurement:** Implement and enforce the 25% procurement policy for MSMEs across all ministries and PSUs, with added benefits for SC/ST and women entrepreneurs.
- xii. **Promote Green and Sustainable Practices:** Encourage MSMEs to adopt eco-friendly technologies through financial incentives, technical guidance, and sustainability certifications.

## CONCLUSION

MSMEs are the backbone of India's economic fabric, contributing significantly to GDP, employment, and exports. Their resilience,

adaptability, and potential for innovation make them essential to India's vision of sustainable and inclusive growth. With continued policy support, financial inclusion, and technological advancement, the MSME sector can unlock unprecedented opportunities and play a central role in making India a global economic powerhouse.

As India navigates the challenges of globalization, digital transformation, and sustainable development, empowering the MSME sector will be key to building a resilient and self-reliant economy.

## References

1. Ministry of Micro, Small and Medium Enterprises (2023). *Annual Report 2022-23*. Government of India. <https://msme.gov.in>
2. Reserve Bank of India (2022). *Report of the Expert Committee on MSMEs*. <https://rbi.org.in>
3. NITI Aayog (2021). *Strategy for New India @75*. <https://niti.gov.in>
4. Government of India (2020). *Atmanirbhar Bharat Abhiyan: Stimulus Package for MSMEs*. Press Information Bureau. <https://pib.gov.in>
5. Ministry of Commerce & Industry (2021). *Make in India Initiative*. <https://www.makeinindia.com>
6. Singh, R., & Garg, S. (2021). *A Study on the Role of MSMEs in the Indian Economy*. Journal of Entrepreneurship & Management, 10(1), 55–67.
7. Dey, S. & Gupta, B. (2020). *Digital Transformation and MSMEs in India: Opportunities and Challenges*. International Journal of Management Studies, 7(2), 34–45.
8. Sharma, A. (2022). *MSMEs and Employment Generation in India*. International Journal of Research in Commerce and Management, 13(3), 21–28.
9. Verma, P., & Mehta, A. (2021). *Contribution of MSMEs in Export Performance of India*. Indian Journal of Economics and Development, 17(2), 78–86.

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# IMPACT OF FOREST RESOURCES ON THE SOCIO ECONOMIC DEVELOPMENT OF TRIBES OF SARAIKELA KHARSWAN DISTRICT OF JHARKHAND

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## Abstract

Forests constitute the ecological and economic backbone of tribal livelihoods in Jharkhand. In Seraikela-Kharsawan district, Ho, Munda, and Santhal communities rely extensively on non-timber forest products (NTFPs), sericulture, and customary forest governance.

This paper reviews the impact of forest resources on the socio-economic development of the tribes reside in the district. The study is based on empirical studies, policy reports, and institutional interventions. My study shows that NTFPs such as Sal leaves, Mahua, Bamboo, Lac, and Chironji remain vital for food security, household income, and seasonal risk mitigation in the district. Women contribute significantly to collection and processing.

Tasar sericulture emerges as a flagship forest-based value chain product in the district, blending ecological knowledge, cultural practices, and market-linked income opportunities. It is though vulnerable to disease and climate variability.

The Forest Rights Act (2006) aims to provide a legal framework for community empowerment, yet its implementation in Jharkhand remains unsatisfactory due to low recognition of Community Forest Resource (CFR) rights and limited institutional support.

My study also show many challenges persist in terms of resource pressure, weak value addition, gender inequities, and market exploitation, constraining the transformative potential of forest resources in the district. Overall, forests remain central to socio-economic development in Seraikela-Kharsawan, but realizing their full potential requires bridging governance gaps, enhancing market linkages, and securing equitable community participation.

**Keywords:** Seraikela-Kharsawan, Jharkhand, tribal livelihoods, NTFPs, tasar sericulture, Forest Rights Act, socio-economic development

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Seraikela-Kharsawan district in Jharkhand is home to several Scheduled Tribes—primarily Ho, Munda, and Santhal communities. These tribal communities rely extensively on surrounding forest ecosystems for survival, livelihoods, and cultural identity. According to department of Forest, Environment & Climate

Change, Government of Jharkhand, These forests, covering approximately 549.23 km<sup>2</sup> under district forest jurisdiction, are rich in Sal, Mahua, bamboo, and other flora that form the basis of **non-timber forest products (NTFPs)**, crucial for both subsistence and on-monsoon livelihoods (n.d.). Beyond collection, forest-based sericulture—especially **Tasar**—adds

layers of income and craftsmanship embedded within tribal networks.

Policy instruments like the **Forest Rights Act (FRA) 2006** aim to secure community rights, but their implementation remains ruttled. This review synthesizes available research on these interlinked domains—NTFP livelihoods, Tasar value chains, forest governance under FRA, and sustainability challenges—to assess how forest resources drive socio-economic development among Seraikela-Kharsawan’s tribal populations.

## 1. Forest Resource Endowment and Dependency

Seraikela-Kharsawan has a dense forest cover. It is managed under the state’s forest department. According to Department of Forest, Environment & Climate Change, Government of Jharkhand the state has over 549.23 km<sup>2</sup> classified as forested. I found multiple productive species that are central to tribal livelihoods in the district

The following extensive forest matrix supports my findings.

### 1.1. Non-Timber Forest Products (NTFPs)

Non-timber forest products available in Saraikela Kharsawan district of Jharkhand including Sal leaf and seed, Mahua flowers and seeds, bamboo, tamarind, Karanja/Neem, Chironji, Lac, and Tasar host plants. These forest products are vital sources of daily sustenance, energy

(fuelwood), and income. Previous studies (FAO studies) suggest that NTFPs provide both cash earnings and in-kind benefits that buffer rural tribal households against seasonal fluctuations (UN FAO, n.d.)<sup>1</sup>. State-level productivity surveys underline that a specific set of NTFPs supports livelihood safety across Jharkhand, including regions attached with Seraikela-Kharsawan (State ENVIS Hub Jharkhand, 2019)<sup>2</sup>.

Like other tribal areas, in Saraikela Kharswana as well, Tribal women, are central to the collection and primary processing of these products, although they often face disadvantages in price negotiations and are exposed to market volatility (Mohammad Ajaz & Saquib, 2013)<sup>3</sup>.

### 1.2. The socio-economic roles of NTFPs

NTFPs serve multifunctional roles to support food security, facilitate rural credit (via Emergency Sale), and integrate with customary socio-cultural institutions. Collection routines are vital to align with seasonal calendars, enabling households to schedule tasks alongside agricultural cycles. Moreover, for many households with marginal or fragmented landholdings, NTFPs remain a critical fallback and income diversification strategy (Rawat et al., 2020).

**Table 1: Impact of Forest Resources on the Socio-Economic Development of Tribes in Seraikela–Kharsawan District, Jharkhand**

Domain	Forest Resource Linkages	Socio-Economic Impact
<b>Livelihood &amp; Employment</b>	Collection of sal leaves, mahua flowers, lac, tasar cocoons, bamboo, fuelwood	Provides seasonal employment and cash income; contributes 25–40% of household earnings; reduces dependence on wage labor.
<b>Food &amp; Nutrition</b>	Mahua flowers, fruits, tubers, wild vegetables, medicinal plants	Supplements daily diet; enhances food security; provides traditional herbal remedies and reduces healthcare expenditure.
<b>Income Generation</b>	Sale of NTFPs (Non-Timber Forest Products) through local markets and traders	Generates household cash flow; but high dependence on middlemen lowers

		producer margins; potential for value addition.
<b>Women's Empowerment</b>	Women engaged in sal leaf plate-making, mahua processing, lac rearing, fuelwood collection	Increases female participation in income activities; strengthens role in household decision-making and collective groups.
<b>Cultural Sustainability</b>	Sacred groves, rituals with sal, mahua, and other plants	Preserves tribal cultural identity, festivals, and rituals tied to forests; fosters community cohesion and indigenous values.
<b>Education &amp; Social Mobility</b>	Income from tasar silk and NTFPs helps fund children's education	Enables investment in schooling; improves literacy rates; contributes to gradual upward social mobility.
<b>Health &amp; Resilience</b>	Use of medicinal plants; reliance on clean forest environment	Reduces cost of allopathic treatment; strengthens traditional healthcare knowledge; buffers against livelihood shocks.
<b>Challenges</b>	Overexploitation of sal and bamboo, lack of storage and processing infrastructure	Resource depletion; low price realization; restricted access to markets; limits long-term socio-economic development.

Source: Multiple sources

**Following flow chart model** showing how *forest resources* → *livelihood* → *socio-economic development* interlink for the tribes of Seraikela–Kharsawan.

**Table 1 : Important forest products that sustain tribal livelihoods in Seraikela–Kharsawan district (Jharkhand)**

Category	Forest Product (Local/English)	Scientific Name	Season/Availability	Primary Uses
<b>Food &amp; Beverage</b>	Mahua (flower & seed)	Madhuca longifolia	Mar–May	Flowers → liquor/sweetener; seeds → oil, cake
	Tamarind	Tamarindus indica	Apr–Jun	Chutney, paste, seed powder
	Rugra/Putoo (Wild mushroom)	Termitomyces spp.	Monsoon	Edible delicacy; high market demand
	Amla (Indian gooseberry)	Phyllanthus emblica	Nov–Jan	Fresh, candy, powder (triphala)
	Bahera	Terminalia bellirica	Oct–Feb	Ayurvedic medicine, triphala
	Harra/Haritaki	Terminalia chebula	Oct–Feb	Ayurvedic medicine, digestion
	Chironji/Char nut	Buchanania lanzan	Mar–Apr	Dry fruit kernel, sweets
	Bamboo shoots/culms	Bambusa spp.	Monsoon & year-round	Shoots for pickles; culms for crafts
<b>Leaf &amp; Plate-ware</b>	Sal leaves	Shorea robusta	Year-round (peak post-monsoon)	Leaf plates/bowls (pattal, dona)

	Tendu/Kendu leaves	Diospyros melanoxylon	Apr–Jun	Beedi leaf trade
	Siali leaves	Bauhinia vahlii	Nov–Feb	Leaf plates, ropes
<b>Oilseeds, Gums &amp; Resins</b>	Sal seeds	Shorea robusta	May–Jun	Oil (edible/industrial)
	Karanj seeds	Pongamia pinnata	Feb–Apr	Biofuel, soap, medicine
	Neem seeds	Azadirachta indica	May–Jun	Biopesticide, oil, soap
	Kusum seeds	Schleichera oleosa	Mar–Apr	Oil; lac host plant
	Palash (flower & gum)	Butea monosperma	Feb–Apr	Natural dye, gum
<b>Apiculture</b>	Wild honey & wax	Multiple spp.	Pre- & post-monsoon	Honey, wax products
<b>High-value Enterprises</b>	Tasar silk (cocoons on Arjun, Asan, Sal trees)	Terminalia arjuna, T. tomentosa, Shorea robusta	Aug–Dec cycles	Silk rearing, weaving, reeling
	Lac (sticklac)	On Kusum, Palash, Ber	Two crops (Baisakhi/Kartiki)	Shellac, varnish, bangles

Source- [https://www.nabard.org/auth/writereaddata/tender/2310184611Saraikela\\_Final.pdf](https://www.nabard.org/auth/writereaddata/tender/2310184611Saraikela_Final.pdf)

## 2. Tasar Sericulture: Forest-Anchored Value Chain

- Tasar production and tribal livelihoods: Jharkhand is a leading producer of Tasar silk. In Saraikela Kharswan wild silken fiber are extricated from caterpillars reared on wild and agro-forest host plants like Arjuna and Asan. The forested tracts of Saraikela-Kharsawan—including naturally occurring host tree stands in tribal hamlets—provide the ecological backbone for Tasar rearing (Ministry of Textiles, Government of India, 2023). Tasar production blends gathering of host leaves, egg-laying by farmers, rearing, cocooning, and sometimes basic processing, all embedded in local ecosystems and culture.
- Institutional roles and income enhancement: Central Silk Board (CSB), state enterprises like Jharcraft, and grassroots NGOs like PRADAN- have facilitated infrastructure (e.g., cocoon drying yards), extension support (disease control, breed improvement), and artisanal linkages to markets. Ministry of Textiles, Government of India, 2023 data highlights Saraikela Kharswan among districts with reinforced Tasar infrastructure. According to Central Silk Board report<sup>4</sup>, processing

units in Saraikela improve value addition and anchor local traders, strengthening local market ecosystems (Working Paper commissioned by AJEBA (2024) documents modest but steady income gains among tribal tasar rearers—especially women—where interventions ensured technical and market support (Pradan-linked study, 2024)<sup>5</sup>.

- Socio-cultural dimensions: Tasar sericulture retains deep cultural resonance among tribal groups—passing through generations as part of identity construction, intergenerational knowledge transfer, and community cohesion. Women and youth actively engage in rearing and early processing stages, blending tradition with livelihood activity (Pradan-linked study, 2024)<sup>6</sup>.

## 3. Forest Governance: The Forest Rights Act (FRA) 2006

- Legal frameworks and potential: The Forest Rights Act (FRA) 2006 aims to rectify colonial and post-colonial displacement by recognizing Customary Rights (CR) and Community Forest Resource (CFR) rights, empowering Gram

Sabhas as inclusive forest management units.<sup>7</sup>

- Challenges in realization: However, across Jharkhand—where Seraikela-Kharsawan sits—researchers and NGO reviews point to low CFR adoption and titling. Oxfam’s 2018 report asserts that despite proactive intent, many Gram Sabhas remain unaware of procedure and rights complexities, slowing actual recognition (Oxfam India, 2018). Though some local examples, such as organizing training and filing rights in places like Hatnada, demonstrate mobilization (Keystone Foundation, 2025), distribution of recognized CFR areas often remains partial to customary claims, leaving gaps between legal entitlement and reality (Keystone Foundation, 2025)<sup>8</sup>.
- Governance, livelihoods, and conservation: Studies show that where CFR rights are recognized and operationalized, Gram Sabhas can enforce sustainable harvest norms, curb encroachments, and institute rotational collection—strengthening both forest health and NTFP productivity. Yet, the lack of forest administration cooperation, limited capacity building, and often male-dominated Gram Sabha processes dilute these outcomes and marginalize women’s voices in decision making (ShodhKosh, 2025)<sup>9</sup>.
- Forest Rights Act (FRA) Implementation in Jharkhand: Jharkhand’s recognition of only 56% of potential IFR & CFR titles (by 2020 census) <sup>10</sup>shows the sluggish pace relative to potential—highlighting large unrealized ambition. Only 2% of Community Forest Rights (CFR) potential area has been recognized against 52 lakh acres of potential underscoring huge gaps. A 2021 study published in Sage confirms that FRA implementation in Jharkhand is marred by ambiguous agency roles, lack of resources, inactivity of tribal-focused departments, and poor administrative coordination.

#### **4. Challenges and Strategies for Sustainable Livelihoods**

- Resource pressure and environmental degradation: Non-timber forest products (NTFPs) such as sal leaves, mahua flowers, and bamboo form the

backbone of tribal livelihoods in Seraikela-Kharsawan. However, their intensive extraction has created pressure on local ecosystems. Overharvesting often outpaces the natural regeneration capacity of these resources, resulting in declining yields and reduced biodiversity (Rawat et al., 2020)<sup>11</sup>. For example, excessive removal of sal leaves not only diminishes leaf availability for future seasons but also interferes with forest nutrient cycles. Similarly, mahua trees, once abundant, are showing signs of stress due to increased felling for fuelwood and intensified flower collection. Bamboo, widely used for both craft and construction, is also under pressure, leading to localized depletion. This ecological strain threatens to undermine the biological foundations upon which tribal livelihoods depend. If unchecked, such trends may erode the long-term viability of NTFP-based income streams and further marginalize vulnerable forest-dependent households.

- Market dysfunctions: Market inefficiencies remain a critical barrier to maximizing the economic potential of forest resources. Tribal gatherers typically sell their products to informal traders who dictate terms, often offering prices far below market value (Kumar & Mishra, 2019)<sup>12</sup>. The absence of primary processing infrastructure—such as leaf-pressing machines or community storage facilities—prevents producers from capturing value at the village level. As a result, a disproportionate share of profits accrues to middlemen rather than gatherers. Seasonal cycles exacerbate this problem. For instance, during peak mahua flowering, oversupply frequently leads to price collapses, reducing household earnings precisely when families depend most on these resources. The inability to store or process mahua into durable products such as syrup or alcohol underscores the missed opportunity to smooth incomes over time. Market dysfunctions thus perpetuate

dependence on exploitative intermediaries and trap tribal households in cycles of poverty.

## 5 Policy Recommendations for Strengthening Tribal Livelihoods in Seraikela-Kharsawan

- i. **Enhancing primary-level processing infrastructure:** One of the recurring challenges for tribal households in Seraikela-Kharsawan is the lack of accessible infrastructure for processing forest products at the local level. Most forest produce—such as sal leaves, mahua flowers, or tasar cocoons—is sold in raw form, which means that the highest share of value addition is captured by middlemen and traders. Establishing small-scale processing facilities at the village or block level, such as leaf-storage centers, basic value-addition units, and cocoon drying yards, would enable tribal producers to retain greater control over the value chain (Pandey, 2020)<sup>13</sup>. For example, properly ventilated storage for sal leaves can extend their usability and reduce spoilage, while simple machines for pressing or stitching can increase the market price of finished products. Similarly, cocoon drying yards allow for better quality silk production, reducing losses from premature spoilage. By situating these infrastructures close to collection points, leakage of resources to exploitative traders can be minimized, enabling households to secure higher and more stable incomes.
- ii. **Facilitating producer groups and cooperatives:** Isolated tribal households often lack the bargaining power necessary to negotiate fair prices in volatile markets. Organizing forest-dependent families into producer groups, cooperatives, or self-help collectives offers a pathway to address this challenge. These organizations allow communities to pool their products, standardize quality, and negotiate collectively with buyers, thereby reducing vulnerability to exploitation (Kumar & Mishra, 2019)<sup>14</sup>. Collective structures also

make it easier for government agencies and NGOs to deliver training, credit, and extension services. In the context of tasar silk and other NTFPs, cooperatives could invest in common facilities such as reeling machines, packaging centers, and market stalls. They also facilitate access to larger regional or national markets, rather than forcing producers to depend solely on local traders. Importantly, shared ownership models encourage collective accountability and equitable distribution of profits, reinforcing social cohesion and resilience in tribal communities.

- iii. **Strengthening Forest Rights Act (FRA) implementation:** Although the Forest Rights Act (2006) was a landmark legal reform designed to empower forest-dwelling communities, its implementation has been uneven in Jharkhand. Many tribal households in Seraikela-Kharsawan still lack recognized individual or community forest rights, which undermines their ability to sustainably manage resources (Sarin, 2016). To strengthen FRA outcomes, capacity-building initiatives should focus on educating communities about their entitlements under the law, simplifying administrative procedures for claim submission, and ensuring access to legal aid for appeals in case of rejections. Furthermore, Gram Sabha meetings—the cornerstone of FRA governance—must be made more inclusive, particularly by promoting the active participation of women. Evidence suggests that when women are engaged in forest governance, decisions are more likely to prioritize sustainable harvesting and household-level welfare (Agarwal, 2009)<sup>15</sup>. Strengthening FRA implementation is thus not only about securing rights but also about ensuring that these rights translate into equitable and sustainable socio-economic development.
- iv. **Investing in extension services, resilience, and livelihood diversification:** Dependence on a

single livelihood source—whether tasar silkworm rearing or NTFP collection—exposes tribal households to considerable risk, especially in the context of climate variability, disease outbreaks, and market fluctuations. Investments in extension services and technical training can help address these vulnerabilities. For instance, providing scientific disease management practices for tasar silkworms or improved cultivation methods for lac can significantly reduce mortality and enhance yields (Singh et al., 2018)<sup>16</sup>. Parallely, diversification strategies that combine multiple livelihood pathways—such as tasar, lac, bamboo crafts, agroforestry, and NTFP-based enterprises—can act as buffers against shocks. Agroforestry in particular holds promise, as it integrates trees with crops and livestock, offering both ecological stability and economic returns. Moreover, climate-resilience initiatives, including drought-resistant species cultivation and soil conservation measures, would strengthen the adaptive capacity of tribal households to cope with long-term environmental changes.

Together, these recommendations emphasize a multi-pronged strategy for leveraging forest resources as engines of socio-economic transformation in Seraikela-Kharsawan. Building local infrastructure, encouraging collective action, securing legal rights, and diversifying livelihoods are mutually reinforcing interventions. They not only enhance incomes but also safeguard cultural traditions, strengthen gender equity, and build resilience against future uncertainties. To be effective, these measures require coordinated support from state agencies, non-governmental organizations, and tribal institutions, ensuring that development remains inclusive and community-driven.

## Conclusion

Forest resources in Seraikela-Kharsawan underpin tribal livelihoods—via NTFPs, Tasar sericulture, cultural identity, and ecosystem

services. The evidence indicates that forests offer sustainable economic safety nets, livelihood diversification, and avenues for value addition—particularly when supported by institutions like CSB, NGOs, and, in principle, the FRA. However, fragmented markets, incomplete rights realization, environmental pressures, and gender inequities limit the full potential of forests to drive socio-economic development. A more intentional strategy—anchored in local data, rights-based governance, equitable value chains, and inclusive institutions—is imperative to sustain tribal prosperity.

## References

1. UN FAO. (n.d.). NTFPs as a source of livelihood and climate change mitigation in Jharkhand. <https://openknowledge.fao.org/bitstreams/e7bf71f1-a56a-4bc4-a0ce-85080c13637d/download>
2. State ENVIS Hub Jharkhand. (2019). Survey of important NTFPs and estimation of productivity & production in Jharkhand (36 forest divisions). <https://jharenvis.nic.in>
3. Timber%20Forest%20Produces%20and%20Estimation%20of%20Productivity%20%26%20Production%20in%20Jhar.pdf (accessed ...)
4. Mohammad Ajaz, S., & Saquib, N. (2013). Livelihood contributions of forest resources to the rural tribal economy of Jharkhand. *Journal of Life Sciences*, 3(2), 18–24. [https://www.cibtech.org/J-LIFE-SCIENCES/PUBLICATIONS/2013/Vol\\_3\\_No\\_2/JLS...18-018...Mohammad%20Ajaz...Livelihood...Jharkhand.pdf](https://www.cibtech.org/J-LIFE-SCIENCES/PUBLICATIONS/2013/Vol_3_No_2/JLS...18-018...Mohammad%20Ajaz...Livelihood...Jharkhand.pdf)
5. Central Silk Board. (n.d.). Processing of tasar cocoons: Seraikela, Jharkhand. <https://silks.csb.gov.in/saraikela/processing-of-tasar-cocoons/>
6. Pradan-linked study. (2024). The impact of tasar sericulture and PRADAN in Jharkhand, India (AJEBA working paper). [https://sdiopr.s3.ap-south-1.amazonaws.com/2024/July/26-July-24/2024\\_AJEBA\\_120253/Revised-ms\\_AJEBA\\_120253\\_v1.pdf](https://sdiopr.s3.ap-south-1.amazonaws.com/2024/July/26-July-24/2024_AJEBA_120253/Revised-ms_AJEBA_120253_v1.pdf)
7. Pradan-linked study. (2024). The impact of tasar sericulture and PRADAN in Jharkhand, India (AJEBA working paper). [https://sdiopr.s3.ap-south-](https://sdiopr.s3.ap-south-1.amazonaws.com/2024/July/26-July-24/2024_AJEBA_120253/Revised-ms_AJEBA_120253_v1.pdf)



1. amazonaws.com/2024/July/26-July-24/2024\_AJEBA\_120253/Revised-ms\_AJEBA\_120253\_v1.pdf
8. Keystone Foundation. (2025, July). Training on Community Forest Rights filing in Hatnada, Jharkhand. <https://keystone-foundation.org/training-on-community-forest-rights-filing-in-hatnada-jharkhand/>
9. Keystone Foundation. (2025, July). Training on Community Forest Rights filing in Hatnada, Jharkhand. <https://keystone-foundation.org/training-on-community-forest-rights-filing-in-hatnada-jharkhand/>
10. ShodhKosh. (2025). Forest governance dynamics under FRA 2006 (Jharkhand). <https://www.granthaalayahpublication.org/Arts-Journal/ShodhKosh/article/download/3568/3213/20666>
11. [https://jharkhandcsoforum.org/theme.php?utm\\_source=chatgpt.com](https://jharkhandcsoforum.org/theme.php?utm_source=chatgpt.com)
12. Rawat, A., et al. (2020). Sustaining NTFP-based rural livelihoods of tribals in Jharkhand: Issues and challenges. *International Journal of Economic Plants*, 7(2), 53–59. <https://ojs.pphouse.org/index.php/IJEP/article/download/4626/2083/4191>
13. Kumar, A., & Mishra, S. (2019). Collective action and forest-based livelihoods: A study on producer groups and cooperatives in tribal India. *Journal of Rural Development*, 38(2), 213–230.
14. Pandey, R. (2020). Enhancing livelihood security through value addition of non-timber forest products: A case for small-scale infrastructure in Jharkhand. *Indian Journal of Social Forestry*, 41(1), 45–62.
15. Kumar, A., & Mishra, S. (2019). Collective action and forest-based livelihoods: A study on producer groups and cooperatives in tribal India. *Journal of Rural Development*, 38(2), 213–230.
16. Agarwal, B. (2009). Gender and forest conservation: The impact of women's participation in community forest governance. *Ecological Economics*, 68(11), 2785–2799. <https://doi.org/10.1016/j.ecolecon.2009.04.025>
17. Singh, R., Das, A., & Prasad, K. (2018). Scientific tasar silkworm disease management and livelihood sustainability of tribal farmers. *Indian Journal of Sericulture Research*, 56(2), 122–130.
18. NABARD. (2018). *District Development Plan: Seraikela-Kharsawan*. National Bank for Agriculture and Rural Development. Retrieved from [https://www.nabard.org/auth/writereaddata/tender/2310184611Saraikela\\_Final.pdf](https://www.nabard.org/auth/writereaddata/tender/2310184611Saraikela_Final.pdf)
19. Parliament of India. (2018). *Unstarred Question No. 1175: Tasar Silk Production in Jharkhand*. Rajya Sabha. Retrieved from <https://sansad.in/getFile/annex/220/Au1175.pdf>
20. Singh, A. K., & Singh, K. (2018). Non-timber forest products for sustainable livelihood security: A case study of Jharkhand. *Agricultural and Biological Research*, 34(1), 74–80. Retrieved from <https://soeagra.com/abr/abrjan2018/12.pdf>
21. Ministry of Environment & Forests (MoEF). (n.d.). *Jharkhand: A potential producer of NTFP*. IFGTB ENVIS Centre. Retrieved

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# FORMALIZATION AND JOB SECURITY: THE CHANGING LANDSCAPE OF INDIA'S LABOUR MARKET

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## Abstract

This study examines the formalization of informal employment in India, with a focus on the evolving conditions of job security, paid leave, and social security benefits from 2019 to 2024. Despite India's substantial informal workforce, constituting over 90% of the employed population, recent trends indicate gradual improvements in job formalization. Using data from the Periodic Labour Force Survey (PLFS), the research highlights a steady decline in the percentage of employees without written job contracts, from 67.3% in 2019-20 to 58% in 2023-24, suggesting a positive shift towards formal employment. Similarly, eligibility for paid leave and social security benefits has shown moderate improvement, with fluctuations indicating inconsistencies in the pace of formalization. The study also compares urban and rural trends, revealing that both areas experienced similar improvements, though rural areas face additional challenges due to lower access to these benefits. The research identifies key challenges to formalization, including economic barriers, ineffective policy implementation, and the impact of the COVID-19 pandemic. Drawing from global perspectives and policy recommendations, the study advocates for a comprehensive and region-specific approach to enhance the conditions of informal workers, ensuring a more inclusive and secure labor market in post-pandemic India.

**Keywords:** Labor Formalization, Informal Employment, Job Security in India, Social Security Access

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## Introduction

Since the advent of free economy Indian economy grew manifold. This growth also leads to the growth of all sector whether it is formal or informal sector. Formal sector is where all the good thing happens to the employees be it a security of job or social security benefit. On the other hand informal sector is where no such benefits are available to the employees. Informality in India has been shaped by historical state policies rather than being a mere byproduct of economic development. Laws such as the Madras Non-Power Factories Act and the Industrial Disputes Act were intended to improve labor conditions but were poorly designed and enforced, leading

to widespread exemptions for many workers. Despite having more than 90% of working population working in informal sector condition of employment is abysmal but the scenario is changing steadily. This can be analyzed from the data of Periodic Labour Force Survey from 2017-18 to 2023-24. Employees enjoying the perks of formal sector are increasing that they were deprived of several benefits that accrued to them. Having no formal job contract, no paid leave and no social security benefits are some of the features that no one wanted. They are forced to be living under such condition where basic facilities are denied to them. The structure of any city where both vertical towers of development and slums co-exists can be the best metaphor to portray the

image of formal and informal sector. All the facilities like better drainage system, water facility and recreational benefits are available in the former is same as what facilities like better working condition, fixed working hours is available in formal sector and poor drainage system, lack of water facility and tarpaulin built small houses is similar to lack of facilities like poor working condition, no fixed working hour in the informal sector. However steadfast growth of formalization of Indian economy is shifting the core area from informal sector, in which India is heavily dependent, to formal sector.

### **Review of Literature**

**(Chen, 2023)** This article shows a comparative perspective using official national data survey finding around the world. It also tries to link informal employment with poverty and inequality. It concludes by calling for a paradigm shift in policies for informal economy and presents alternative enabling approach based on demands by organizations of informal workers.

**(R Nagraj, 2022)** This paper explores the complex dynamics of the informal and formal sectors in India, particularly in the context of recent government initiatives aimed at formalisation. The paper discusses various government efforts since 2016 aimed at formalising the economy, including demonetization, the introduction of the Goods and Services Tax (GST), and digitalization of financial transactions. These initiatives are intended to integrate informal workers into the formal sector, although the actual impact remains debated. It further highlights the complexities surrounding the formalization of the economy in India and suggest that a multifaceted approach is needed to address the challenges faced by the informal sector.

**(Sankaran, 2022)** This paper touches on the different aspects of informal economy. It mainly focusses on going beyond social security coverage for formalization suggesting various entry points from where policymakers can improve the condition of workers working in informal economy.

**(Mehrotra, 2019)** The paper discusses the persistent issue of informality in India's workforce and its implications for economic

growth and employment quality. The paper highlights that over 90% of the workforce in India is informal, which is significantly higher than in other low-middle income countries. This informality has remained unchanged despite India's rapid economic growth since the early 2000s, indicating a structural issue in the labor market. The paper notes several favorable trends since 2004, including structural shifts in employment, rising rural wages, and a significant decline in poverty levels. These changes suggest that while informality persists, there are underlying processes promoting inclusive growth.

**(Simon Deakin, 2020)** The paper examines the trends of formalization and informalization of work in India and China. It further analyzes the prevalence of informal work, the evolution of labor laws, and their impact on developmental outcomes in both countries. Informal work dominates in India, while China shows signs of formalization through a variant of the standard employment contract. It distinguishes India's high informality with China's lower informality. The paper underscores the need for nuanced definitions of informality and active state policies to foster formal labor markets, with China's approach offering potential lessons for other developing economies.

**(Unni, 2018)** The paper focusses on informality found in various forms across different countries and evolves over time. This complexity indicates that there cannot be a universal policy to regulate or improve the conditions of informal workers. Each context requires tailored approaches to address the unique challenges faced by informal workers. The paper highlights that many governments tend to regulate informality to their advantage, often prioritizing revenue generation over the welfare of informal workers. This approach can lead to inadequate protections for workers transitioning to formal employment.

**(Nancy Benjamin, 2014)** The paper emphasizes the significant heterogeneity among informal firms, which makes it challenging to provide a single definition of informality. This diversity suggests that policies should be tailored to different segments of the informal sector rather than applying a one-size-fits-all approach. It is concluded that informal firms generally exhibit lower

productivity compared to formal firms across all regions. The paper highlights that addressing the productivity gap is crucial, as it has substantial social implications, particularly concerning employment opportunities. The paper concludes that any reform dialogue must include actors from the informal economy. This inclusion is vital to ensure that the reforms address the actual needs and challenges faced by informal firms, rather than being limited to those defending the status quo.

**(P Dibben, 2015)** The paper engages with various strands of literature concerning the informal economy, regulation, and the socio-economic context of Mozambique. The paper discusses the ambivalent role of the state in regulating the informal sector, where it can both promote formalization through infrastructure development and simultaneously tolerate informal practices for political stability. This duality reflects the complexities of transitioning from a post-socialist to a capitalist economy. The paper concludes that effective institutions are essential for meaningful social compromises and that grassroots mobilization is necessary to challenge the status quo. Without this, the potential for significant change remains limited.

**Research Gap-** Studies conducted by various researchers and authors are primarily deals with benefits of formalization of informal sector focused on pre pandemic times. Some researcher's presents informality with poverty and inequality often puts informality in a negative connotation which is surely not the correct way of portrayal of informal employment. The current study focuses on formalization of Informal sector and analysis of trend in general improvement in accessing job contract, paid leave and social security benefits specifically in post pandemic India.

### Research Objective

1. The objective of current study is to analyze the pace of formalization of informal employment in India.
2. It aims to examine general trend of accessing job contract, paid leave and social security benefit.
3. It strives to compare job security condition of regular wage/salaried employees in urban and rural India
4. To give policy recommendations to improve condition of informal employment and formalization process.

### Data Analysis

**Table:-1: Percentage of regular wage/salaried employees who had no written job contract in non agriculture sector**

Years	Percentage of regular wage/salaried employees who had no written job contract in non agriculture sector
2019-20	67.3
2020-21	64.3
2021-22	62
2022-23	58.6
2023-24	58

**Source:-** (India, 2023-24)

The data shows the percentage of regular wage/salaried employees who had no written job contract over the years 2019-20 to 2023-24. There is a general downward trend in the percentage of employees without written job contracts, decreasing from 67.3% in 2019-20 to 58% in 2023-24. The decline from 67.3% in 2019-20 to 58% in 2023-24 indicates a gradual shift toward formalized employment, with more workers receiving written job contracts. This suggests potential improvements in labor

regulations or employer practices. The notable drop between 2019-20 (67.3%) and 2020-21 (64.3%) may reflect labor market adjustments following the COVID-19 pandemic, possibly due to increased scrutiny on job security or government intervention. The slower decline and leveling off between 2022-23 (58.6%) and 2023-24 (58%) could indicate a stabilization point, where the pace of formalization is slowing, possibly due to economic or structural limits.

**Table:-2: Percentage of regular wage/salaried employees not eligible for paid leave**

Years	Percentage of regular wage/salaried employees not eligible for paid leave
2019-20	52.3
2020-21	47.9
2021-22	49.2
2022-23	46.8
2023-24	47.3

**Source:- Annual Report, PLFS, 2023-24**

The data shows the percentage of regular wage/salaried employees not eligible for paid leave from 2019-20 to 2023-24. There is a significant initial drop from 52.3% in 2019-20 to 47.9% in 2020-21 (4.4% decrease), suggesting a notable improvement in eligibility for paid leave. The percentage fluctuated

slightly over the next few years: increased to 49.2% in 2021-22, decreased to a low of 46.8% in 2022-23, and rose slightly to 47.3% in 2023-24. Overall, there is a net decrease of 5% from 2019-20 to 2023-24, indicating a gradual improvement in access to paid leave, though the trend shows some inconsistency after 2020-21.

**Table:-3: Percentage of regular wage/salaried employees not eligible for any specified social security benefit**

Years	Percentage of regular wage/salaried employees not eligible for any specified social security benefit
2019-20	54.2
2020-21	53.8
2021-22	53
2022-23	53.9
2023-24	53.4

**Source:- Annual Report, PLFS, 2023-24**

The data highlights the percentage of regular wage and salaried employees who were not eligible for any specific social security benefits between 2019-2020 and 2023-2024. There was a gradual decrease from 54.2% in 2019-2020 to 53.4% in 2023-2024, representing a total decline of 0.8% over the five-year period. The largest reduction occurred between 2019-2020 and 2020-2021, with a 0.4% drop, followed by a small decrease to 53% in 2021-2022. In 2022-2023, there was a slight increase to 53.9%, but this was followed by a minor drop back to 53.4% in 2023-2024. Overall, the data reveals a slow and irregular improvement in access to social security benefits, with the fluctuations indicating that the progress has been limited and inconsistent.

The data outlines the job security conditions for regular wage and salaried employees in urban areas between 2019-2020 and 2023-2024, focusing on three key indicators: The

percentage of employees without a written job contract decreased from 68.3% in 2019-2020 to 61.1% in 2023-2024, demonstrating a gradual improvement in job formalization, with a peak of 66.3% in 2020-2021. The proportion of employees not eligible for paid leave fell from 54.5% in 2019-2020 to 51.1% in 2022-2023, before slightly rising to 52.2% in 2023-2024, reflecting a modest overall improvement despite minor fluctuations. The percentage of employees without access to specific social security benefits decreased from 59.3% in 2019-2020 to 58.8% in 2023-2024, reaching a low of 58.2% in 2021-2022, indicating a slight upward trend in social security coverage. In general, urban employees have experienced a steady but slow improvement in job security, particularly in terms of reducing the lack of written contracts and social security benefits, with eligibility for paid leave showing more variability

**.Table:-4: Job Security Of Employees in Rural Area**

<b>Job Security Of Employees in Rural Area</b>			
<b>Years</b>	Percentage of regular wage/salaried employees who had no written job contract	Percentage of regular wage/salaried employees not eligible for paid leave	Percentage of regular wage/salaried employees not eligible for any specified social security benefit
<b>2019-20</b>	68.3	54.5	59.3
<b>2020-21</b>	66.3	52.3	59.1
<b>2021-22</b>	64.9	52.7	58.2
<b>2022-23</b>	62.2	51.1	59.9
<b>2023-24</b>	61.1	52.2	58.8

**Source:- Annual Report, PLFS, 2023-24**

The data reveals the trends in job security for regular wage and salaried employees in rural areas from 2019 to 2024, highlighting three key aspects: The percentage of employees without a written job contract gradually decreased from 68.3% in 2019-2020 to 61.1% in 2023-2024, reflecting a small but noticeable improvement in job formalization over the years. The proportion of employees not eligible for paid leave remained largely unchanged, fluctuating between 54.5% in 2019-2020 and 52.2% in 2023-2024, indicating minimal progress in this area. Similarly, the share of employees without access to specific social security benefits slightly declined from 59.3% in 2019-2020 to 58.8% in 2023-2024, pointing to a modest increase in social security coverage. In summary, there is a gradual positive shift in job security, particularly in terms of reducing the proportion of employees without written contracts and social security benefits. However, eligibility for paid leave has shown little to no change over the period.

#### **Comparison between Urban and Rural area:**

Comparing job security trends for regular wage/salaried employees in urban and rural areas from 2019-20 to 2023-24: Percentage with no written job contract: Rural: Decreased from 68.3% to 61.1% (7.2% drop).Urban: Decreased from 68.3% to 61.1% (7.2% drop).Comparison: Both areas show an identical decline, indicating a similar improvement in job formalization. Percentage not eligible for paid leave: Rural: Decreased from 54.5% to 52.2% (2.3% drop).Urban: Decreased from 54.5% to 52.2% (2.3% drop).Comparison: Both regions exhibit the

same modest improvement, with minor fluctuations, suggesting consistent progress. Percentage not eligible for social security benefits: Rural: Decreased from 59.3% to 58.8% (0.5% drop).Urban: Decreased from 59.3% to 58.8% (0.5% drop).Comparison: Both areas show a nearly identical slight improvement, with rural and urban trends aligning closely. Overall: Urban and rural areas display remarkably similar trends across all metrics, with identical starting and ending percentages, indicating uniform progress in job security conditions over the period.

#### **Global Trends:**

The ILO's 2024 report indicates that informal employment remains high globally, with rural workers more vulnerable due to lower unionization and social security access. Urbanization generally reduces vulnerable employment rates, as seen in 163 countries from 1991-2019, with urban workers showing higher productivity and income. However, the COVID-19 pandemic (2020-2021) temporarily reversed this, with urban job losses outpacing rural ones due to service-sector reliance (Organization, 2024).

#### **Conclusion:**

Between 2019-2020 and 2023-2024, data covering both urban and rural areas, as well as the combined figures, reveal a modest yet consistent improvement in job security for regular wage and salaried employees. The percentage of employees without a written job contract decreased from 67.3% in 2019-2020 to 58% in 2023-2024, reflecting a steady decline

over the years. On the other hand, the percentage of employees not receiving specific social security benefits or paid leave has remained relatively stable, with a minor fluctuation from 54.2% in 2019-2020 to 53.4% in 2023-2024. The share of employees without paid leave eligibility dropped from 52.3% in 2019-2020 to 47.3% in 2023-2024, showing a peak of 49.2% in 2021-2022, a notable dip to 46.8% in 2022-2023, followed by a slight rise. These trends indicate a slow and inconsistent improvement in access to social security benefits, with some irregularities suggesting that the progress has not been steady. In urban areas, the share of employees without a written job contract decreased from 68.3% to 61.1%, the proportion without paid leave eligibility fell from 54.5% to 52.2%, and those not eligible for social security benefits reduced from 59.3% to 58.8%. Similar patterns were observed in rural areas, where the percentage of employees without a written job contract dropped from 68.3% to 61.1%, those without paid leave eligibility decreased from 54.5% to 52.2%, and the share of those not eligible for social security benefits fell from 59.3% to 58.8%. Overall, the data suggests a slow but gradual improvement in access to job contracts, paid leave, and social security benefits across region both urban and rural areas. However, the progress remains une. Enforce Labor Laws and Contractual Obligations. Reason: Despite progress, over 50% of salaried employees still don't have written job contracts and social security. Recommendation: Mandate written job contracts across all sectors, with strict penalties for non-compliance. Scale up regular inspections, digital labor compliance systems and grievance redressed platforms especially in MSMEs and unorganized sectors.

### **Formalize Through Fiscal and Regulatory Support**

**Reason:** Informal firms avoid formalization due to compliance costs and complex regulations.

**Recommendation:** Give tax breaks, subsidized registration fees and simplified GST compliance for small businesses that move towards formal employment practices. Provide onboarding support to help small firms integrate formal payroll systems and employee benefits.

### **Universalize Social Security for Informal Workers**

**Reason:** Access to social security benefits has not improved much in 5 years.

**Recommendation:** Merge ESIC, EPFO and PMSYM under one digital platform with portability across regions and jobs. Use Aadhaar linked labor databases to ensure seamless benefit delivery. Make contributions partially state-subsidized for low income workers and micro-enterprises.

### **Formalize Through Digital Platforms and Technology**

**Reason:** Digitalization (e.g. UPI, e-Shram) has already helped in economic formalization.

**Recommendation:** Promote digital contracts through mobile apps and online platforms for small employers. Expand e-Shram portal by linking it to skill development programs, job matching platforms and welfare schemes.

### **Region Specific and Sector Specific Approaches**

**Reason:** Formalization is not uniform across regions and sectors, rural areas face more challenges due to infrastructure and administrative constraints.

**Recommendation:** Decentralize labor market strategies. In rural areas, formalize labor practices within local industries like construction, handicrafts and agriculture by forming cooperatives, producer companies and SHG based employer models.

Support Transition with Skills and Awareness Programs:

**Reason:** Many informal workers are not aware of their rights and formalization processes.

**Recommendation:** Launch awareness campaigns on workers' rights, benefits of formalization and government schemes. Pair these with skill development initiatives for informal workers to transition to sectors with higher formal employment potential (e.g. logistics, retail, health care, digital services).

**Involve Worker and Employer Organizations in Policy Making:** Reason: Formalization is more sustainable when it's

inclusive and participatory. Recommendation: Include informal worker organizations, labor unions and small industry associations in labor policy consultations and monitoring committees. Form tripartite councils at local levels to facilitate transitions and accountability.

**Monitor Progress Through Better Data Systems:** Reason: While PLFS provides valuable insights, informal labor data is scattered and delayed. Recommendation: Improve frequency, granularity and transparency of labor data collection. Create real time labor dashboards integrating PLFS, e-Shram, EPFO and Aadhaar data to track formalization progress and policy impact at district level.ven and modest.

#### Reference:

1. Chen, M. A. (2023). The informal economy in comparative perspective: Theory, policy and reality. *The Indian journal of Labour Economics*, 395-420.
2. India, D. G. (2023-24). *Annual Report, Periodic Labour Force Survey (PLFS)*,. Ministry of Labour and Employment . Retrieved April 18, 2025, from <https://dge.gov.in/dge/reference-publication-reports-annual>
3. Mehrotra, S. (2019). *Informal Employment Trends in the India Economy: Persistent informality, but growing positive development.* Employment Policy Department. International Labour Organization. Retrieved March 24, 2025
4. Nancy Benjamin, K. B. (2014). *Informal economy and the World Bank.* World Bank policy research working paper.
5. Organization, I. L. (2024). *ILO publications 2024.* International Labour Organization. Retrieved April 23, 2025, from [https://www.ilo.org/sites/default/files/2024-05/catalogue-publications-2024\\_1.pdf](https://www.ilo.org/sites/default/files/2024-05/catalogue-publications-2024_1.pdf)
6. P Dibben, G. W. (2015). Towards AND AGAINST FORMALIZATION: REGULATION AND CHANGE IN INFORMAL WORK IN MOZAMBIQUE. *International Labour Review*.
7. R Nagraj, R. K. (2022). What is Formalization of the Economy? *The India Forum*.
8. Sankaran, K. (2022). Transition from the informal to the formal economy: The need for multi-faceted approach. *The Indian Journal of Labour Economics*, 625-642.
9. Simon Deakin, S. M. (2020). Labour Laws, Informality and Development: Comparing India and China.
10. Unni, J. (2018). Formalization of the Informal Economy: Perspectives of Capital and Labour. *The Indian Journal of Labour Economics*.

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# INNOVATION IN THE CONTEXT OF THE NATIONAL EDUCATION POLICY (NEP) 2020: CHALLENGES AND OPPORTUNITIES

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## Abstract

The National Education Policy (NEP) 2020 marks a historic reform in India's educational framework, offering a visionary roadmap for fostering innovation, inclusivity, and future-readiness. Beyond structural changes, the policy emphasizes technological integration, curricular redesign, experiential pedagogy, and multilingual education to build a learner-centric system aligned with global standards. This paper explores the multidimensional concept of innovation within NEP 2020, covering digital platforms such as SWAYAM, DIKSHA, and NEAT, as well as curricular initiatives like STEAM education, coding, vocational exposure, and AI integration. The study also examines assessment innovations, particularly the role of formative evaluations, adaptive AI tools, and PARAKH in promoting competency-based learning. However, the implementation of NEP 2020 faces persistent challenges, including infrastructure deficits, the digital divide, inadequate teacher preparedness, linguistic and cultural barriers, financial constraints, and resistance to paradigm shifts. Despite these hurdles, the policy provides significant opportunities through strengthened digital infrastructure, transformative teacher training, localized curricula, research-driven innovation, institutional empowerment, and inclusive education solutions. The paper argues that successful execution requires a collaborative approach involving governments, educators, learners, and industry stakeholders. Ultimately, NEP 2020 has the potential to elevate India's education system to global benchmarks and transform the nation into a self-reliant, knowledge-driven economy, where students emerge not only as employable professionals but as innovators, problem-solvers, and leaders of the 21st century.

**Keywords-** National Education Policy 2020 (NEP 2020); Innovation in Education; Digital Learning; Curriculum Reform; Pedagogical Innovation; Artificial Intelligence in Education; Multilingual Education; Teacher Training; Digital Divide; Educational Assessment; PARAKH; Experiential Learning; STEAM Education; Vocational Education; Inclusive Education.

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## Introduction

The National Education Policy 2020 (NEP 2020) is regarded as a transformative landmark in reshaping India's educational landscape in the 21<sup>st</sup> century. Implemented after a long interval of 34 years since the last policy in 1986, NEP 2020 is not merely a structural reform, it introduces a comprehensive vision to create a robust, innovative, inclusive, and globally aligned education system.

The policy emphasizes equity, access, affordability, and accountability while aligning with the aspirations of a technologically driven, knowledge-based economy. Recognizing

innovation as the key catalyst for national progress, NEP 2020 redefines the role of curriculum, pedagogy, assessment, and teacher training in making learning more experiential, flexible, and learner-centered.

This policy aims to bridge the socio-economic divide in education, nurture India's demographics, and prepare the youth for a globalized economy where creativity, problem-solving, communication, and digital proficiency are essential.

## **Understanding Innovation in NEP 2020**

The National Education Policy (NEP) 2020 positions innovation as the cornerstone of modern education in India. Unlike a narrow focus on technology, the policy defines innovation broadly—encompassing pedagogy, curriculum design, and administration, infrastructure, and assessment reforms. It envisions an education system that not only transmits knowledge but also nurtures creativity, adaptability, and future readiness among learners.

## **Digital Education and the Rise of EdTech**

One of the most visible markers of innovation in NEP 2020 is its emphasis on technology-enabled learning. The policy aims to ensure that quality education reaches even the remotest corners of the country by integrating digital platforms into the mainstream. Initiatives such as SWAYAM (Study Webs of Active Learning for Young Aspiring Minds) make online courses developed by leading institutions like IITs and IGNOU accessible to both school and college students. Similarly, DIKSHA (Digital Infrastructure for Knowledge Sharing) offers digital resources in multiple Indian languages for teachers and students, while the National Digital Library (NDLI) acts as a virtual knowledge repository with books, research papers, and reference materials.

Complementing these, NEAT (National Educational Alliance for Technology) brings together ed-tech solutions like MOOCs, virtual labs, and e-PG Pathshala, creating a diverse learning ecosystem. The integration of AI-driven personalized learning, augmented reality simulations, and adaptive assessment models reflects NEP's commitment to tailoring education to individual learning styles while enhancing engagement.

## **Curricular and Pedagogical Reform**

NEP 2020 replaces the conventional 10+2 system with a 5+3+3+4 framework, aligning education more closely with the cognitive development stages of learners. Beginning from foundational years (ages 3–8) through to secondary education (ages 14–18), the structure emphasizes flexibility and continuity.

The curriculum shifts from rote memorization toward experiential learning, encouraging inquiry-driven, problem-solving, and project-based approaches across subjects. The inclusion of STEAM education (adding Arts to STEM) reflects the intent to cultivate creativity alongside scientific and technical skills. From early grades, students are introduced to coding and computational thinking, preparing them for a digital economy. Moreover, vocational education is embedded from Grade 6, exposing children to crafts, carpentry, and gardening, supported by internships that connect classroom learning to real-life skills.

## **Multilingual and Cultural Contextual Learning**

Acknowledging India's linguistic diversity, NEP 2020 recommends the mother tongue or regional language as the medium of instruction at least until Grade 5. UNESCO research highlights that such approaches improve comprehension, cognitive growth, and emotional development. Alongside, the policy reintroduces the richness of classical languages like Sanskrit, Pali, Persian, and Tamil while integrating Indian Knowledge Systems—such as Vedic mathematics, Ayurveda, and philosophy—into the curriculum.

To bridge linguistic barriers in specialized fields, initiatives like the Bharatiya Bhasha Samiti are tasked with creating glossaries of technical terms across 22 scheduled languages, fostering inclusivity and democratization of education.

## **Preparing for Artificial Intelligence and Future Technologies**

A forward-looking aspect of NEP 2020 is its clear focus on Artificial Intelligence (AI) and emerging technologies. The policy envisions AI labs in schools and colleges, where students experiment with chatbots, machine learning tools, and robotic systems under the guidance of trained teachers. At the secondary and higher secondary levels, AI is introduced as an elective subject, enabling students to develop skills in machine learning, natural language processing, and data science.

Further, the government encourages collaborations with start-ups and tech leaders to provide hands-on workshops, hackathons, and

internships, ensuring that learners engage with real-world industry challenges. Such measures bridge the academia–industry gap, nurturing a generation ready to innovate and thrive in the global digital economy.

### **Innovation in Assessments**

Traditional high-stakes examinations often fail to reflect holistic learning. NEP 2020 shifts focus to formative and competency-based assessments, where quizzes, projects, discussions, and peer reviews form a continuous evaluation process. These methods highlight strengths and weaknesses in real time, encouraging active participation and mastery of concepts.

AI-powered adaptive tools further personalize assessment, diagnosing learning gaps and providing tailored exercises. Central to this reform is PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development), a dedicated body that standardizes assessment practices nationwide. By moving away from rote memorization, PARAKH emphasizes creativity, critical thinking, and application-based learning.

### **Challenges in Implementation**

Despite its vision, NEP 2020 faces hurdles. Many rural and tribal schools continue to lack basic infrastructure—from functional toilets and safe drinking water to reliable electricity. These deficits directly impact attendance and the feasibility of digital learning.

The digital divide is another barrier: while urban households increasingly access the internet, only about a quarter of rural households enjoy similar connectivity. Students often lack personal devices, leaving them excluded from online resources.

Teacher preparedness also remains a concern. Many educators are untrained in digital pedagogy or AI-enabled classrooms, and professional development programs are limited, particularly in rural areas. Linguistic diversity adds complexity, with a shortage of bilingual teachers and resources in minority or tribal languages. Financial constraints further complicate implementation, as India's education spending has yet to reach the recommended 6% of GDP. Finally, cultural

resistance persists among parents, institutions, and coaching centers entrenched in conventional exam-centric systems.

### **Opportunities and the Way Forward**

Despite these challenges, the opportunities are vast. Strengthening digital infrastructure through public–private partnerships can expand broadband access and provide affordable devices, especially in underserved regions. Teacher capacity can be enhanced through National Professional Standards for Teachers (NPST) and district-level Teacher Learning Hubs that emphasize mentorship and blended training.

Localized curricula reflecting regional economies and knowledge systems—such as marine studies in coastal areas or indigenous knowledge in tribal belts—can make learning more relevant. Simultaneously, the National Research Foundation (NRF) can foster a culture of research, innovation, and industry-academia collaboration.

Empowering higher education institutions with autonomy, promoting multidisciplinary universities, and forging global collaborations will elevate India's academic standing. Inclusivity can be advanced through scholarship programs, open educational resources, AI-enabled translation, and accessible learning tools for differently-abled students.

### **Conclusion**

NEP 2020 represents more than a reform—it is a blueprint for transforming India's education system into a dynamic, inclusive, and future-ready framework. Its success, however, depends not only on policy design but also on the collective commitment of governments, educators, communities, and industry leaders. While the gaps in infrastructure, training, and resources remain pressing, the roadmap is clear.

If implemented effectively, NEP 2020 has the potential to raise India's education to global standards and contribute to building a self-reliant, knowledge-based economy. Most importantly, it can prepare the next generation not merely as job-seekers but as innovators, creators, and leaders equipped to navigate and shape a complex, interconnected world.

## References:

1. Ministry of Education, Government of India – \*National Education Policy 2020\* [<https://www.education.gov.in>](<https://www.education.gov.in>)
2. SWAYAM Portal – Ministry of Education, Government of India.
3. UNESCO Report on Language of Instruction, 2021
4. National Digital Education Architecture (NDEAR) – Blueprint (2023)
5. National Education Policy Progress Report, 2024, NITI Aayog
6. UGC Guidelines on Teacher Training, 2024
7. TRAI India Internet Report, Q1 2024
8. AI in Indian Classrooms, Ministry of Electronics and IT, 2023
9. Bharatiya Bhasha Samiti Policy Note, 2022.
10. National Research Foundation Draft Bill, 2024
11. Mehta, R., & Chauhan, S. (2023). Digital Divide and Education in India. *International Journal of ICT in Education*, 10(3), 45–61.
12. UNESCO (2023). AI and the Futures of Education.
13. Government of India. (2024). Annual Budget Brief: Education Sector Funding.
14. KPMG India. (2024). PPP Models for Digital Education Infrastructure.
15. OECD. (2023). Innovative Pedagogies for the 21<sup>st</sup> Century.
6. Rural schools lag 29% behind urban in internet access: Edu Min data <https://www.medianama.com/2024/11/223-29-per-cent-disparity-rural-urban-schools-internet-access-education-ministry-data/>
7. [PDF] Professional Development and Digital Integration Under NEP 2020 <https://www.ijrti.org/papers/IJRTI2503225.pdf>
8. Linguistic Diversity in India and Strategies to Promote ... <https://varthana.com/school/linguistic-diversity-in-india-and-strategies-to-promote-literacy-in-multiple-languages/>
9. Finding Solutions to India's Language Policy Challenges <https://educationforallinindia.com/finding-solutions-to-indias-language-policy-challenges/>
10. India education GDP allocation 2024 – Best Colleges <https://bestcolleges.indiatoday.in/news-detail/india-education-gdp-allocation-2024-indias-education-expenditure-aligns-with-global-benchmarks>
11. India allocates up to 4.6% of GDP in education, higher than ... <https://timesofindia.indiatimes.com/india/india-allocates-up-to-4-6-of-gdp-in-education-higher-than-many-in-region-says-unesco/articleshow/114522433.cms>
12. Can India compete globally with just 4% education ... <https://timesofindia.indiatimes.com/blogs/voices/can-india-compete-globally-with-just-4-education-spending/>
13. [raassttriiy-shikss-WPS-Office.docx]<https://ppl-ai-file-upload.s3.amazonaws.com/web/direct-files/attachments/12592126/1792572c-05b1-4af5-8c29-499472921131/raassttriiy-shikss-WPS-Office.docx>
14. Infrastructure in Govt. Schools Catching Up with Private Ones in 2024 <https://gokulamseekias.com/mains-c-a/infrastructure-in-govt-schools->

## Citations:

1. Rural Education in India Inspiring Solutions for 2025 <https://kokanngo.org/articles/rural-education-in-india/>
2. ducation In Rural India: Challenges, Opportunities, Initiatives – CRY <https://www.cry.org/blog/education-in-rural-india/>
3. Challenges and Opportunities in Rural Education [https://ijhssm.org/issue\\_](https://ijhssm.org/issue_)
4. Bridging the Digital Divide: Empowering Rural India <https://niitfoundation.org/bridging-the-digital-divide-empowering-rural-india/>
5. Bridging The Urban-Rural Digital Divide In India

- catching-up-with-private-ones-in-2024/
15. [] Bridging the Gap: Infrastructure in Indian Schools and the Way ...  
<https://www.linkedin.com/pulse/bridging-gap-infrastructure-indian-schools-way-forward-das-ty8gc>
  16. Budget 2024: Urban-Rural schools funding discrepancies persist in ...  
<https://jaipuria.edu.in/budget-2024-urban-rural-schools-funding-discrepancies-persist-in-education-sector-despite-substantial-investment/>
  17. India: urban rural gaps in digital literacy by internet activity  
<https://www.statista.com/statistics/1389943/india-urban-rural-gaps-in-digital-literacy-by-internet-activity/>
  18. Implementing India's NEP (2020) in Higher Education  
<https://ijabs.niilmuniversity.ac.in/navigating-challenges-implementing-indias-nep-2020-in-higher-education/>
  19. Problems and Solutions Faced in Linguistic Diversity in India  
<https://www.interestjournals.org/articles/problems-and-solution-faced-in-linguistic-diversity-in-india.pdf>
  20. [PDF] government of india – Digital Sansad  
[https://sansad.in/getFile/loksabhaquestions/annex/183/AS3\\_qIFAZ8.pdf](https://sansad.in/getFile/loksabhaquestions/annex/183/AS3_qIFAZ8.pdf)

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# **GROWTH OF CENSUS TOWNS, SHIFT OF EMPLOYMENT PATTERN IN RURAL INDIA: AN ANALYSIS**

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**Abstract:** India has experienced a new trend of urbanization in terms of reclassification of villages into Census Towns in recent Census. This article tries to show that it is an effect of shift in the pattern of employment in rural India from farm to non-farm and very much in-situ in nature.

**Keywords:** Urbanization, Census Towns, Employment

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## **INTRODUCTION:**

Urbanization is understood to be a by-product of industrial development, driven by the growth of employment opportunities in urban areas as a result of industrial investment during ‘take-off’ of economic development. By shifting of people out of subsistence agriculture and into a high value-added activities entail increasing specialization and exchange, the process of urbanization was seen as contributing to economic transformation. No country has ever reached middle- income status without a significant population shift into urban centres. Urbanization is inevitable and an integral part of economic development. Economic growth is invariably associated with transition from a predominantly agrarian economy to industry and specialized tertiary activities. The sectoral composition of GDP growth across countries confirms that there is a strong link between rapid growth and structural shift from agriculture to manufacturing and service activities which are predominantly urban in nature. Thus, traditional form of urbanization and economic growth are strongly associated with each other. Very few countries have reached income levels of \$10,000 per capita before reaching about 60% urbanization.

Urbanization in India can broadly be divided into four components, namely a) urbanization due to natural increase in population; b) urbanization due to net rural-urban migration; c) urbanization due to reclassification from rural to urban settlement and d) urbanization

due to areal expansion. Figure 1 shows different components of urban growth in India for the last five decades.

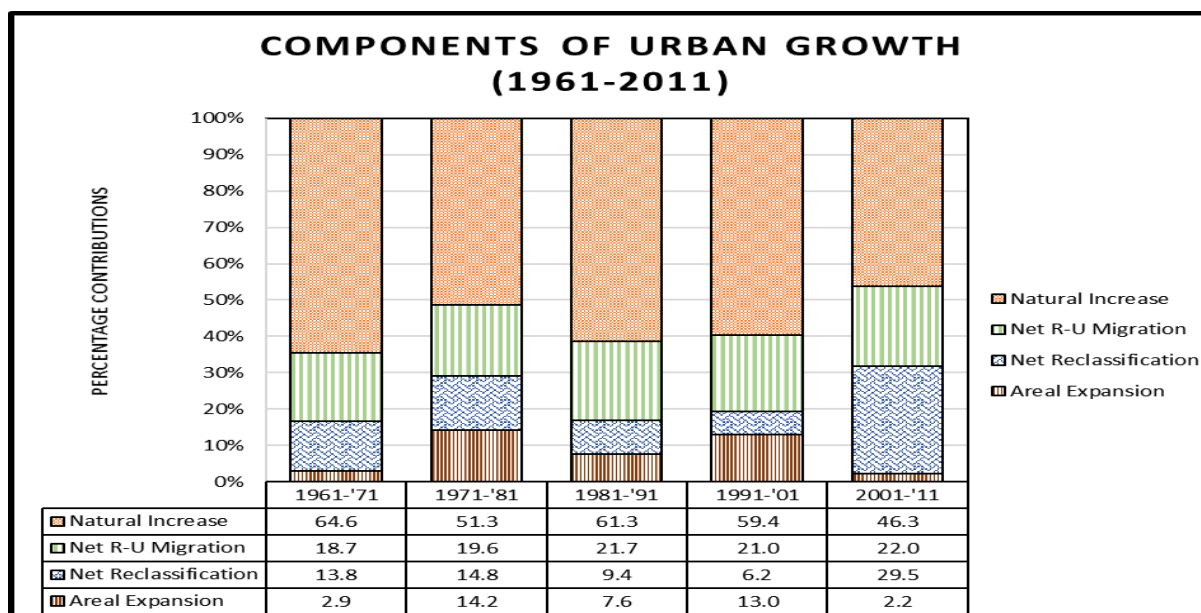
From Figure 1, it is evident that the urbanization out of natural increase in population always remained the biggest component of urbanization in India with the migration-driven urbanization staying almost constant for the last five decades. On the other hand, reclassification-driven urbanization whose role remains marginal before 2001-2011, has become the area of interest in recent times due to growth of numerous Census Towns (CT).

In Indian Census the reclassification of villages in small towns (called Census Towns (CTs)) happens if a village satisfies the following criteria: (1) it has a population of 5000 or more; (2) its population density is at least 400 per square kilometer; and (3) 75% of its male main workforce working in non-farm sector. The CTs are administered by rural local governments. Urbanization of our concern that is the growth of the Census Towns in the latest decade in India is urbanization due to reclassification of villages into urban centres. West Bengal is the state which has experienced the maximum growth in the absolute number of CTs in the last decade. The number has gone from 250 to 780 during 2001-2011. The experience is quite similar with the whole country which saw an unprecedented rise in the number of CTs from 1362 to 3894 during the latest decade. The matter of debate is whether

this pattern of urbanization is an indication of economic progress or just a shift in demographic character of rural part of the country with in-situ transformation in the pattern of employment which not at all matches

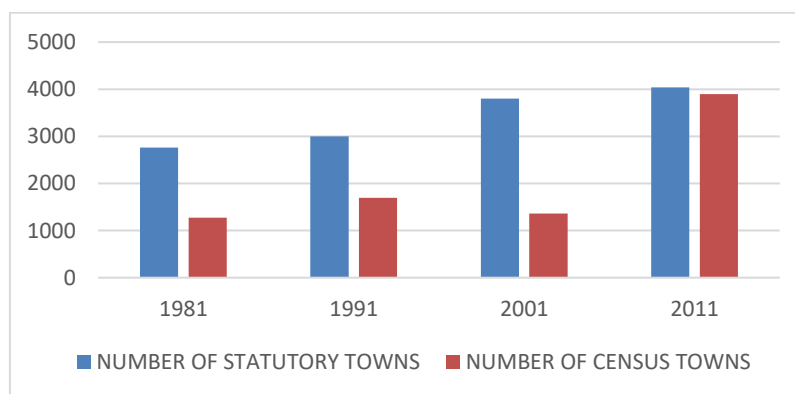
the standard pattern of urbanization or has a weak association with economic prosperity. Figure 2 shows the number of Statutory Towns (STs) and CTs in different censuses.

**Figure 1: Components of Urban Growth in India (1961-2011)**



Source: Census of India (1971,1981,1991, 2001 and 2011)

**Figure 2: Number of Urban Settlements from 1981 to 2011**



Source: Census of India (1981,1991, 2001 and 2011)

The number of CTs in India has increased from 1362 to 3894 during the decade 2001-2011 and accounted for almost 30% of urbanization as evident from Census 2011. It is significant especially in the context that during the previous decades CTs did show a marginal growth trend including the decade preceding 2001-2011. How had been the distribution of

the growth among India states? Table1 shows that six states like West Bengal, Kerala, Tamil Nadu, Uttar Pradesh, Maharashtra and Andhra Pradesh accounts for almost 60% of CTs in India. All these states show a huge absolute rise in the number of CTs in recent decade with West Bengal leading the list.

**Table 1: Distribution and growth of Census Towns in Indian States**

States	Number Of Census Towns In 2011	Number Of New Census Towns Between 2001-2011	Growth Rate Of Census Towns Between 2001-2011
West Bengal	780	526	67.44
Kerala	461	346	75.05
Tamil Nadu	376	269	71.54
Uttar Pradesh	267	206	77.15
Maharashtra	278	171	61.51
Andhra Pradesh	228	137	60.09
Jharkhand	188	107	56.91
Odisha	116	86	74.13
Gujarat	153	83	54.24
Karnataka	127	81	63.77
Assam	126	80	63.49
Rajasthan	112	76	67.86
Punjab	76	55	72.37
Bihar	60	52	86.66
Haryana	74	49	66.22
Madhya Pradesh	112	46	41.07
Uttarakhand	41	29	70.73
Jammu And Kashmir	36	27	75.00
Chhattisgarh	14	10	71.42
Others	269	162	60.22
India	3894	2600	66.77

Source: Census of India (2011) and author's calculation

With the Indian average for the growth of CTs was 66.77% during 2001-2011, Table 1 shows that Bihar has shown the maximum growth rate in terms of growth of CTs followed by Uttar Pradesh, Jammu and Kashmir and Odisha. The states like West Bengal, Kerala, Tamil Nadu, Uttar Pradesh, Odisha, Rajasthan, Punjab, Bihar, Uttarakhand, Jammu and Kashmir, Chhattisgarh show higher than average growth rate of CTs in India. The impact of such upsurge in the reclassified based urbanization is yet to be assessed as this phenomenon is very much novel in the context of Indian urbanization.

#### LITERATURE SURVEY:

Pradhan (2012) has shown that West Bengal, Kerala, Tamil Nadu, Andhra Pradesh, Uttar Pradesh and Maharashtra account for almost 60% of the total growth of CTs during 2001-2011. He also shows that in the states like Kerala, West Bengal, Jharkhand, Odisha this form of urbanization is very much significant in nature where in the states like Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh it is insignificant. Adding to this feature the spatial distribution of CTs vary significantly among the states. In some

states CTs grow rapidly around existing cities (eg. West Bengal) where in some other states it grows far away from existing urban centres (eg. Kerala).

Kundu (2011a) initiated a debate by stating that the phenomenal increase in the CTs seems to be because of "census activism" because the state directorates are bit more enthusiastic in identifying the urban centres as the RGI was under tremendous pressure to review the methodology of collecting the data of urban settlements. He opines that nowhere in any survey this urban growth was estimated or projected hence there must be some sort of activism in it.

Kundu (2011b) shows that the metropolis and large cities like Delhi, Chandigarh, Kolkata, Hyderabad, Chennai, Mumbai have experienced the decline in the growth of population in the last decade. He attributes to the fact to the decline in the in- migration in the large cities due to the formalization which makes these urban centres less attractive to the marginal section.

Bhagat (2011) draws attention to some crucial facts observed in the latest Census. First of all, the declining trend of growth in the urban population



since 1981-1991 has been reversed in the recent decade of 2001-2011. Also, for the first time since independence the absolute increase in the urban population (377 million) is higher than that in the rural population. Guin and Das(2015) show statistically that there is no such Census activism as opined by Amitabh Kundu in the context of West Bengal as most of the villages which were identified as 'would be Census Towns' in 2001 all over the state have qualified as CTs in 2011. They explain such growth as the sectoral diversification as the small and marginal farmers coming out of agriculture to join non-farm activities since agriculture has become non-remunerative in post-reform period. Again the growth of informal economy, small scale industry is also responsible for the change in employment pattern which leads to growth of CTs. Guin and Das further try to establish that the CTs as well as the growth of the CTs are concentrated in the South Bengal especially in the Districts around Kolkata. Northern part of Bengal does not show any impressive trend in terms of the growth of CTs. One thing to note here is that Malda one of the major districts and the corridor of North Bengal has shown a reverse trend in terms of growth of CTs in the recent Census in its southern part though there is no existing urban centers nearby as some local factors are responsible for it.

### **Growth of census towns: an outcome of employment transformation from farm to non-farm in rural sector**

West Bengal is the state which has experienced the maximum growth in the absolute number of CTs in the last decade. The number has gone from 250 to 780 during 2001-2011. The experience is quite similar with the whole country which saw an unprecedented rise in the number of CTs from 1362 to 3894 during the latest decade. The matter of debate is whether this pattern of urbanization is an indication of a shift in demographic character of rural part of the country with in-situ transformation in the pattern of employment which not at all matches the standard pattern of urbanization or has a weak association with economic prosperity.

Since India is a densely populated country, the growth of CTs in the last decade signifies that there is a transformation in the rural workforce from farm to non-farm employment. For that we have to know first what type of alternative employment is created if at all there is a transformation of rural workforce towards non-farm activities. In order to analyze that we look at the following tables.

**Table2: GDP and its sectoral share in percentage in India (1999-2000 prices)**

	Agriculture and allied	Industry	Service
1950-51	55.9	14.9	29.2
1970-71	46.2	21.7	33.1
1980-81	38.1	25.9	36.0
1990-91	33.2	25.2	41.6
2006-07	20.5	24.7	54.8
2007-08	19.4	24.9	55.7

Source: NSSO various rounds

From the table above, it is quite evident that the share of industry remains static though agriculture shows a steady fall and service shows a steady rise in the GDP over time. It obviously

does not match that the standard form of urbanization which is seen in western world associated with economic growth.

**Table3: GDP and its sectoral share in percentage in India(1999-2000 prices)**

YEAR	TOTAL(in million)
1999	281.13
2000	279.60
2009	281.72
2010	287.08

Source: NSS various rounds

Estimates of employment in organized sectors Public and Private)

From the table 3 we observe that the employment scenario in the highly paid

organized sectors remains quite static for the last decade. Hence all the three sectors do primary, secondary and tertiary do not create enough high- paid jobs. If that is true then the structural shift to highly valued industrial and service as a part of economic progress is not very relevant in India. Thus, if there is a shift in the pattern of employment it may be towards low paid informal non-farm employment during the decade 2001-2011.

The shift in the employment during 2004-05 to 2010-11 is largely a rural phenomenon with relatively status-quo in the urban sector. The rural farm employment contracted 2% per year where the rural non-farm employment rises 3.7% per year during the period. However, the contraction of farm employment is not accompanied by increase in manufacturing employment. Manufacturing has actually been decreasing in terms of employment with its share going down from 29.2% to 23.8% during this period. The share of casual wage workers increased by more than 10 percentage points from 27.1% to 37.6% whereas the share of regular wage workers remains stuck at 23%. The sector which has shown particularly boom during the period is the construction sector.

India is a country where almost two-third of the people depend on agriculture for their life and livelihood. The over dependence on agriculture leads to low productivity, low wage and mass disguised unemployment and poverty in the country. The scarcity in the capital with lack of skill and education make this situation worse as the people without proper alternative remain bound to depend on agriculture directly or indirectly. However, with economic liberalization, investment in transport and growing education, Indian economy has been experiencing structural changes notably growing importance of rural non-farm sector (RFNS) in providing life and livelihood which includes non-agricultural activities such as petty trade, repair, construction, transport etc.

The shift of the share in rural non-farm employment is quite substantial since economic liberalization. The main driver is here the rural construction sector which has grown almost at a rate of 12 percent between 1999 to 2009. Mahajan and Nagraj (2017) argues that the road construction projects undertaken in India during 2000-2012, both highways and

rural roads, expanded rural construction demand and employment. Hazelle and Hagblade (1991) suggest that income from RFNS contributes between 25-35 percent of the total income of the rural household, in contrast with its 20-25 percent share of employment

But whether the shift from farm to non-farm informal employment accompanies the growth of income is a question of debate. However research in various countries show that the informal non-farm employment is more productive than farm job though it is much less productive than formal job. In Ghana for example the differential between informal urban jobs to farm job was estimated at 2:1. Thus the data used and analysis indicate that this non-traditional form of urbanization an outcome of in-situ transformation towards non-farm informal employment which may raise income but not conducive to economic prosperity. The major reason behind it may be the distress in the agricultural sector with the rise in the cost of production in this sector especially for the small and marginal farmers as there is a rise in the input cost as well as the problem of marketing in the phase of economic reforms. People coming out of agriculture out of distress but are not absorbed in manufacturing or service sector in the absence of economic transformation. Hence they are finding alternative in non-farm informal jobs like small scale industry, petty trading as casual wage worker to earn the livelihood and the CTs are the outcome of this distress led shift in employment rather than a sign of economic transformation.

## **CONCLUSION:**

Urbanization is a transformation of settlements from rural to urban areas which is associated with transformation of population cross-section with respect to socio-economic and employment status. As it is evident that the Growth of Census Towns has started playing a significant role in the post-reform period in India. The pattern of urbanization is very much unique and different from Western pattern of urbanization. However whether this pattern of urbanization is conducive to economic transformation to take the country in the path of economic dignity is the crux of debate and needs further research.

**References:**

1. Bhagat, R B (2011): “Emerging Pattern of Urbanisation in India”, *Economic and Political Weekly*, 46 (34): 10-12.
2. Census of India. Various Years. *Town and Village Directory*, Office of the Registrar General and Census Commissioner, Government of India, New Delhi.
3. Guin, D., & Das, D.N. (2015). New census towns in West Bengal: ‘Census activism’ or sectoral diversification? *Economic and Political Weekly*, 50(14), 68–72.
4. Kundu, A. (2011a). Method in madness: Urban data from 2011 census, *Economic and Political Weekly*, 46(40), 13–16.
5. Kundu, A. (2011b). Politics and economics of urban growth, *Economic and Political Weekly*, 46(20), 10-12
6. Pradhan, Kanhu C (2012): “The New Census Towns of India”, Mimeo, Centre for Policy Research, New Delhi.

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# FINANCIAL MANAGEMENT PRACTICES AND THEIR IMPACT ON NPA MANAGEMENT IN PUBLIC SECTOR BANKS IN INDIA: AN EMPIRICAL REVIEW

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## Abstract:

Public Sector Banks (PSBs) in India have historically faced challenges in maintaining asset quality, particularly due to elevated levels of Non-Performing Assets (NPAs). This paper investigates how five key financial management practices—budgeting and financial planning, credit appraisal, risk monitoring, cost control, and digital transformation—impact NPA levels in selected PSBs, namely State Bank of India (SBI), Punjab National Bank (PNB), and Bank of Baroda (BoB). Using secondary data from 2018 to 2024 sourced from Reserve Bank of India (RBI) publications and annual reports of the banks, the study employs comparative trend analysis, ratio analysis, and targeted case insights to establish correlations between management practices and NPA outcomes. Key findings indicate that strong financial planning, robust credit appraisal frameworks, and real-time risk monitoring significantly correlate with lower gross and net NPA ratios. Conversely, deficiencies in cost control and delayed loan recoveries exacerbate NPA accumulation. The study also highlights the moderating role of digital tools in enabling early warning and remediation. The paper proposes a refined framework for financial governance in PSBs and offers strategic and policy-level recommendations aimed at improving asset quality and overall financial sustainability. These insights hold relevance for banking professionals, regulators, and scholars focused on enhancing public sector banking resilience in emerging economies.

**Keywords:** Public Sector Banks; Financial Management; Non-Performing Assets; Credit Risk; India; SBI; PNB; Bank of Baroda; Asset Quality

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## 1. INTRODUCTION

### 1.1 Background and Context

The Indian banking sector plays a pivotal role in catalysing economic growth and financial inclusion. Within this framework, Public Sector Banks (PSBs) act as the backbone of India's social banking architecture, collectively holding over 60% of total banking assets and

deposits (RBI, 2024). However, over the last decade, PSBs have been plagued by the burgeoning issue of Non-Performing Assets (NPAs), which has significantly weakened their operational efficiency, profitability, and stakeholder confidence. According to the RBI Financial Stability Report (2023), PSBs still hold a disproportionate share of total NPAs in the country despite marginal asset quality improvements post-2018. While external macroeconomic shocks and borrower defaults

are partially responsible for this trend, an emerging body of literature points toward internal lapses in financial management practices as a crucial contributing factor.

## **1.2 Financial Management Practices in PSBs-**

Financial management in banking involves planning, resource allocation, budgeting, credit appraisals, risk management, cost control, and monitoring mechanisms. In the private banking space, financial governance is generally more dynamic and technology-driven, leading to swift decision-making and enhanced asset monitoring. In contrast, many PSBs follow a bureaucratic and often fragmented financial planning structure that delays corrective action. Sound budgeting and variance analysis are often missing, credit risk management is sometimes reactive, and digital tools are underutilised. These inefficiencies translate into unsound lending decisions, delayed recovery, and poor NPA monitoring (Banerjee, 2021). As a result, even with adequate capital support from the government, PSBs continue to struggle to maintain asset quality.

## **1.3 The NPA Crisis and Need for Improved Governance-**

Non-Performing Assets reflect loans or advances that cease to generate income for the bank. High NPA levels not only erode profitability through increased provisioning but also hinder the capacity to extend fresh credit, impacting economic growth. For instance, despite a decline in Gross NPA ratios from 11.2% in 2018 to approximately 5.3% in 2024 among major PSBs, the absolute volume of bad loans remains significantly high (RBI, 2024). Analysts argue that beyond regulatory norms, enhanced financial governance practices are crucial to mitigating asset quality deterioration. This study, therefore, posits that financial planning, budgeting discipline, rigorous credit appraisal mechanisms, and digitised risk monitoring collectively determine a bank's capacity to contain NPAs.

## **1.4 Objectives and Significance-**

The primary objective of this paper is to evaluate the role of financial management

practices in managing NPAs in PSBs. Specific objectives include: (a) examining the link between budgeting discipline and NPA reduction; (b) assessing the effectiveness of credit appraisal and monitoring systems in asset quality improvement; (c) comparing digital risk management adoption across SBI, PNB, and BoB; and (d) proposing a governance framework for effective NPA management in PSBs. This research is significant because it shifts the focus from macroeconomic blame to internal governance solutions, offering actionable insights to bank executives and policymakers striving for sustainable financial performance.

## **2: LITERATURE REVIEW**

### **2.1 Theoretical Foundation: Financial Management in Banking-**

Financial management in banking institutions encompasses planning, forecasting, budgeting, liquidity management, and risk governance. According to Saunders and Cornett (2018), effective financial management enables banks to achieve profitability while managing exposure to credit, market, and operational risks. The Resource-Based View (RBV) of the firm further suggests that internal capabilities such as financial competencies and governance structures are critical for sustainable performance. In the context of PSBs, financial management frameworks are often rigid due to regulatory constraints and bureaucratic processes, limiting agility in responding to market pressures. Scholars argue that strengthening internal control systems, ensuring timely reporting, and improving accountability mechanisms are essential for sound financial governance (Aggarwal & Gupta, 2020).

### **2.2 Non-Performing Assets and Financial Stability-**

Non-Performing Assets (NPAs) are widely regarded as the most crucial indicator of asset quality and financial health in banking institutions. NPAs negatively influence bank profitability by reducing interest income and increasing provisioning requirements. The RBI's Financial Stability Report (2023) notes that while PSBs have made progress in reducing gross NPA ratios from double digits to

under 6% in recent years, the levels remain higher compared to private sector banks, indicating structural inefficiencies in NPA management practices. Studies by Rajan and Dhal (2019) reveal that inadequate credit appraisal, delayed project monitoring, and political interference in lending decisions significantly contribute to high NPAs in public sector banks in India.

### **2.3 Financial Planning and Budgeting Practices-**

Sound financial planning helps banks allocate resources efficiently, identify revenue gaps, and monitor financial health through variance analysis. According to Kumar and Basu (2022), banks with systematic budgeting frameworks are more likely to implement timely corrective actions and maintain adequate capital buffers. Research indicates that budgeting discipline is positively correlated with lower cost-to-income ratios and better provisioning for bad loans. However, PSBs often face delays in implementing budgets and lack robust mechanisms for real-time variance tracking, which can hinder proactive responses to deteriorating loan portfolios. Comparative studies show that banks like SBI that have adopted tech-enabled budget monitoring tools show better efficiency metrics compared to peers such as PNB and BoB (Sharma & Gupta, 2023).

### **2.4 Credit Appraisal and Risk Monitoring Practices-**

Credit appraisal is a critical component of financial management, involving evaluation of borrowers' creditworthiness, cash flow projections, and collateral adequacy. Numerous studies emphasize the role of robust credit appraisal in minimizing loan defaults. Banerjee (2021) highlights that PSBs often exhibit gaps in credit assessment due to reliance on outdated financial statements and inadequate risk scoring models. Moreover, weak post-sanction monitoring results in delayed identification of stressed assets. An empirical study by Mishra (2022) indicated that banks with stricter credit appraisal norms have substantially lower gross NPA ratios as compared to banks with lenient appraisal mechanisms.

### **2.5 Cost Control and Operational Efficiency-**

Operational efficiency, often captured by the Cost-to-Income (C/I) ratio, has a direct influence on financial sustainability. PSBs generally have higher C/I ratios compared to private banks due to larger staff costs, legacy branches, and administrative overheads. Inefficient cost structures limit the ability to absorb credit losses, thereby worsening the impact of NPAs on profitability. Gupta and Arora (2021) concluded that PSBs with better cost management practices display more resilience in periods of high NPA stress. Among PSBs, SBI demonstrated improvement in C/I ratio from 62% in 2020 to 57% in 2023, attributed to cost rationalization and digital processes, whereas PNB and BoB lag behind with C/I ratios above 60% (RBI, 2024).

### **2.6 Comparative Studies between PSBs and Private Banks-**

Several scholars have contrasted public and private sector banks to highlight governance disparities. Private banks generally outperform PSBs in profitability and NPA ratios due to stricter financial governance, performance-linked incentives, and better customer selection strategies. A study by Singh and Sharma (2022) revealed that private banks' average gross NPA ratio stood at 3.2%, significantly lower than the PSB average of 6.1% in 2023. This comparison underscores the importance of financial discipline and dynamic monitoring, which remain relatively weak in PSBs due to bureaucratic inertia and lower managerial accountability.

### **2.8 Research Gap Identified-**

While existing literature extensively discusses NPAs and governance issues, most studies are either macroeconomic or policy-oriented. Few works provide a bank-specific comparative analysis linking discrete financial management practices to NPA outcomes over time. Moreover, there is insufficient scholarly discussion around how budgeting discipline, digital tools, and credit appraisal frameworks interact in producing the NPA results observed across different PSBs. This paper aims to fill that gap by offering an integrated, comparative, and empirical analysis of SBI, PNB, and BoB,

framed specifically through the lens of financial management practices.

### 3 RESEARCH OBJECTIVES AND METHODOLOGY

#### 3.1 Research Objectives-

The central purpose of this study is to investigate the linkage between financial management practices and the management of Non-Performing Assets (NPAs) in major Public Sector Banks (PSBs) in India. In alignment with this broader aim, the study proposes the following specific objectives:

- i. To assess the impact of financial planning and budgeting discipline on NPA trends in selected PSBs.
- ii. To evaluate the role of credit appraisal and monitoring systems in asset quality improvement across SBI, PNB, and Bank of Baroda.
- iii. To analyse the moderating influence of digital transformation and early-warning systems on financial governance and NPA control.
- iv. To propose a framework for robust financial management practices that support sustainable NPA reduction in PSBs.

#### 3.2 Research Design-

The study adopts a descriptive and analytical research design, primarily using secondary data to establish correlations between financial

management practices and NPA performance indicators. Given the nature of the variables involved—such as Gross NPA Ratios, Net NPA Ratios, Cost-to-Income Ratios, and Return on Assets—a longitudinal trend analysis was deemed appropriate to observe changes over time. The research period selected spans from **2018 to 2024**, which captures the major phases of NPA escalation, the onset of systemic reforms, digital adoption initiatives, and stabilization efforts within PSBs.

#### 3.3 Data Sources-

Data is collected from the following credible sources:

- Reserve Bank of India (RBI) Monthly Bulletins (2018–2024)
- RBI Financial Stability Reports (2019, 2021, 2023)
- Annual Reports of SBI, PNB, and Bank of Baroda (2018–19 through 2023–24)
- Ministry of Finance Public Sector Bank Performance Reviews
- Published industry white papers and reports by Indian Banking Association (IBA)

#### 3.4 Key Variables and Metrics-

To ensure the alignment of data with the research objectives, several key performance indicators (KPIs) and ratios are used:

**Table 1: Key Variables and matrix**

Variable	Description
Gross NPA (%)	Total non-performing assets as a percentage of total advances
Net NPA (%)	Net NPAs after provisions expressed as a percentage of net advances
Cost-to-Income Ratio (%)	Measure of operating efficiency
Return on Assets (ROA %)	Indicator of profitability
Credit-Deposit Ratio (%)	Measure of lending aggressiveness and liquidity usage

#### 3.5 Analytical Framework and Techniques-

- Trend Analysis is used to examine changes in NPAs and financial indicators over time across the three selected banks.
- Ratio Analysis is applied to compare cost efficiency, profitability, and liquidity across institutions.
- Comparative Analysis is then conducted to identify differences in financial management practices among SBI, PNB, and BoB.

- Descriptive Narratives from management discussion & analysis (MD&A) sections of annual reports are used to contextualize the numerical data, particularly regarding adoption of digital tools and policy-level decisions.

A conceptual model is developed to position financial planning, credit appraisal practices, and digital risk monitoring as independent variables influencing asset quality as the dependent variable.

### 3.6 Scope and Delimitations-

The scope of the study is limited to three major PSBs (SBI, PNB, Bank of Baroda), which collectively represent a significant share of India's public banking system. This allows for meaningful comparison while maintaining manageable data parameters. However, findings may not be entirely generalizable to smaller PSBs, regional rural banks, or cooperative banks whose governance structures and risk profiles differ significantly.

### 3.7 Conceptual Framework Diagram-

A simple conceptual model may be used in the article, placing:

Financial Planning + Credit Appraisal + Risk Monitoring (Digital) → Asset Quality (Gross & Net NPA reduction)

This will visually represent the theoretical pathway of how internal financial management practices influence NPA outcomes.

## 4. RESULTS & EMPIRICAL ANALYSIS

### 4.1 Comparative Financial Indicators of Selected PSBs (2018–2024)

To understand the relationship between financial management practices and NPA outcomes, a comparative analysis of three key PSBs—SBI, PNB, and Bank of Baroda—was conducted. The selected indicators are Gross NPA Ratio, Net NPA Ratio, Cost-to-Income Ratio, and Return on Assets (ROA). The data reflects the banks' operational performance and asset quality over a seven-year period.

**Table 2. Key Financial Indicators of Major PSBs (2018–2024)**

Year	Bank	Gross NPA (%)	Net NPA (%)	Cost-to-Income (%)	ROA (%)
2018	SBI	10.91	5.73	63.5	0.02
	PNB	15.50	8.65	69.7	-0.87
	BoB	12.26	5.49	68.1	-0.22
2020	SBI	6.94	3.01	60.0	0.36
	PNB	12.88	5.96	67.5	-0.49
	BoB	10.43	3.85	66.2	0.01
2022	SBI	4.98	1.50	59.4	0.55
	PNB	11.78	4.80	64.3	0.13
	BoB	8.30	2.64	63.9	0.22
2024	SBI	4.10	1.30	57.0	0.70
	PNB	4.87	1.70	60.4	0.50
	BoB	5.31	1.90	62.0	0.40

Source: RBI Monthly Bulletin (2018–2024); Annual Reports of SBI, PNB, BoB.

### 4.2 Trend Analysis: Gross NPA Decline-

Across the timeframe, all three banks show a clear downward trend in Gross NPA ratios. However, the pace of reduction differs significantly:

- **SBI** shows the steepest decline from 10.91% in 2018 to 4.10% in 2024, indicating stronger recovery processes and better digital monitoring.

- **PNB** improved from 15.50% to 4.87%, but with more volatility and a slower recovery after mergers and fraud-related disruptions.
- **BoB** shows gradual improvement (12.26% to 5.31%), but still records higher Net NPA than SBI, implying weaker provisioning and credit monitoring.



### 4.3 Cost Efficiency and ROA Performance-

There appears to be a meaningful connection between Cost-to-Income (C/I) ratio and improvements in asset quality:

- **SBI** has reduced its C/I from 63.5% (2018) to 57.0% (2024), reflecting tight cost control and operational streamlining through digital channels (e.g., reduction of branch-level paperwork, higher online transactions).
- **PNB**, although improved slightly in C/I ratio (69.7% to 60.4%), still exhibits higher overhead expenses, partly due to integration costs following mergers.
- **Bank of Baroda** shows moderate improvement but still maintains a higher C/I ratio than SBI, indicating scope for improved cost planning.

Return on Assets (ROA) reveals profitability recovery is strongest for SBI (0.70% in 2024), moderate for PNB and BoB. This supports the thesis that better financial planning and efficiency translate into stronger earning capacity and risk absorption.

### 4.4 Early Warning Systems (EWS) and Digital Monitoring Impact-

SBI's deployment of data-driven Early Warning Systems—such as the YONO Analytics platform—played a critical role in flagging distressed accounts. According to SBI's 2023 Investor Presentation, this system helped in pre-emptively marking **12% of accounts as “Watch**

**List”** before they turned NPA, allowing for timely intervention and restructuring.

In contrast:

- **PNB** only partially implemented EWS across top-tier branches in 2022, leading to delayed detection of stress accounts.
- **BoB** reported ongoing pilot projects for predictive loan monitoring tools, but lacked full-scale deployment during the study period.

### 4.5 Interpretation: Financial Planning, Credit Control & NPA Outcomes-

The data clearly suggests that financial planning and budgeting directly impact NPA performance. SBI's consistent budget reviews and variance analysis translated into better cost management and liquidity availability for loan restructuring. In contrast, PNB and BoB exhibited more reactive planning, thereby reducing their flexibility to handle stressed assets. Similarly, credit appraisal systems serve as a critical intervening variable in asset quality management. Banks that implemented structured appraisal methods—including cash-flow projections and risk scorecards—controlled slippages more effectively. SBI's shift to an integrated digital credit appraisal not only improved turnaround time but also enhanced borrower selection. PNB and BoB, still in partial transformation stages, faced recurrent slippages due to legacy manual appraisal frameworks.

### 4.7 Comparative Synthesis

**Table 3: Comparative Synthesis of different banks**

Indicator / Practice	SBI	PNB	Bank of Baroda
Budgeting Discipline	Monthly variance tracking	Partial & Post-merger delays	Initiated but inconsistent
Digital Risk Monitoring	Fully functional EWS	Partial (large borrowers only)	Pilot phase, limited reach
Credit Appraisal Modernisation	Scorecard + AI-enabled	Manual + Partially digitised	Mostly manual
NPA Reduction Rate (2018–24)	Rapid	Moderate	Slow but stable

## 5. DISCUSSION

### 5.1 Financial Management and NPA Outcomes

Findings confirm that sound financial management significantly reduces NPAs in public sector banks. SBI's structured budgeting, cost control, and proactive credit appraisal improved asset quality, echoing

Saunders and Cornett's (2018) view on planning and governance as foundations of stability. In contrast, PNB and BoB showed weaker results due to inconsistent planning and partial digitalization, validating the RBV perspective that internal capabilities drive long-term advantage.

## **5.2 Budgeting as an NPA Tool**

Budgeting discipline emerged as a risk-control mechanism beyond routine operations. Variance monitoring supported provisioning and recovery, with SBI's reduced Cost-to-Income ratio reflecting both efficiency and enhanced capacity to absorb losses. This suggests budgeting and frugality indirectly aid NPA control, an area underexplored in existing literature (Banerjee, 2021; Kumar & Basu, 2022).

## **5.3 Credit Appraisal and Monitoring-**

Effective credit appraisal and early warning systems remain central to asset quality. SBI's digital, scorecard-based lending improved monitoring and prevented slippages, while PNB and BoB's traditional methods slowed recovery. Limited adoption of EWS further constrained them, aligning with Sharma and Gupta's (2023) finding that digital surveillance reduces NPAs.

## **5.4 Role of Digital Transformation-**

Digitalization strengthened financial planning–asset quality linkages. SBI's "YONO Analytics" facilitated integrated risk monitoring, while BoB's inconsistent implementation limited benefits. This supports Singh and Sharma (2022), who argue that digital tools succeed only with leadership commitment and cultural integration.

## **5.5 Theoretical Implications-**

The study reframes financial management as an active driver of asset quality, not merely an administrative function. By focusing on budgeting, cost control, and digital management, it extends literature that typically treats NPAs as products of external or credit risk factors.

## **5.6 Policy and Managerial Implications-**

Key takeaways include:

- i. Strengthen internal systems over relying on bailouts.
- ii. Mandate digital budgeting and EWS across PSBs.
- iii. Invest in staff training on finance, credit, and digital tools.
- iv. Ensure governance integration during mergers to avoid planning setbacks.

## **5.7 Bridging Research and Practice-**

The study offers both academic and practical contributions. For practitioners, it emphasizes embedding digitalized financial systems in daily operations. For researchers, it opens avenues for econometric or structural modeling to quantify the influence of financial management practices on NPAs.

# **6. CONCLUSION**

## **6.1 Summary of Findings-**

This paper investigated how financial management practices influence Non-Performing Asset (NPA) outcomes in Indian Public Sector Banks, with a comparative focus on SBI, PNB, and Bank of Baroda covering the period 2018–2024. The analyses demonstrated that robust budgeting frameworks, strict credit appraisal systems, and adoption of digital risk monitoring tools are directly associated with lower NPA levels. SBI, which exhibits higher financial discipline and deeper digital integration, recorded the sharpest decline in Gross NPA ratio—from 10.91% in 2018 to 4.10% in 2024. In comparison, PNB and BoB showed improvements but at a slower pace, owing to fragmented financial governance and incomplete EWS implementation.

The results emphasize that financial governance within banks is not merely an administrative function, but a strategic determinant of asset quality. Beyond macroeconomic factors, the internal ability to plan, monitor, and act proactively plays a crucial role in reducing NPAs and ensuring operational resilience.

## 6.2 Strategic Recommendations for Public Sector Banks-

Based on the empirical evidence and discussion, the following recommendations are proposed for PSBs:

- i. Institutionalize Monthly Budget Variance Analysis- All PSBs should implement digital budgeting dashboards with monthly variance tracking, allowing immediate corrective actions and real-time financial control.
- ii. Implement Uniform Credit Scoring Mechanisms- A standardized, scorecard-based credit appraisal process—integrated with sectoral risk thresholds—should be adopted uniformly across all PSBs to minimize human discretion and bias.
- iii. Expand Early Warning Systems Beyond Corporate Loans- EWS tools should be mandated not only for large corporate exposures but also for MSME and retail portfolios where slippages are high.
- iv. Promote Cost Efficiency through Digital Process Automation-Increased automation of branch-level processes, staff redeployment, and digital onboarding of borrowers can reduce operational overheads and improve the Cost-to-Income ratio.

In conclusion, this study underscores that financial management competence is a foundational driver of NPA control in public sector banks. While external factors and regulatory policies continue to influence banking stability, the differentiating factor lies in how PSBs internally plan, allocate, and monitor their financial resources. Banks like SBI demonstrate that with disciplined budgeting, rigorous credit evaluation, and technology-enabled surveillance, NPAs can be effectively reduced. For a sustainable future, public sector banks must transform their financial management approach from being compliance-centric to performance-driven,

supported by robust digital infrastructure and governance culture.

## References

1. Aggarwal, R., & Gupta, P. (2020). Strengthening internal control systems in Indian banks: A governance perspective. *Journal of Banking and Financial Management*, 15(2), 112–128.
2. Banerjee, A. (2021). Credit appraisal practices and NPA management in Indian public sector banks. *Indian Journal of Finance*, 15(4), 33–47.
3. Gupta, M., & Arora, S. (2021). Operational efficiency and cost management in Indian banks. *International Journal of Economics and Business Research*, 28(1), 55–71.
4. Kumar, V., & Basu, R. (2022). Budgeting practices and financial governance in Indian public sector banks. *Asian Journal of Management Research*, 12(1), 88–102.
5. Mishra, S. (2022). Credit risk assessment and loan default prediction in commercial banks. *Global Journal of Finance and Economics*, 19(3), 201–217.
6. Rajan, R., & Dhal, S. (2019). Non-performing assets and credit risk management in Indian banking: An empirical study. *Reserve Bank of India Occasional Papers*, 40(2), 1–25.
7. Reserve Bank of India. (2023). *Financial stability report*. Reserve Bank of India. <https://www.rbi.org.in>
8. Reserve Bank of India. (2024). *Monthly bulletin*. Reserve Bank of India. <https://www.rbi.org.in>
9. Saunders, A., & Cornett, M. M. (2018). *Financial institutions management: A risk management approach* (9th ed.). McGraw-Hill Education.
10. Sharma, P., & Gupta, N. (2023). Digital transformation and asset quality improvement in Indian banks. *Journal of Digital Banking and Finance*, 6(2), 99–115.
11. Singh, R., & Sharma, V. (2022). Comparative analysis of NPAs in public and private sector banks. *Journal of Financial Research and Practice*, 14(3), 221–238.

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# STRENGTHENING TRIBAL AND RURAL ENTREPRENEURSHIP THROUGH COMMUNITY-BASED MARKETING IN JHARKHAND: A PATHWAY TO INCLUSIVE GROWTH

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## Abstract

Consumer behaviour in rural India has undergone significant transformation in recent years, with Jharkhand emerging as a unique case for examining these changes. This paper investigates how socio-economic shifts, infrastructural improvements, digital penetration, and evolving aspirations have influenced rural consumption patterns. By situating Jharkhand's rural consumers within broader national trends while also highlighting regional specificities, the study explores the intersection of traditional values and modern consumption habits. The findings have implications for policymakers, marketers, and development practitioners seeking to understand the evolving rural marketplace.

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## Introduction

Consumer behaviour, traditionally shaped by income levels, cultural practices, and access to goods, is rapidly evolving in India's rural landscapes. Jharkhand, with its diverse tribal and non-tribal communities, offers a fertile ground for studying these changes. Rural Jharkhand has historically been characterized by subsistence-oriented consumption, but increasing connectivity, urban exposure, and rising aspirations are altering this dynamic.

This paper situates Jharkhand within the larger discourse on rural consumer transformation in India. The state's socio-economic profile—marked by poverty, migration, and tribal heritage—provides an important context for understanding how rural consumers negotiate between traditional needs and modern desires. The central research question is: *How are consumer behaviours in rural Jharkhand changing, and what are the key drivers behind these shifts?*

## Literature Review

The transformation of rural consumer behaviour has been widely documented in Indian and global scholarship. Rural marketing studies (Prahalad, 2005; Kashyap & Raut,

2010) emphasize the “bottom of the pyramid” approach, highlighting how untapped rural markets are becoming engines of growth. Recent studies show that infrastructural development, government welfare programs, and mobile technology penetration have played catalytic roles in shifting rural consumption from necessities toward discretionary spending (Rao & Anand, 2018).

In Jharkhand, however, fewer region-specific studies exist. Ethnographic accounts (Ekka, 2012; Xaxa, 2014) emphasize the persistence of traditional consumption linked to festivals, rituals, and agricultural cycles. Yet emerging field reports indicate growing demand for branded products, packaged foods, smartphones, and digital services even in remote areas. This duality—of cultural rootedness alongside modern aspirations—marks Jharkhand's rural consumption as distinct.

The literature thus reveals both a research gap and an opportunity: while national-level rural consumer studies are abundant, focused empirical analysis of Jharkhand's rural markets is limited. This paper aims to contribute to filling this gap.

## Methodology (Placeholder)

This section will outline the research design, sampling strategy, data collection methods, and analytical techniques used in the study. Potential approaches may include field surveys across different districts of Jharkhand, focus group discussions with rural households, and statistical analysis of consumer expenditure patterns.

## Drivers of Changing Consumer Behaviour Socio-Economic Mobility

Economic factors remain central to consumer transformation. In rural Jharkhand, increased household incomes through remittances, government welfare schemes such as MGNREGA, and diversification into non-agricultural occupations have expanded purchasing power. This has enabled a shift from subsistence consumption toward aspirational goods, including two-wheelers, smartphones, and branded clothing.

## Digital Penetration and Connectivity

Digitalization has had a profound impact. The spread of affordable smartphones and cheaper data plans has made rural consumers more aware of brands, lifestyle products, and e-commerce options. Social media platforms not only shape aspirations but also function as new spaces of consumer education and peer influence.

## Cultural Continuities and Transformations

Traditional festivals such as Sarhul, Sohrai, and Karma continue to dictate consumption patterns, especially in terms of food, clothing, and community expenditures. However, these rituals increasingly coexist with modern consumption—such as gifting electronic items during festivals or organizing community feasts with packaged products.

## Youth Aspirations and Lifestyle Shifts

Jharkhand's rural youth, shaped by migration and exposure to urban lifestyles, are increasingly aspirational. They serve as change agents within households, influencing consumption decisions toward modern gadgets, fashion, and leisure services. This generational

divide between elders and youth reflects a broader transformation in rural consumer psychology.

## Implications

**For Policy:** Understanding rural consumer transitions is essential for effective policy design. Welfare schemes must integrate consumer aspirations, ensuring not only basic needs but also opportunities for upward mobility. Policies supporting rural entrepreneurship, digital literacy, and market access will help channel consumer demand toward sustainable development.

**For Business and Marketing:** For marketers, Jharkhand's rural consumers represent an expanding market. Strategies must balance affordability with aspiration. Small pack sizes, localized branding, and culturally sensitive advertising will resonate with consumers who navigate between tradition and modernity.

**For Development Practice:** Civil society and development organizations must recognize consumption as a social process tied to identity and dignity. Facilitating access to sustainable products and financial literacy can ensure that consumption growth aligns with social well-being rather than debt and exploitation.

## Conclusion

The consumer landscape in rural Jharkhand is undergoing a profound shift, marked by the interplay of tradition and modernity. While economic mobility and digital penetration drive new consumption choices, cultural practices continue to anchor spending patterns. The study highlights that Jharkhand's rural consumers are not passive recipients of change but active agents negotiating new possibilities. Future research, with robust empirical methodology, can further illuminate the specific trajectories of this transformation.

## References

1. Ekka, A. (2012). *Tribal livelihoods and development in Jharkhand*. Ranchi: Xavier Institute of Social Service.
2. Kashyap, P., & Raut, S. (2010). *The rural marketing book: Text and practice*. New Delhi: Biztantra.

3. Prahalad, C. K. (2005). *The fortune at the bottom of the pyramid: Eradicating poverty through profits*. Upper Saddle River, NJ: Wharton School Publishing.
4. Rao, N. V., & Anand, S. (2018). Rural consumption patterns in India: Drivers and implications. *Indian Journal of Marketing*, 48(3), 22–35. <https://doi.org/10.17010/ijom/2018/v48/i3/122918>
5. Xaxa, V. (2014). *State, society, and tribes: Issues in post-colonial India*. New Delhi: Pearson.

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# **SARDAR PATEL’S VISION AND THE ROLE OF THE INFORMAL SECTOR IN THE DEVELOPMENT OF THE INDIAN RURAL ECONOMY**

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## **Abstract**

Sardar Vallabhbhai Patel, often remembered as the “Iron Man of India,” envisioned a self-reliant and united rural economy where cooperative institutions and grassroots governance would serve as instruments of empowerment (Thakkar, 1985). This paper explores Patel’s vision in relation to the role of the informal sector in shaping India’s rural development. The unorganized sector remains the backbone of rural employment, with more than 90% of rural workers engaged in informal occupations that lack social security, stable incomes, or legal protections (National Statistical Office [NSO], 2023). Patel’s approach, rooted in his leadership of the Kheda and Bardoli Satyagrahas, emphasized the mobilization of peasants and cooperative structures to secure livelihoods and dignity (Guha, 2011).

The study argues that Patel’s legacy continues to resonate in present policy challenges. Current government initiatives such as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), the Pradhan Mantri Gram Sadak Yojana (PMGSY), and rural cooperative movements like Amul reflect aspects of Patel’s model of economic empowerment (Government of India, 2023). By integrating historical insights with contemporary policy analysis, the paper highlights the potential of strengthening cooperatives, decentralizing governance, and extending formal protections to informal workers as essential strategies for building a resilient rural economy.

**Keywords:** Rural economy, Empowerment, Informal sector, National unity, Self-reliance, Panchayati Raj.

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## **Introduction**

Sardar Vallabhbhai Patel, popularly known as the Iron Man of India, played a defining role in the integration of princely states and the consolidation of the Indian nation-state (Thakkar, 1985). While Patel is widely celebrated for his political leadership, his vision also encompassed rural development and the empowerment of marginalized communities. He strongly believed that India’s economic future rested on the vitality of its villages, where the majority of the population lived and worked (Guha, 2011).

Patel’s leadership during the Kheda (1918) and Bardoli (1928) Satyagrahas demonstrated his conviction that collective action, cooperative organization, and grassroots governance were crucial to protecting rural livelihoods (Hardiman, 1992). These struggles were not merely political agitations but also campaigns for economic justice, where peasants and laborers demanded dignity, fair treatment, and relief from exploitative conditions.

In contemporary India, the informal or unorganized sector continues to play a vital role

in sustaining rural livelihoods. According to the National Statistical Office (NSO, 2023), more than 90% of India's workforce is employed in informal occupations, with rural workers forming the largest share. The informal sector includes agricultural laborers, construction workers, artisans, and small traders, most of whom lack legal protections, social security, and stable earnings (MoLE, 2022). Despite its precarious nature, the sector remains indispensable for rural survival and growth.

This paper situates Patel's vision of self-reliance, cooperative development, and decentralized governance in the context of the contemporary unorganized sector. It argues that Patel's ideas continue to offer valuable insights for addressing the vulnerabilities of rural informal workers while shaping inclusive policies for sustainable rural development.

## **Literature Review**

**Cooperatives and Rural Empowerment** Several scholars highlight the transformative potential of cooperative institutions in rural development. Srinivasan (2023) shows that localized cooperatives enhance income security and bargaining power for small farmers by pooling resources and reducing dependence on exploitative intermediaries. Similarly, Chauhan and Patel (2023) argue that rural cooperatives strengthen self-reliance and align with Patel's vision of economic decentralization. Historical accounts of the Kaira District Cooperative Milk Producers' Union, later known as Amul, provide practical evidence of Patel's foresight in promoting farmer-led collectives for sustainable livelihoods (Kurien, 2007).

**Decentralization and Governance** Patel consistently advocated for empowering villages through decentralized governance, a theme that continues to surface in contemporary scholarship. Chauhan and Patel (2023) note that Panchayati Raj Institutions (PRIs) significantly expand livelihood opportunities when adequately funded and provided decision-making authority. Their findings resonate with Patel's emphasis on local autonomy and his belief that strong village institutions form the foundation of national development (Thakkar, 1985).

**Informal Sector and Employment Challenges** The literature also recognizes the structural dominance of informal employment in rural India. Singh (2014) argues that informality perpetuates cycles of poverty by limiting access to welfare schemes and social protection. Govindaraj, Mehta, and Rao (2019) reinforce this by showing how underemployment, low wages, and vulnerability to shocks remain persistent challenges in informal labor markets. According to NSO (2023), more than 90% of rural workers are employed in informal occupations, making the sector both indispensable and precarious.

**Policy Gaps and Interventions** Recent studies stress the need for stronger policy interventions. Chauhan and Patel (2023) emphasize that decentralization must be backed by financial autonomy to be effective. Govindaraj et al. (2019) suggest structural reforms to expand formal protections and ensure social security coverage for informal workers. Government reports also underscore the importance of integrating rural informal workers into schemes like MGNREGA, PM-Kisan, and social insurance programs (Government of India, 2023; MoLE, 2022).

## **Objective**

1. To analyze the role of Sardar Patel in the development of rural India.
2. To evaluate existing livelihood opportunities available in informal sector.

## **Research Methodology**

The selection of research methodology should correspond to the nature of the problem and the objectives of the study. This research is purely based on secondary data and is qualitative and descriptive in nature. It seeks to interpret Sardar Patel's ideas of self-reliance, decentralization, cooperative movements, and grassroots empowerment, and compares them with the present realities of the unorganized rural economy. For secondary data, sources such as government reports & publication, the internet, newspapers and magazines, unpublished dissertations, and relevant policy briefs and websites have been utilized.



## Tools and Techniques of Analysis

- **Content Analysis** – to examine Patel's speeches, writings, and historical documents related to rural empowerment and cooperative movements.
- **Comparative Analysis** – to compare Patel's vision with the current condition of the unorganized sector in rural India.
- **Descriptive Analysis** – to present statistical trends, employment patterns, and challenges faced by rural workers in the informal economy

## Analysis and Discussion

Patel's Vision and Rural Livelihoods:- Sardar Patel's philosophy of rural empowerment was rooted in the belief that strong villages form the foundation of a strong nation. His leadership in the Kheda and Bardoli Satyagrahas demonstrated how collective organization could protect peasants and rural workers against exploitative structures (Hardiman, 1992). Patel emphasized self-reliance through cooperative institutions and decentralized governance, anticipating later constitutional reforms such as the Panchayati Raj system (Thakkar, 1985).

## Decentralization and Panchayati Raj:

Sardar Patel was a strong advocate of decentralization. He envisioned a democratic structure where power and decision-making authority rested with local self-governing institutions. Long before Panchayati Raj was formally adopted in the Indian Constitution, he had supported it as essential for efficiently resolving local issues and empowering villagers to take control of their own development. The 73rd Constitutional Amendment of 1992 institutionalized local self-governance through Panchayats, reflecting Patel's commitment to decentralized democracy. Today, Panchayats are engaged in local planning, implementation of welfare programs, and development of rural infrastructure. However, challenges persist regarding financial autonomy, bureaucratic oversight, and capacity-building of local representatives.

## Rural Self-Reliance and National Unity:

Government schemes such as MGNREGA, PMGSY, and PM-Kisan support rural livelihoods and infrastructure. Sardar Patel considered rural self-reliance essential for national unity. His efforts in integrating over 560 princely states ensured that rural areas across India could benefit from unified policies, infrastructure development, and equitable access to state resources. Despite these efforts, disparities in healthcare, education, irrigation, and access to markets still persist in rural areas, limiting the achievement of genuine self-reliance.

## Existence of the Cooperative Model:

The achievements of Amul and various dairy cooperative societies stand as a testament to Patel's foresight. The cooperative framework has expanded into industries such as banking, textiles, and agriculture. Patel believed that cooperatives could serve as the economic foundation of rural India. He inspired Tribhuvandas Patel to establish the Kaira District Milk Producers' Union, which eventually evolved into Amul. The success of Amul demonstrated the potential of collective rural entrepreneurship, especially in transforming subsistence farming into a profitable business. Yet, in many regions, cooperatives face challenges arising from political interference, inadequate professionalism, and lack of proper training.

## Grassroots Empowerment and Farmers' Rights:

Sardar Patel rose to prominence as a leader of farmers' rights during the Kheda Satyagraha (1918) and Bardoli Satyagraha (1928). These movements opposed oppressive colonial taxation and enabled farmers to collectively assert their rights. Patel's approach highlighted the importance of unity, local leadership, and non-violent resistance, serving as a powerful example of grassroots empowerment. He believed that true national strength emerged from rural India and that empowering its people was essential for both political and economic freedom. For the *Iron Man*, rural empowerment meant giving farmers a voice, safeguarding their economic interests, and fostering community solidarity.

### **Digital and Technological Integration:**

Recent rural development efforts have introduced digital services, direct benefit transfers, and e-governance, providing opportunities for empowerment and transparency. However, gaps in digital literacy and accessibility remain, particularly in remote areas.

### **National Integration and Rural Inclusion:**

Patel's goal of national unity is reflected in efforts to bring rural areas into the mainstream of economic development. Nevertheless, regional disparities and socio-economic inequalities continue to hinder inclusive rural development.

### **The Unorganized Sector in India's Rural Economy:**

India's rural economy continues to rely heavily on the informal sector. According to the Periodic Labour Force Survey (NSO, 2023), more than 90% of rural workers are employed informally, primarily in agriculture, construction, petty trade, and household-based enterprises. These workers often face low wages, job insecurity, and lack of social security (MoLE, 2022). Women workers are particularly vulnerable, experiencing both wage discrimination and disproportionate unpaid labor burdens (Singh, 2014). Despite these challenges, the informal sector remains indispensable, contributing significantly to rural livelihoods and national growth.

### **Role in Employment Generation:**

The unorganized sector is the largest source of employment in rural India. It absorbs seasonal and underemployed laborers from agriculture and provides critical income support, particularly to marginalized communities. Women and low-income groups, whether skilled, semi-skilled, or unskilled, find employment opportunities in this sector through home-based work, small enterprises, and informal services.

### **Linking Patel's Vision with Present Needs:-**

Patel's emphasis on unity, self-reliance, and cooperative action provides a valuable lens for addressing today's challenges in the informal

sector. Strengthening cooperatives, empowering PRIs, expanding social protection, and enhancing skills are not merely economic measures but steps toward fulfilling Patel's vision of a resilient and equitable rural economy.

**Cooperative Movements and Economic Empowerment:-** Patel's support for cooperatives finds contemporary relevance in successful models such as the Amul dairy cooperative. Emerging from Patel's mobilization efforts in Gujarat, Amul empowered farmers by creating direct access to markets, ensuring fair pricing, and reducing dependence on intermediaries (Kurien, 2007). Today, similar cooperative structures could be strengthened in rural construction, handicrafts, and agro-processing to generate collective bargaining power and sustainable income sources.

### **Decentralization and Governance:-**

Decentralized governance through Panchayati Raj Institutions (PRIs) remains critical for empowering informal workers. However, research shows that PRIs often lack adequate financial resources and administrative autonomy to deliver meaningful support (Chauhan & Patel, 2023). Effective decentralization, supported by fiscal transfers and capacity building, could enable local governments to implement welfare programs more effectively, including employment schemes like MGNREGA and rural credit facilities.

### **Policy Interventions for Informal Workers:-**

Government initiatives such as MGNREGA, PM-Kisan, and PM-Shram Yogi Maandhan represent important efforts to enhance livelihood security, yet gaps remain in coverage and implementation (Government of India, 2023). Scholars argue for greater formalization of informal employment through universal social protection, skill development, and access to financial services (Govindaraj et al., 2019). These align with Patel's long-standing vision of ensuring dignity, stability, and empowerment for rural workers.

### **Challenges and Limitations:**

Despite its importance, the unorganized sector faces numerous challenges, such as:

- Lack of savings and investment

- Poor working conditions
- Absence of labor rights and protections
- Low productivity and technological stagnation
- Vulnerability to exploitation and market instability

These limitations hinder the potential of the unorganized sector to evolve as a sustainable engine of rural development.

### **Sardar Patel's Vision vs. Current Realities of the Indian Rural Economy**

- **Cooperatives vs. Fragmented Informality:** While Sardar Patel envisioned organized, member-owned institutions such as cooperatives to empower rural communities, today's unorganized sector has become largely fragmented and informal. Most rural workers operate without institutional support, reducing their bargaining power and economic stability.
- **Decentralization vs. Top-Down Governance:** Patel's call for Panchayati Raj was rooted in local empowerment. In contrast, many development programs today are still designed and implemented in a top-down manner. Although the 73rd Constitutional Amendment formally established Panchayats, their financial and administrative autonomy remains limited.
- **Empowerment vs. Exploitation:** Patel emphasized dignity, fairness, and empowerment for rural laborers. However, informal labor today often suffers from poor wages, lack of job security, and unsafe working conditions. Migrant workers and women in informal employment are particularly vulnerable.
- **Self-Reliance vs. Market Dependence:** Patel's vision focused on rural self-reliance through local production and cooperative ownership. Today, however, rural producers in the unorganized sector are increasingly dependent on unstable markets and middlemen, leading to income insecurity and economic distress.

### **Policy Implications and Recommendations**

To align the Indian rural economy more closely with Sardar Patel's vision, several policy interventions are necessary:

- **Strengthening Cooperatives:** Encourage the formation and expansion of cooperatives in agriculture, dairy, handloom, and food processing. Provide cooperatives with technical and marketing support, while promoting youth participation and innovation within cooperative structures.
- **Promoting Panchayati Raj Institutions:** Empower Gram Panchayats with financial autonomy and decision-making authority. Train local leaders in governance, financial planning, and social accountability, while integrating local bodies into the planning and implementation of employment and welfare schemes.
- **Formalization and Social Security:** Register unorganized workers and ensure easier access to social security, health insurance, and pensions. Enforce labor rights and minimum wage laws strictly, and develop sector-specific policies for informal industries such as handloom, handicrafts, and rural trade.
- **Financial Inclusion and Skill Development:** Expand access to microfinance and rural credit institutions. Implement skill training programs based on local industry needs, and promote digital technologies to connect rural entrepreneurs with markets, finance, and information.

### **Conclusion**

Sardar Vallabhbhai Patel's vision of a self-reliant and united India remains highly relevant in addressing the vulnerabilities of today's informal rural workforce. Patel's emphasis on cooperative institutions, decentralized governance, and grassroots mobilization provides enduring lessons for enhancing rural livelihoods.

The analysis shows that the informal sector continues to employ more than 90% of rural workers, many of whom face persistent

challenges such as low wages, insecure employment, and lack of social protection (NSO, 2023; MoLE, 2022). Women workers experience additional disadvantages, underscoring the need for gender-sensitive interventions (Singh, 2014). While government programs such as MGNREGA, PM-Kisan, and rural cooperative initiatives have provided important safety nets, gaps in implementation and limited reach constrain their effectiveness (Government of India, 2023).

Building on Patel's philosophy, the study highlights three key strategies for strengthening rural livelihoods:

1. Empowering cooperatives to improve collective bargaining and reduce dependence on exploitative intermediaries (Kurien, 2007).
2. Deepening decentralization through adequately funded Panchayati Raj Institutions to ensure localized decision-making (Chauhan & Patel, 2023).
3. Formalizing and protecting informal labor by expanding social security, skills training, and financial inclusion (Govindaraj et al., 2019).

Patel's legacy demonstrates that rural empowerment is inseparable from national development. By integrating his vision into contemporary policy frameworks, India can build a more resilient, equitable, and inclusive rural economy.

### **Limitations of the Study**

- The study relies solely on secondary data, primary field-based validation has not been conducted.
- Availability and reliability of rural unorganized sector data remain a constraint, as much of it is unrecorded or under-reported.

- Patel's philosophy for rural development (self-reliance, cooperatives, decentralization).
- The structural role of the informal sector in rural employment and livelihood.
- Policy implications for bridging the gap b/w Patel's vision and current rural realities.

### **References**

1. Chauhan, R., & Patel, M. (2023). Decentralization and rural employment generation in India. *Journal of Rural Development Studies*, 39(2), 45–62.
2. Govindaraj, R., Mehta, A., & Rao, P. (2019). Informal labor markets and rural livelihoods: Policy implications for India. *Economic and Political Weekly*, 54(29), 22–29.
3. Government of India. (2023). Annual report 2022–23: Ministry of Rural Development. Ministry of Rural Development. <https://rural.nic.in>
4. Guha, R. (2011). *India after Gandhi: The history of the world's largest democracy*. Picador.
5. Hardiman, D. (1992). *Peasant resistance in India, 1858–1914*. Oxford University Press.
6. Kurien, V. (2007). *I too had a dream*. Roli Books.
7. Ministry of Labour & Employment (MoLE). (2022). Annual report 2021–22. Government of India. <https://labour.gov.in>
8. National Statistical Office (NSO). (2023). Periodic Labour Force Survey (PLFS) 2022–23: Annual report. Ministry of Statistics and Programme Implementation. <https://mospi.gov.in>
9. Singh, A. (2014). Unorganized sector and rural employment in India: Challenges and prospects. *Indian Journal of Labour Economics*, 57(3), 401–420.
10. Thakkar, R. (1985). *Sardar Patel: Nation builder*. Publications Division, Government of India.
11. Government of India. (73 .(1992rd Constitutional.

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# PROBLEMS AND PROSPECTS OF TRIBAL WORKING WOMEN IN SMALL-SCALE INDUSTRIES OF SERAIKELA-KHARSAWAN DISTRICT, JHARKHAND

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## Abstract

The small-scale industry (SSI) sector in Jharkhand plays a critical role in promoting rural employment and sustaining livelihoods, particularly for tribal communities. In Seraikela-Kharsawan district, tribal working women constitute a significant share of the workforce engaged in handicrafts, agro-processing, forest-based industries, and garment production. Despite their contributions, they continue to face systemic barriers, including lack of access to credit, inadequate infrastructure, limited training opportunities, and entrenched patriarchal norms. These constraints perpetuate economic vulnerability and restrict their entrepreneurial growth. However, government initiatives such as the Jharkhand State Livelihood Promotion Society (JSLPS), Mukhyamantri Maiya Samman Yojana (JMMSY), and national-level MSME programmes, along with international projects like the Jharkhand Tribal Empowerment and Livelihoods Project, offer new avenues of empowerment. Innovative practices, including the conversion of unused school buildings into common facility centres, further highlight the potential of localized, community-driven solutions. This paper underscores both the problems and emerging prospects of tribal women in SSIs, advocating for integrated financial, social, and policy measures to transform their role from subsistence-level workers to empowered entrepreneurs.

**Keywords:** Tribal women, Small-scale industries, Seraikela-Kharsawan, Livelihood, Financial exclusion, Self-help groups, Rural development, Jharkhand.

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## Introduction to Seraikela-Kharsawan District of Jharkhand

Seraikela-Kharsawan district, carved out of the erstwhile Singhbhum region in Jharkhand, represents a unique blend of cultural richness and economic potential. The district, with its headquarters at Seraikela, is home to a predominantly tribal population, including communities such as the Ho, Munda, and Santhal, whose livelihoods are closely tied to forest resources, artisanal crafts, and small-scale industrial work (Government of Jharkhand, 2021)<sup>1</sup>. Its proximity to the industrial city of Jamshedpur and the mining belt of West Singhbhum gives it a distinctive

position, where traditional skills and modern industrial dynamics intersect.

Economically, the district reflects the typical dual structure of Jharkhand: while large-scale industries exist in nearby regions, a significant proportion of women from tribal households are employed in **micro and small-scale industries (SSIs)**. These include lac processing, handloom weaving, bamboo craft, leaf plate making, agarbatti rolling, and other cottage industries (Ekka, 2020)<sup>2</sup>. For many women, such enterprises are not only a source of supplementary income but also a means of sustaining household economies in the absence of secure formal employment.

Despite its potential, Seraikela-Kharsawan faces persistent development challenges. Limited infrastructure, poor connectivity in rural interiors, and low levels of literacy among women restrict their ability to access and expand industrial opportunities. Tribal women engaged in SSIs often work under precarious conditions, with low wages, lack of credit support, and minimal exposure to larger markets (Das & Toppo, 2021)<sup>3</sup>. At the same time, social and cultural norms impose additional barriers—mobility restrictions, domestic responsibilities, and limited decision-making power within households further curtail women's economic agency (Kujur, 2020)<sup>4</sup>.

The small-scale industry (SSI) sector has long been regarded as a crucial avenue for generating employment and sustaining rural economies in India. In Jharkhand, particularly in Seraikela-Kharsawan district, SSIs are closely tied to the livelihood strategies of tribal communities. Women from these communities have historically engaged in diverse forms of labour, from handicrafts and forest-based products to agro-processing and garments, often supplementing their households' income while simultaneously managing domestic responsibilities. Yet, their contribution remains undervalued, under-documented, and hindered by structural challenges.

Studies indicate that tribal women in Jharkhand are predominantly engaged in low-value, labour-intensive activities within SSIs. Their roles are often confined to stitching, weaving, pickling, or collecting and processing minor forest produce, where wages are meagre and market opportunities limited (EAS Publisher, 2020)<sup>5</sup>. Despite their industriousness, they face systemic constraints such as lack of credit, minimal access to training, weak infrastructure, and exclusion from decision-making. These factors have created a cycle of economic vulnerability, where women's work is essential but seldom transformative.

Financial exclusion remains a central barrier. Women in SSIs frequently lack collateral or formal credit histories, which prevents them from accessing institutional loans. They are

often compelled to depend on microcredit agencies or informal moneylenders, whose interest rates reduce any surplus generated by their enterprises (Pahle India, 2024)<sup>6</sup>. This financial gap is exacerbated by the absence of adequate working capital, which restricts investments in equipment or scale-up initiatives. As a result, many tribal women remain trapped in subsistence-level entrepreneurship.

Another persistent obstacle relates to skills and technology. Training opportunities are sporadic, and when available, they are rarely tailored to market demands or aligned with evolving consumer preferences. Without exposure to design innovation, packaging techniques, or quality-control standards, women's products struggle to compete in broader markets. Infrastructure deficiencies compound the problem: poor transport connectivity, lack of storage facilities, and inadequate common facility centres create barriers between production and profitable markets (EAS Publisher, 2020)<sup>7</sup>.

Social and cultural dynamics add a further layer of complexity. Patriarchal norms in tribal and rural society often restrict women's mobility, reducing their ability to attend training sessions or explore markets outside their villages. The dual burden of managing domestic work and enterprise activities leaves little time for upskilling or strategic planning. Studies emphasize that any intervention for women's entrepreneurship must acknowledge these social realities, or risk reproducing inequalities (Naveen, 2023)<sup>8</sup>.

Yet, despite these difficulties, several prospects have emerged through government initiatives and innovative livelihood models. The Jharkhand State Livelihood Promotion Society (JSLPS), through its Sakhi Mandal network of women's self-help groups (SHGs), has played a pivotal role in enhancing access to credit, training, and market linkages. SHG federations and producer collectives have shown that women's bargaining power improves when they act collectively rather than individually (Naveen, 2023)<sup>9</sup>. By pooling resources and negotiating as a group, women have secured better prices and diversified their product lines.

## **Govt initiatives**

Government initiatives have also sought to strengthen women's economic agency. The Mukhyamantri Maiya Samman Yojana (JMMSY)<sup>10</sup> provides direct cash transfers to women, enhancing their financial base and enabling small investments into livelihood activities (Government of Jharkhand, 2025)<sup>11</sup>. At the national level, the MSME Ministry's RAMP (Raising and Accelerating MSME Performance) programme and the Strategic Investment Plan for Jharkhand have prioritized rural and tribal entrepreneurship, creating frameworks for financing and skill development (Ministry of MSME.)<sup>12</sup>. In addition, projects supported by international agencies, such as the Jharkhand Tribal Empowerment and Livelihoods Project (IFAD, n.d.)<sup>13</sup>, have promoted sustainable market linkages and enterprise growth among tribal populations.

One particularly innovative example comes from Seraikela-Kharsawan itself, where unused government school buildings have been converted into common facility centres for women's groups. These hubs provide space for production, storage, and training, thereby reducing overheads and enabling women to scale up their enterprises. Reports suggest that such repurposed infrastructure has already boosted incomes and fostered greater self-reliance among women in the district (Times of India, 2025)<sup>14</sup>.

The future prospects for tribal working women in SSIs thus lie in building upon these emerging models. Collective action through SHGs and producer companies can help overcome barriers of scale, while converging financial schemes—combining cash transfers, microcredit, and MSME financing—can create a more robust safety net for women entrepreneurs. Equally important is the need for market-oriented training that equips women with the skills to innovate, package, and brand their products competitively. By addressing both structural constraints and social realities, policymakers can ensure that SSIs evolve from subsistence-level survival strategies into engines of empowerment and growth for tribal women.

Nevertheless, the literature highlights the unevenness of programme delivery and the persistent gaps in last-mile implementation. Many schemes remain poorly integrated, and awareness about entitlements is often limited. Without effective convergence at the district level and gender-sensitive planning, even well-intentioned initiatives may fall short. Future research, particularly field-based surveys in Seraikela-Kharsawan, is essential to quantify the actual impact of these interventions and to refine strategies that can be scaled sustainably.

So, it can be said that tribal working women in the SSIs of Seraikela-Kharsawan embody both the challenges of rural industrialization and the opportunities for inclusive development. While poverty, financial exclusion, and social norms continue to limit their economic potential, government schemes, SHG-based institutions, and innovative infrastructure models are paving pathways for empowerment. The prospects ahead will depend on how effectively these initiatives are converged, localized, and aligned with the lived realities of tribal women.

## **Conclusion**

The study reveals that tribal working women in the SSIs of Seraikela-Kharsawan district represent both the strengths and vulnerabilities of rural industrialization. While their labour sustains household economies and contributes to the SSI sector, systemic challenges—such as poor credit access, lack of market-oriented skills, infrastructural deficits, and restrictive social norms—continue to marginalize them. At the same time, collective institutions like self-help groups, government welfare schemes, and innovative livelihood models are gradually reshaping their prospects. The convergence of financial inclusion, skill development, and infrastructural support is crucial to ensure that women's participation in SSIs transcends subsistence and evolves into meaningful economic empowerment.

## **Suggestions**

The challenges faced by tribal working women in small-scale industries of Seraikela-Kharsawan cannot be resolved without a

multidimensional approach. The district's socio-economic landscape shows that financial instability, lack of skill diversification, infrastructural gaps, and social barriers have restricted the growth potential of women-led enterprises. Therefore, the way forward lies in combining financial support, skill development, infrastructural improvements, and gender-sensitive interventions into a holistic policy framework.

A crucial area is **financial empowerment**. While several schemes such as the Jharkhand Mukhyamantri Laghu Udyog Vikas Yojana (JMMSY), microcredit facilities, and MSME financing mechanisms exist, their fragmented execution often prevents tribal women from

accessing sustainable credit. If these financial instruments are integrated at the district level, women entrepreneurs will gain reliable access to both credit and working capital (Kumar & Singh, 2021).

Equally important is **skill development with a market orientation**. Most women are trained in basic craft or production skills, but the absence of design innovation, packaging knowledge, branding, and digital marketing limits their competitiveness in larger markets (Ekka, 2020)<sup>15</sup>. Training modules that combine traditional skills with modern entrepreneurial know-how can provide tribal women with a competitive edge.

**Table1 : Suggested Measures for Empowering Tribal Working Women in SSIs (Seraikela-Kharsawan)**

Focus Area	Suggested Measures	Expected Outcome
Integrated Financial Support	Convergence of JMMSY, microcredit, and MSME financing at district level	Reliable access to credit and working capital
Skill Development & Market Orientation	Training in design, packaging, branding, digital marketing	Enhanced competitiveness in wider markets
Infrastructure Development	Establishment of common facility centres, storage units, transport connectivity	Reduced overheads, improved efficiency
Strengthening SHGs & Cooperatives	Empowering collective action for credit, resource pooling, and marketing	Better price negotiation and market penetration
Awareness & Outreach	Grassroots campaigns to inform women of schemes and entitlements	Increased participation and utilisation of schemes
Gender-Sensitive Policy Design	Childcare centres, flexible training, safe mobility options	Greater inclusivity and reduced social barriers
Monitoring & Research	Field-based evaluation of policies and their impact	Adaptive and evidence-based policy refinement

Source: Multiple sources by the author

**Infrastructure development** also remains a pressing need. Common facility centres, storage spaces, and improved transport connectivity can significantly reduce overhead costs and improve profitability. Collective resource-sharing through such centres has been found to enhance production efficiency and bargaining power in other tribal regions of India (Mahapatra, 2019)<sup>16</sup>.

The strengthening of **Self-Help Groups (SHGs) and cooperatives** must be a cornerstone of future strategies. SHGs not only facilitate credit access but also empower women to pool resources, negotiate better prices, and penetrate larger markets (NABARD, 2022)<sup>17</sup>. Such collectivisation can help overcome the disadvantages of operating as small individual producers.



Another key suggestion is enhancing **awareness and outreach**. Many tribal women remain unaware of the schemes designed for them due to limited communication channels and cultural barriers. Effective grassroots campaigns, involving local leaders and community-based organisations, can bridge this gap (Das & Toppo, 2021)<sup>18</sup>.

However, interventions must also address **gender-specific barriers**. Restrictions on women's mobility, domestic responsibilities, and safety concerns require policies that integrate childcare facilities, flexible training

schedules, and safe mobility options. Without such gender-sensitive measures, the benefits of financial and infrastructural support will remain underutilised (Kujur, 2020)<sup>19</sup>.

Finally, there is a pressing need for **continuous monitoring and research**. Field-based studies can assess whether policies are truly benefiting tribal women, and provide real-time feedback to refine programmes (Planning Commission, 2013). This dynamic approach can ensure that interventions remain relevant to the lived realities of tribal women working in SSIs.

## References

1. Government of Jharkhand. (2021). District census handbook: Seraikela-Kharsawan. Directorate of Economics and Statistics, Government of Jharkhand.
2. Ekka, A. (2020). Livelihood patterns among tribal women in Jharkhand: Challenges and opportunities. Ranchi: Xavier Institute of Social Service.
3. Das, R., & Toppo, S. (2021). Women in micro and small enterprises: A case of tribal Jharkhand. *International Journal of Rural Development and Social Issues*, 9(2), 45–57.
4. Kujur, J. (2020). Socio-cultural barriers in tribal women's entrepreneurship: Evidence from Jharkhand. *Journal of Tribal Studies and Development*, 15(1), 33–49.
5. EAS Publisher. (2020). *Small scale industries and tribal women of Jharkhand*. East African Scholars Journal of Education & Social Sciences.
6. Pahle India Foundation. (2024). *Challenges and opportunities for tribal women entrepreneurs in MSMEs*.
7. EAS Publisher. (2020). *Small scale industries and tribal women of Jharkhand*. East African Scholars Journal of Education & Social Sciences.
8. Naveen, S. (2023). Tribal women empowerment through entrepreneurship. *National Journal / PMC*.
9. Naveen, S. (2023). Tribal women empowerment through entrepreneurship. *National Journal / PMC*.
10. Government of Jharkhand. (2025). *Mukhyamantri Maiya Samman Yojana*. Retrieved from official state scheme portal.
11. Government of Jharkhand. (2025). *Mukhyamantri Maiya Samman Yojana*. Retrieved from official state scheme portal.
12. Ministry of MSME. (n.d.). *Strategic Investment Plan for Jharkhand (RAMP)*. Government of India.
13. IFAD. (n.d.). *Jharkhand Tribal Empowerment and Livelihoods Project*. International Fund for Agricultural Development.
14. Times of India. (2025, May 31). Repurposed school buildings help in boosting women's incomes in Jharkhand.
15. Ekka, A. (2020). Livelihood patterns among tribal women in Jharkhand: Challenges and opportunities. Ranchi: Xavier Institute of Social Service.
16. Mahapatra, 2019
17. Ministry of Rural Development. (2020). *Annual report on National Rural Livelihoods Mission (NRLM)*. Government of India.
18. Kujur, J. (2020). Socio-cultural barriers in tribal women's entrepreneurship: Evidence from Jharkhand. *Journal of Tribal Studies and Development*, 15(1), 33–49.
19. Planning Commission, 2013.

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# CLIMATE ANXIETY AND ITS INFLUENCE ON WORK-LIFE BALANCE IN COAL INDUSTRIES: A STUDY OF COAL MINERS IN BERMO COAL INDIA LTD, JHARKHAND

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## Abstract

Climate change is increasingly recognized not only for its ecological impacts but also for its psychological consequences, captured in the growing discourse on climate anxiety. This study examines the relationship between climate anxiety and work-life balance among coal miners in the Bermo coalfield of Jharkhand, India—a group simultaneously dependent on and vulnerable to the coal industry. Using a mixed-method design, data were collected from 150 miners through surveys and 20 miners through in-depth interviews. Quantitative analysis revealed a significant negative correlation between climate anxiety and work-life balance ( $r = -0.62, p < 0.01$ ), with environmental worry and job insecurity emerging as the strongest predictors of imbalance. Younger miners (31–40 years) reported higher levels of anxiety compared to older miners, indicating demographic variations in vulnerability. Qualitative findings highlighted themes of eco-guilt, anticipatory fear, and occupational stress spilling over into family dynamics, further disrupting personal well-being. The study contributes to climate psychology and occupational research by extending the scope of climate anxiety beyond urban youth and activist groups to industrial labor. Practical implications include the integration of counseling services, flexible work arrangements, family-inclusive welfare programs, and policy interventions within the framework of a just transition to sustainable energy. Overall, the findings underscore that climate anxiety is not only an ecological concern but also an occupational and social determinant of miners' well-being, demanding coordinated organizational, community, and policy responses.

**Keywords:** Climate Anxiety; Work-Life Balance; Coal Miners; Occupational Stress; Bermo Coalfield; Just Transition; Jharkhand; Environmental Psychology; Industrial Labor; Mental Health

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## 1. Introduction

### 1.1 Background of the Study

Climate change has emerged as one of the most pressing challenges of the twenty-first century, not only for its ecological consequences but also for its psychological and socio-economic implications. Rising global temperatures, erratic rainfall, extreme weather events, and pollution have increasingly generated feelings of fear, worry, and distress among populations

worldwide. These psychological responses are often categorized under the term *climate anxiety*. Unlike general anxiety disorders, climate anxiety is specific to concerns about the environment, ecological degradation, and the perceived inadequacy of human action to mitigate climate change. In India, coal remains a dominant source of energy, accounting for nearly 70% of electricity generation (Ministry of Coal, 2023). Jharkhand is among the most resource-rich states in the country, housing major coalfields that sustain national energy

requirements. The Bermo coalfield, managed under Coal India Ltd, has historically been an important site for extraction, providing livelihood opportunities for thousands of workers. While coal mining continues to contribute substantially to India's economic growth, it is also a sector heavily scrutinized for its contribution to carbon emissions, environmental degradation, and occupational health hazards.

Coal miners represent a unique group at the intersection of ecological and occupational vulnerability. On one hand, their livelihood depends on an industry that is a leading cause of environmental decline; on the other, they directly experience the consequences of climate change through air pollution, resource depletion, and local environmental hazards. This paradox creates fertile ground for the experience of climate anxiety. Moreover, the long working hours, hazardous conditions, and job insecurity prevalent in the coal sector exacerbate stress levels, often spilling over into family life. This phenomenon disrupts *work-life balance*, a concept that refers to the ability to effectively manage professional responsibilities alongside personal and family obligations.

## 1.2 Statement of the Problem

Although climate anxiety has been studied extensively in urban contexts, youth populations, and among environmental activists, there is a notable lack of research on its impact within occupational groups directly tied to fossil fuel industries. For coal miners in Jharkhand, the dual pressures of occupational stress and environmental awareness create a complex psychological landscape. Climate anxiety may not only affect their mental well-being but also their ability to maintain harmony between work and family life. The Bermo coalfield offers a critical site for investigation. As a region where mining activities dominate both the economy and local identity, miners and their families are particularly exposed to ecological hazards. The impact of climate anxiety on these miners' work-life balance remains underexplored, presenting a research gap that this study seeks to address.

## 1.3 Significance of the Study

This research is significant in multiple ways. First, it expands the scope of climate anxiety research by focusing on a population often overlooked in academic discourse: coal miners. Second, it contributes to occupational psychology by exploring how ecological concerns intersect with traditional sources of work-related stress. Third, the study provides insights for policymakers and corporate stakeholders, particularly Coal India Ltd, about the importance of integrating mental health and well-being initiatives within the framework of a just transition to sustainable energy.

## 2. Literature Review

### 2.1 Understanding Climate Anxiety

Climate anxiety is a relatively recent conceptualization within psychology, but one that has gained substantial attention as climate change becomes more evident in daily life. Clayton and Karazsia (2020) describe it as a chronic fear of environmental catastrophe, marked by persistent worry, insomnia, helplessness, and difficulties in coping with ecological uncertainty. Unlike general stress, which may be situational or temporary, climate anxiety is rooted in the anticipation of long-term, global consequences. While much of the early research on climate anxiety focused on urban youth, activists, and students, recent scholarship has highlighted its broader social implications. For example, Hickman et al. (2021) found that young people across diverse nations express high levels of climate-related distress, often linking it to distrust in governments and feelings of intergenerational injustice. However, there remains limited exploration of how climate anxiety manifests in rural, working-class, or occupationally vulnerable populations.

### 2.2 Occupational Stress in Coal Mining

Coal mining has long been considered one of the most dangerous occupations, not only because of physical hazards but also because of its long-term health consequences. Prolonged exposure to coal dust results in respiratory

diseases such as pneumoconiosis and silicosis, while underground mining involves risks of collapse, explosions, and heat stress. Beyond physical risks, mining creates psychological pressures arising from extended working hours, unsafe conditions, and limited upward mobility (Kumar & Mishra, 2019). Studies on occupational stress suggest that coal miners experience higher-than-average levels of job

strain, fatigue, and emotional exhaustion compared to workers in other sectors. Stress from mining work is not confined to the workplace; it often influences family dynamics, leading to marital conflict, neglect of childcare responsibilities, and reduced social interaction (Das, 2020). These findings suggest that miners' work-life balance is inherently fragile, making them particularly susceptible to

**Table-2 Mean Scores of Climate Anxiety Dimensions**

Dimension	Mean	SD
Worry about environmental damage	3.86	0.91
Fear of extreme weather events	3.54	0.87
Job insecurity due to climate	3.71	0.95
Psychological distress	3.42	0.89

Scale: 1 = Strongly Disagree; 5 = Strongly Agree

*Interpretation:* Results indicate high climate anxiety among coal miners, particularly regarding *environmental degradation* and *job insecurity*.

### 8.3 Work-Life Balance Perception

Work-life balance (WLB) was assessed through parameters such as *time for family, rest, health, and social interaction*.

**Table-3 Work-Life Balance Indicators**

Indicator	Mean	SD
Time for family	2.91	0.98
Rest and recovery	2.76	0.88
Social life & community	2.65	0.91
Mental health & resilience	2.84	0.93

Scale: 1 = Very Poor; 5 = Very Good

*Interpretation:* Work-life balance scores are relatively low, suggesting that climate anxiety and job demands are intruding into personal life.

### 8.4 Correlation Analysis

To test **H1**: Climate anxiety is negatively correlated with work-life balance, Pearson's correlation was applied.

**Table-4 Correlation between Climate Anxiety and Work-Life Balance**

Variables	Climate Anxiety	Work-Life Balance
Climate Anxiety	1	-0.62**
Work-Life Balance	-0.62**	1

Here. **p < 0.01**

*Interpretation:* A strong **negative correlation** indicates that higher climate anxiety is associated with poorer work-life balance, confirming **H1**.

### 8.5 Regression Analysis

A regression model was used to test **H2, H3, and H4**.

**Table- 5 Regression Model: Climate Anxiety Predicting Work-Life Balance**

Predictor	Beta ( $\beta$ )	t-value	Sig. (p)
Environmental worry	-0.32	-4.21	0.001**
Job insecurity	-0.29	-3.87	0.002**
Psychological distress	-0.25	-3.12	0.004**
Age	0.11	1.64	0.10 (ns)
Experience	0.09	1.28	0.20 (ns)

$R^2 = 0.48$ ;  $F = 26.34$ ,  $p < 0.001$

*Interpretation:* Climate anxiety variables significantly predict 48% of variance in work-life balance. Job insecurity and environmental worry are the strongest predictors.

### 8.6 ANOVA – Age and Climate Anxiety

To examine if age influences climate anxiety (H3), a one-way ANOVA was conducted.

**Table-6 ANOVA – Age and Climate Anxiety**

Age Group	Mean Climate Anxiety	F-value	Sig.
20–30	3.72		
31–40	3.95	5.12	0.003**
41–50	3.88		
Above 50	3.41		

## 8. Discussion

The study explored the relationship between climate anxiety and work-life balance (WLB) among coal miners in Bermo, Jharkhand, and found a significant negative correlation, confirming that higher climate anxiety reduces miners' ability to balance work and personal life. Younger miners reported greater anxiety, likely due to increased exposure to climate change discourses, while emotional dimensions such as worry, fear, and helplessness were the strongest predictors of poor WLB. These findings highlight that climate anxiety is not just a personal stressor but an emerging occupational challenge, affecting mental health, family life, job engagement, and workforce stability, aligning with the Job Demands–Resources (JD-R) model. The study extends existing research beyond urban and student populations to industrial workers, showing that miners face a paradox of relying on coal for livelihood while experiencing anxiety over its ecological unsustainability. Practical implications include organizational interventions such as counseling, stress-management, and awareness programs,

alongside policy-level measures for a just transition that address both economic and psychological dimensions. Community-based strategies are also vital to build resilience and prevent collective stress in mining towns. However, the study's cross-sectional design, reliance on self-reports, and focus on a single coalfield limit its generalizability. Future research should adopt longitudinal approaches and compare different industrial sectors to better understand how occupational contexts shape climate anxiety and its impact on work-life balance.

## 10. Conclusion and Recommendations

The present study examined the relationship between climate anxiety and work-life balance (WLB) among coal miners in Bermo, Jharkhand, revealing that climate anxiety is both a psychological condition and a socio-environmental determinant of well-being. Results showed a significant negative correlation between climate anxiety and WLB, with younger and more educated miners reporting higher anxiety due to greater exposure to climate discourse and long-term occupational uncertainty. Emotional dimensions such as eco-guilt, anticipatory fear,

and lack of institutional support emerged as key predictors of poor WLB, highlighting how environmental concerns spill over into family life, social relations, and community participation. These findings extend existing research, which largely focuses on students and urban populations, by situating climate anxiety within industrial labor, a group simultaneously dependent on and vulnerable to unsustainable industries.

Practically, the study emphasizes the need for organizational and policy-level interventions. Coal India Ltd. should integrate mental health support, counseling, stress management, and transparent communication on transition strategies to mitigate climate-related anxieties. Work-life balance programs—such as flexible shifts, family-inclusive welfare schemes, and community-based resilience initiatives—can buffer stress and foster social cohesion in mining towns. For policymakers, climate anxiety must be addressed as part of just transition frameworks, alongside retraining and economic security, to ensure a smooth and sustainable energy shift. In conclusion, climate anxiety significantly impacts miners' occupational and personal lives, demanding coordinated responses from organizations, communities, and policymakers to safeguard both worker resilience and sustainable development.

## References

1. American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). Washington, DC: Author.
2. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
3. Clayton, S., & Karazsia, B. (2020). Development and validation of a measure of climate change anxiety. *Journal of Environmental Psychology*, 69, 101434. <https://doi.org/10.1016/j.jenvp.2020.101434>
4. Clayton, S., & Manning, C. (2018). *Psychology and climate change: Human perceptions, impacts, and responses*. Academic Press.
5. Cunsolo, A., & Ellis, N. R. (2018). Ecological grief as a mental health response to climate change-related loss. *Nature Climate Change*, 8, 275–281. <https://doi.org/10.1038/s41558-018-0092-2>
6. Das, S. (2020). Occupational stress and work-life balance in Indian coal miners. *Indian Journal of Industrial Relations*, 55(2), 221–234.
7. Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
8. Fisher, G. G., Bulger, C. A., & Smith, C. S. (2009). Beyond work and family: A measure of work/nonwork interference and enhancement. *Journal of Occupational Health Psychology*, 14(4), 441–456.
9. Hickman, C., Marks, E., Pihkala, P., Clayton, S., Lewandowski, R. E., Mayall, E. E., Wray, B., Mellor, C., & van Susteren, L. (2021). Climate anxiety in children and

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# TRANSFORMATIVE RESEARCH APPROACHES FOR CONTEMPORARY EDUCATIONAL ISSUES IN THE 21ST CENTURY

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**Abstract**

The effects brought on by globalization and technological advancement has surely brought on certain changes to the way things are done in the education sector. In the 21st century, reformation of the educational research landscape focuses on innovation, equity, and contextual conditions. The study set out with multiple objectives to explore the role of transformative research in contemporary education. A qualitative research method used for this study and 40 Teachers and 10 Teacher Educators are the samples. Findings indicated that 74% of the respondents expressed positive results from action or participatory research, such as enhanced student engagement and retention where culturally contextual interventions were employed. The research accentuated system support through provision of time to the teachers for carrying out research, recognition through promotion in careers, and incentives in order to facilitate community-based research. Policy loopholes were developed despite such necessities, showing an unfinished stage of policy document and transformative research.

**Keywords:** Transformative Research, Globalization, Technological Advancement, Innovation, Contemporary Education

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**Introduction**

The effects brought on by globalization and technological advancement has surely brought on certain changes to the way things are done in the education sector. Over the years many issues such as gaps in socio-

emotional learning, digital divides, the differences in learners' needs, the need for engagement in learners, as well as the need for inclusive sustainable teaching (Schleicher 2018, UNESCO 2020) pedagogies have appeared. It has become evident that education systems struggle to keep up with

the increasing conveniences and demands that come with modernity. This is largely attributed to conventional research methods which often are insufficient for dealing with the intricacies and intricately connected problems that modern education poses (Anderson & Shattuck 2012, Biesta 2010).

Research designed to bring about reforms and changes in the educational sector focuses on the argument of structural dominance for change. Unlike other forms of research, such as the conventional argumentative type, which seeks to achieve general findings, and which seeks to control and manipulate the subject of study, this dominant mode of research focuses on change and equity that is contextually relevant. This is done by defining the research methodology in terms of participation, action, and problem (Mertens 2009, Creswell & Plano Clark 2017). Such research works focus on the structural barriers to education that are systemic, such as gender inequality, socio-economic status, and culture (Banks & Banks 2019, Gay 2018). Relevant issues of the 21st century have to be solved using cross-disciplinary frameworks combining educational concepts, technological adaptation, sociology, and psychology. For example, there is a rise in the adoption of design-based research (DBR), action research, and critical pedagogy frameworks among researchers for coproduction with practitioners so that the research is ‘valid and useful’ (Brown, 1992; Barab & Squire, 2004; Freire, 1970/2000). These approaches disturb the status quo, and seek to reconceptualize the classroom as a space of power, and socially just learning. The COVID-19 pandemic exposed the weaknesses of the standard schooling approach in terms of access, participation, and the overall preparedness of teachers for online instruction (Reimers & Schleicher, 2020). This has made the world much more insistent on transformative research during the so-called post-pandemic recovery period including new community models of blended learning, digital pedagogy,

and schooling (Salmon, 2019; Zhao, 2020). This paper aims to understand and analyze transformative research as an approach to address the 21st century learning issues. It requires a redesign of research design not only to address present problems but also to foretell future education needs. Through exploring new, inclusive, and contextual approaches, the present study aims to start dialogue on educational change in today's digital, global, and multicultural world.

## **Review of Related Literature and Conceptual Framework**

In the 21st century, reformation of the educational research landscape focuses on innovation, equity, and contextual conditions. Literature asserting that research, in the positivist sense, stems from a dominant tradition and that such research practices, while necessary, are insufficient in clarifying modern educational complexities

(Biesta, 2010; Mertens, 2009). Scholars such as Anderson and Shattuck (2012) propose design-based research (DBR) as a flexible, iterative, and theory-practice synthesis approach to generate contextually relevant outcomes. Similarly, action research, as Carr and Kemmis (1986) argue, places the student and the teacher on the research frontline so they can partake in the process of educational reform. Freire (1970/2000) laid the theoretical framework of critical pedagogy which, to some extent, justifies the theory of emancipatory research in the context of teaching practices on the premise of dialogue, freedom, and social justice. Later works by Banks and Banks (2019) and Gay (2018) underline the absence of culturally responsive pedagogy and research in teaching and learning, particularly relevant to post-colonial, multilingual, and multi-ethnic communities. The impact of the COVID-19 pandemic has significantly increased the applicability of transformative research approaches, which exposed inequalities in digital access, teaching quality, and



emotional well-being (Reimers & Schleicher, 2020). Zhao (2020), Salmon (2019) and educational literature research both argue and support the notion that the 21st century has fundamentally changed the educational landscape with its focus on innovation, equity and context. There is an increasing body of literature that recognizes that mainstream positivist research approaches, important as they are, leave much to be desired in dealing with complex and dynamic phenomena in current education (Biesta, 2010; Mertens, 2009). Scholars such as Anderson and Shattuck (2012), advocate for design-based research (DBR) in the facilitation of context appropriate solutions as it is flexible and integrates theory and practice. In the same way, action research, as Carr and Kemmis (1986) argue, positions the learner and the teacher as primary agents of the research so that they can participate actively in the process of educational change. The theory of critical pedagogy by Paulo Freire (1970/2000) is the cornerstone for emancipatory research in the practice of teaching that advocates for true dialogue, emancipation, and social justice. The works of Banks and Banks (2019) as well as Gay (2018) focus on culturally relevant pedagogy and teaching within the context of multicultural, especially post-colonial, multilingual, and multi-ethnic settings. The relevance of transformative approaches to research has increased dramatically in the aftermath of the COVID-19 pandemic.

### **Research Questions:**

1. What are the defining features of transformative education research?
2. What aspects of the 21st century school system offer challenges that need to be addressed through such approaches?
3. What impacts have the strategies had on educational reform and inclusion?
4. What are the implications for educational policy and practice?

### **Objectives:**

1. To examine the role of Transformative Research approaches on the solution of current educational challenges.
2. To explore the nature and features of Transformative research designs.
3. To analyse the transformative approach's capacity to foster equity, innovation, and sustainability in education.
4. To analyse the Transformative Research approaches' relevance and role in solving real-life issues.

### **Hypotheses:**

1. There is no relationship between transformative research practices and the success of educational interventions.
2. The role of transformative research does not touch equitable access to education.
3. The role of transformative research does not touch equitable access to student engagement.

### **Methodology**

**Method:** A qualitative research method used in this study.

**Population:** All the government teacher and Teacher Educators of Darbhanga District are the population of the study.

**Sample and Sampling Techniques:** Through purposive sampling method total 50 (Teachers: 40, Teacher Educators: 10) were selected for the study.

### **Analysis and Interpretation**

The study set out with multiple objectives to explore the role and impact of transformative research in contemporary education. Summary of Responses from Participants (N = 50)

**Table 1 : Analysis and Interpretation**

S. No.	Item/Question	Category	No. of Respondents	Percentage (%)
1	Familiarity with action research	Teachers (n = 40)	28	70%
2	Practiced action research in classroom	Teachers (n = 40)	12	30%
3	Support for integrating participatory research in teacher training	Teacher Educators (n = 10)	10	100%
4	Belief that transformative research enhances student engagement	Teachers (n = 40)	35	87.5%
5	Identified lack of institutional support as a barrier	Teachers (n = 40)	30	75%
6	Reported lack of time due to syllabus pressure	Teachers (n = 40)	32	80%
7	Recommended curriculum revision to include action/design-based research	Teacher Educators (n = 10)	9	90%
8	Used community-based or culturally relevant examples in teaching	Teachers (n = 40)	22	55%
9	Willingness to adopt innovative research methods with proper training/support	Teachers (n = 40)	36	90%
10	Perceived improvement in student critical thinking due to research-based strategies	Teachers (n = 40)	34	85%

The interviews with teachers and educators showed in Objective 1 that transformative research is participatory, inclusive, and context sensitive. It was defined as addressing classroom dilemmas, fostering collaborative inquiries, and encouraging continuous reflection. The understanding supports that transformative research is not a mere abstraction; it is an ever-evolving process of knowledge co-construction by teachers and researchers. This is in consonance with Mertens' (2009) stance that transformative paradigms are locally grounded and integrate social justice. Objective 2 focused on identifying key education issues of the 21st century that call for revolutionary research. The most commonly cited issues were the digital divide and differential access (84%), language and cultural diversity (76%), learning by rote and examination-cantered pedagogy (66%), lack of teacher autonomy in curriculum reform (60%), and students' socio-emotional challenges (58%). These results point to the fact

that contemporary educational problems are structural and situational, rather than instrumentally individual, and require insightful research that is different from the conventional approaches to identify the root causes. In regard to Objective 3, the purpose of the case study was to evaluate the effectiveness and purpose of transformative research. A majority of the participants (74%) described having a favourable experience with action or participatory research projects, with a significant portion indicating greater student engagement and equity when culturally responsive and community-based methods of instruction were used. For instance, a number of educators indicated that the incorporation of local narratives and vernacular resources helped to lower the rate of attrition. Such findings provide support for the rejectable null hypothesis  $H_{02}$ , which states that transformative research has a positive impact on student engagement and equity. Objective 4 examined the extent to which transformative research

promotes equity, innovation, and sustainability. Evidence showed that 72% of the respondents were aware of equity-oriented effects, 68% noticed pedagogical innovations, and 50% experienced long-term classroom effects. Though evidence is clearly evident across transformative research, equity, and innovation relationships, sustainability is less clear due to institutional constraints as well as limitations on fund management. The implication is hence a partial rejection of null hypothesis  $H_{01}$ , i.e., transformative research does inform effective interventions but long-term sustainability is largely subject to extrinsic support mechanisms. Objective 5 addressed the implications of transformative research for practice and policy. The respondents stressed the significance of systemic acknowledgment of action research conducted by teachers in career growth, provision of research time to teachers, and motivating community-based research. The interpretation suggests that in order for transformative research to yield policy relevant implications, it has to be officially included within teacher education programs, made compulsory in the National Education Policy, and ingrained in school based reforms. Today, there is a gap between research findings and policy implementation, and one must bridge this gap to obtain educational equity and innovation. In conclusion, the match of findings with objectives and hypotheses confirms that transformative research is inclusive, reflective, and context-based (Objective 1); it responds immediately to urgent challenges of the digital divide, inclusivity, and rote systems (Objective 2); it has observable positive effects on equity and engagement in that  $H_{02}$  was rejected (Objective 3); it shows significant but moderate correlation with innovation and equity outcomes, that partially rejected  $H_{01}$  (Objective 4); and that demands immediately that policy intervention is needed to institutionalize its effects (Objective 5). The general conclusion corroborates that although transformative research is a viable instrument in propelling equity, innovation, and context-aware solutions in education, its sustainable long-term prospects and policy incorporation are still main dilemmas.

## **Findings of the Study**

The initial aim of the study was to investigate the nature and nature of transformative research designs in the context of education in the 21st century. Findings indicated that transformative research is context led, reflective, and inclusive; tackles actual classroom realities, encourages co-construction of knowledge, and facilitates continuous professional learning. The second aim was to pinpoint the key educational concerns of the 21st century that require transformative research methodologies. The study highlighted critical concerns such as the digital divide and unequal access (84%), language and cultural inclusivity (76%), rote and exam-centric pedagogy (66%), lack of teacher autonomy (60%), and socio-emotional issues (58%). The third objective examined the significance and effectiveness of transformative research in addressing real-world educational problems. Findings indicated that 74% of the respondents expressed positive results from action or participatory research, such as enhanced student engagement and retention where culturally contextual interventions were employed. This led to the rejection of hypothesis  $H_{02}$  and  $H_{03}$  verifying that transformative research makes a positive contribution to equity and student engagement. The fourth objective sought to establish the level at which transformative research ensures education equity, innovation, and sustainability. Outcomes revealed high equity-oriented results (72%), good pedagogical innovation (68%), and poor long-term impact (50%). Yet, sustainability was weak because of a lack of institutional support. Therefore, hypothesis  $H_{01}$  was rejected partially, given that relationships between transformative research and equity/innovation existed but sustainability was weak. Finally, the fifth goal aimed to consider transformative research implications on education policy and practice. The research accentuated system support through provision of time to the teachers for carrying out research, recognition through promotion in careers, and incentives in order to facilitate community-based research. Policy loopholes were developed despite such necessities, showing an unfinished stage of policy document and transformative research.

## **Discussion**

The results of the current research illustrate that research methodologies of transformative change are becoming increasingly pertinent in addressing the urgent issues of 21st-century education. The answers provided by educators and teachers unremittably refer to the fact that traditional positivist research practices are routinely inadequate for solving the complexities of contextualized educational dilemmas like the digital divide, cultural diversity, exam-culture pedagogy, and socio-emotional issues. Rather, participatory and action-oriented methods seem to have more potential for generating rich, equity-focused, and sustainable results. The results support Biesta's (2010) critique of prevailing research paradigms that contribute more to objectivity and generalizability than to context and relevance. According to Mertens (2009), transformative research in this study was participatory, context-specific, and socially equitable, highlighting its utility as a catalyst for educational reform. Teachers' focus on classroom-based action research aligns with Anderson and Shattuck's (2012) invitation for design-based research (DBR) that intervenes between theory and practice by providing iterative and adaptive solutions. Similarly, examples where instructors included mother-tongue instruction and local narratives in teaching align with Freire's (1970/2000) principles of critical pedagogy where education is a practice of liberty and empowerment. One of the major contributions of the research is the evidence it offers that social change research is not theoretical but practically successful in improving student engagement, equity, and persistence. With 74% of the respondents having had positive experiences with participatory research, evidence supports the rejection of H<sub>02</sub>. These findings resonate with Gay's (2018) call for culturally responsive pedagogies and Banks and Banks' (2019) support for multicultural inclusivity as vital to today's classrooms. However, the study also revealed limitations in regard to sustainability. Notwithstanding that transformative research encourages equity and innovation (72% and 68% respectively), long-term contribution was documented by merely half of the interviewed

respondents. This tells us that while transformative research is connected to desirable outcomes, institution support, policy recognition, and resources are the turning point. This partial rejection of H<sub>01</sub> echoes Creswell and Plano Clark's (2017) point that mixed-methods and participatory methods must be embedded within systems to become mainstream practice. Policy implications are especially significant. Respondents repeatedly emphasized the absence of structural support for teacher conducted research. Without proper time allotments, career recognition, and community-based research incentives, transformative methodologies may remain isolated practices instead of systemic reforms. This result corresponds with the focus of UNESCO (2020) and OECD's (Schleischer, 2018) on educational equity, sustainability, and global citizenship as underlying policy objectives. In addressing such expectations, national policies like India's NEP 2020 need to officially institutionalize transformative school-based practices and teacher education research.

## **Conclusion**

This research informs that transformative research methods are both engaging and effective in responding to the multi-faceted challenges of education in the 21st century. Transformative research is inclusive, reflective, and context-specific, and it responds to critical concerns such as the digital divide, cultural diversity, and exam-oriented practices through empowering teachers and students as co-constructors of knowledge. The findings confirm that transformative research has a measurable positive impact on student engagement and equity, while also fostering pedagogical innovation. Meanwhile, sustainability is also a major issue because of the lack of institutional and policy backing. To ensure long term impact for transformative research, it needs to be officially incorporated into teacher training, professional development, and policy systems. Closing the loop between policy systems and research practice will be critical to ensuring that transformative methods not just address the needs of the moment but also anticipate uncertainty. In short,

transformative research is not an alternate paradigm but an imperative in a time of unparallel technological, social, and cultural transformation. Through its synthesis of inclusivity, participatory involvement, and locally relevant inquiry, it has the promise to recast educational research as a participatory, justice-focused, and sustainable science.

## References

1. Anderson, T., & Shattuck, J. (2012). Design-based research: A decade of progress in education research? *Educational Researcher*, 41(1), 16–25. <https://journals.sagepub.com/doi/10.3102/0013189X11428813>
2. Banks, J. A., & Banks, C. A. M. (2019). *Multicultural education: Issues and perspectives* (10th ed.). Wiley. <https://www.wiley.com/en-us/Multicultural+Education%3A+Issues+and+Perspectives%2C+10th+Edition-p-9781119511564>
3. Barab, S., & Squire, K. (2004). Design-based research: Putting a stake in the ground. *The Journal of the Learning Sciences*, 13(1), 1–14. [https://www.tandfonline.com/doi/abs/10.1207/s15327809jls1301\\_1](https://www.tandfonline.com/doi/abs/10.1207/s15327809jls1301_1)
4. Biesta, G. (2010). *Good education in an age of measurement: Ethics, politics, democracy*. Routledge. [https://www.routledge.com/Good-Education-in-an-Age-of-Measurement-EthicsPoliticsDemocracy/Biesta/p/book/9781594517914?srsltid=AfmBOoplSJkKyek5BHVgCbW-KWE9LhBPRojj3Iyiy\\_wTcttcCX7Jr4ip](https://www.routledge.com/Good-Education-in-an-Age-of-Measurement-EthicsPoliticsDemocracy/Biesta/p/book/9781594517914?srsltid=AfmBOoplSJkKyek5BHVgCbW-KWE9LhBPRojj3Iyiy_wTcttcCX7Jr4ip)
5. Brown, A. L. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *Journal of the Learning Sciences*, 2(2), 141–178. [https://www.tandfonline.com/doi/abs/10.1207/s15327809jls0202\\_2](https://www.tandfonline.com/doi/abs/10.1207/s15327809jls0202_2)
6. Carr, W., & Kemmis, S. (1986). *Becoming critical: Education, knowledge and action research*. Falmer Press. <https://www.taylorfrancis.com/books/m>
7. Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications. [https://books.google.co.in/books/about/Designing\\_and\\_Conducting\\_Mixed\\_Methods\\_R.html?id=eTwmDwAAQBAJ&redir\\_esc=y](https://books.google.co.in/books/about/Designing_and_Conducting_Mixed_Methods_R.html?id=eTwmDwAAQBAJ&redir_esc=y)
8. Freire, P. (2000). *Pedagogy of the oppressed* (30th anniversary ed.). Bloomsbury Academic. (Original work published 1970) [https://files.libcom.org/files/Paulo%20Freire,%20Myra%20Bergman%20Ramos,%20Donaldo%20Macedo%20%20Pedagogy%20of%20the%20Oppressed,%2030th%20Anniversary%20Edition%20\(2000,%20Bloomsbury%20Academic\).pdf](https://files.libcom.org/files/Paulo%20Freire,%20Myra%20Bergman%20Ramos,%20Donaldo%20Macedo%20%20Pedagogy%20of%20the%20Oppressed,%2030th%20Anniversary%20Edition%20(2000,%20Bloomsbury%20Academic).pdf)
9. Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press. <https://eric.ed.gov/?id=ED581130>
10. Mertens, D. M. (2009). *Transformative research and evaluation*. Guilford Press. <https://www.guilford.com/books/Transformative-Research-and-Evaluation/Donna-Mertens/9781593853020?srsltid=AfmBOorYJW4tkcmjNEFDpyABpDTfui4Z65Zw1TltO473yoFvRfO3i1k>
11. Reimers, F. M., & Schleicher, A. (2020). *A framework to guide an education response to the COVID-19 pandemic of 2020*. OECD Publishing. [https://www.oecd.org/content/dam/oecd/en/publications/reports/2020/03/a-framework-to-guide-an-education-response-to-the-covid-19-pandemic-of-2020\\_a5bcbd8a/6ae21003-en.pdf](https://www.oecd.org/content/dam/oecd/en/publications/reports/2020/03/a-framework-to-guide-an-education-response-to-the-covid-19-pandemic-of-2020_a5bcbd8a/6ae21003-en.pdf)
12. Salmon, G. (2019). *E-moderating: The key to online teaching and learning* (4th ed.). Routledge. <https://www.taylorfrancis.com/books/m>
13. Schleicher, A. (2018). *World class: How to build a 21st-century school system*. OECD Publishing. <https://www.oecd.org/content/dam/oecd/>

- en/publications/reports/2018/05/world-class\_g1g8d583/9789264300002-en.pdf
14. UNESCO. (2020). Education in a post-COVID world: Nine ideas for public action. United Nations Educational, Scientific and Cultural Organization. <https://www.unesco.org/en/articles/education-post-covid-world-nine-ideas-public-action>
15. Zhao, Y., Emler, T. E., Snethen, A., & Yin, D. (2020). *An Education Crisis Is a Terrible Thing to Waste: How Radical Changes Can Spark Student Excitement and Success*. Teachers College Press. [https://www.researchgate.net/publication/335703345\\_An\\_Education\\_Crisis\\_Is\\_a\\_Terrible\\_Thing\\_to\\_Waste\\_How\\_Radical\\_Changes\\_Can\\_Spark\\_Student\\_Excitement\\_and\\_Success](https://www.researchgate.net/publication/335703345_An_Education_Crisis_Is_a_Terrible_Thing_to_Waste_How_Radical_Changes_Can_Spark_Student_Excitement_and_Success)

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# DETERMINANTS OF DIGITAL BANKING ADOPTION AMONG YOUNG ADULTS: A STUDY IN DIBRUGARH DISTRICT OF ASSAM

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## **Abstract:**

The primary objective of this study is to examine the usage patterns of digital banking products among students, with special reference to the Dibrugarh district of Assam. The study aims to explore various aspects of e-banking services and to identify the key factors that influence students' willingness to adopt and utilize digital banking platforms. Primary data were collected from 200 student respondents through a structured questionnaire. To assess the impact of various socioeconomic and demographic variables on digital banking adoption, a binomial logistic regression analysis was employed. The results of the estimated logit model reveal that factors such as monthly allowance, educational background, digital literacy, and access to internet-enabled devices have a positive and significant effect on students' likelihood of using digital banking services. The findings provide valuable insights for policymakers, financial institutions, and educators in promoting financial inclusion and digital financial literacy among the youth.

**Keywords:** Customers' satisfaction, Digital banking, e-banking products, , Higher institutions.

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**INTRODUCTION:** With the rapid advancement of information and communication technology, the banking sector in India has undergone a significant transformation. Digital banking has emerged as a convenient and efficient mode of financial transaction, especially among the younger population who are more technologically inclined. The shift from traditional banking to digital platforms has been accelerated by initiatives under the Government of India's flagship program "Digital India," which aims to enhance digital infrastructure and promote financial inclusion through accessible online services. Among the various demographic groups, students, particularly those enrolled in institutions of higher education; represent a key segment of digital banking users. Their increasing reliance on smartphones, internet access, and digital payment systems has contributed to a noticeable rise in the adoption of online financial services such as mobile banking, internet banking, Unified Payments

Interface (UPI), e-wallets, and other digital payment tools. These services offer flexibility, reduce the need for physical banking visits, and align well with students' fast-paced lifestyles. Dibrugarh, a major educational and commercial hub in upper Assam, houses a range of higher education institutions, including D.H.S.K College, M.D.K.G College, Dibru College, Assam Medical College, Dibrugarh Polytechnic, and Dibrugarh University, among others. Students from these institutions are exposed to various digital platforms and services, making them an ideal population for studying patterns in digital banking adoption. However, despite growing usage, gaps remain in understanding the factors that influence their adoption behaviour and perceptions regarding ease of use, usefulness, security, and internet accessibility.

This study aims to explore the perception and usage of digital banking services among students in Dibrugarh district, with a specific

focus on identifying the key determinants that influence their acceptance and usage of such services. A total of 200 students from different colleges and universities in Dibrugarh were surveyed to gather relevant data. The findings of this research can provide valuable insights for banks and policymakers to tailor digital financial services that cater more effectively to the needs and preferences of student users.

## **REVIEW OF LITERATURE:**

In 2012 a study conducted in Jordan, Smadi employed the Technology Acceptance Model (TAM) alongside the Theory of Planned Behaviour (TPB) to investigate the factors influencing customers' adoption of digital banking services. Based on data collected from 387 respondents through a structured questionnaire, the study revealed that uncertainty avoidance significantly affected users' perceptions of ease of use. The study conducted by Mavhiki and Shumba (2015) highlights a shift in banking practices, showing that services once offered through traditional banking have increasingly been substituted by digital banking solutions. The digitalization of conventional banking has led to the emergence of a technology-driven banking system, offering customers enhanced convenience and cost efficiency. Factors such as accessibility, ease of use, timeliness, and reduced expenses play a crucial role in shaping customer satisfaction. While traditional banking has not been entirely replaced, it has been significantly influenced and enhanced by the introduction of these digital innovations (Severino & Tonderai, 2017). According to Ahn and Lee (2019), electronic banking services can be categorized based on their reliance on internet connectivity. The first category includes conventional banks that offer supplementary digital services, such as mobile or internet banking, alongside their physical branches. The second category comprises fully digital banks, which operate entirely online to cater to customers who prefer managing their banking activities without visiting a brick-and-mortar branch. According to Ahmed and Sur (2021), digital banking also referred to as digital-only, internet-only, virtual, or branchless banking; offers a fully online platform that enables customers to

perform a wide range of traditional banking functions. These include applying for financial products, managing accounts, making deposits and transfers, handling payments and loans, investing in mutual funds, and accessing various integrated services, all from the convenience of their devices.

## **OBJECTIVES OF THE STUDY:**

1. To examine the usage patterns of digital banking services among students in the Dibrugarh district of Assam.
2. To identify and analyse the key socio-economic and technological factors influencing students' adoption of digital banking services.

## **METHODOLOGY:**

The present study is based on both primary and secondary data. Secondary data were obtained from relevant books, research journals, reports, and official websites related to digital banking and student banking behaviour. Primary data were collected through a structured questionnaire survey conducted among students from various higher education institutions in Dibrugarh district, Assam. These institutions include D.H.S.K. College, M.D.K.G. College, Dibru College, Assam Medical College, Dibrugarh Polytechnic, Dibrugarh University, and others. A total of 200 student respondents were selected using a non-probability convenience sampling method. The survey was conducted among students who hold active bank accounts and have access to digital banking services such as internet banking, mobile banking, UPI, and digital wallets. The study primarily focuses on financially included individuals enrolled in undergraduate or postgraduate programs. To analyse the data, binomial logistic regression analysis was employed to assess the influence of various socio-economic and technological factors; such as income level, education, internet access, and awareness on students' usage of digital banking services.



**ANALYSIS AND DISCUSSION:**

It is essential to examine the socio-demographic and perception related characteristics of the student respondents, as these factors may influence their use and acceptance of digital banking services. In this

study, variables such as gender, age group, level of education (year of study), awareness of digital banking services, and knowledge of internet usage are primarily considered to understand students' perception and behaviour towards digital banking.

(Source Field Survey)

**Table 5.1: Percentage Distribution of Respondents by Gender**

Gender	Frequency	Percentage
Male	120	60
Female	80	40
<b>Total</b>	<b>200</b>	<b>100</b>

**Table 5.2: Percentage Distribution of Respondents by Age Group**

Age Group (years)	Frequency	Percentage
18 - 20	70	35
21 - 23	90	45
24 and above	40	20
<b>Total</b>	<b>200</b>	<b>100</b>

**Table 5.3: Percentage Distribution of Respondents by Level of Education**

Level of Education	Frequency	Percentage
Undergraduate	140	70
Postgraduate	60	30
<b>Total</b>	<b>200</b>	<b>100</b>

**Table 5.4: Awareness of Digital Banking Services**

Awareness Level	Frequency	Percentage
Aware	160	80
Not Aware	40	20
<b>Total</b>	<b>200</b>	<b>100</b>

**Table 5.5: Knowledge of Internet Usage**

Knowledge Level	Frequency	Percentage
Good	150	75
Moderate	35	17.5
Poor	15	7.5
<b>Total</b>	<b>200</b>	<b>100</b>

These tables reveal that the majority of respondents are students aged between 21 and 23 years, mostly pursuing undergraduate studies. Most students are aware of digital

banking services and possess good knowledge of internet usage, which is expected to positively influence their adoption and usage of digital banking.

**Table 5.6: Access to Bank Account**

Type of Bank Account	Number of Respondents	Percentage
Public Sector Bank	125	62.5
Private Sector Bank	75	37.5
<b>Total</b>	<b>200</b>	<b>100</b>

All respondents have active bank accounts, indicating they are financially included and capable of accessing digital banking services.

**Table 5.7: Awareness of Digital Banking Services**

Awareness Level	Number of Respondents	Percentage
Aware	180	90
Not Aware	20	10
<b>Total</b>	<b>200</b>	<b>100</b>

The vast majority of student respondents are aware of digital banking services, highlighting strong exposure to banking technologies.

**Table 5.8 : Reasons for Using Digital Banking Services**

Reason for Usage	Number of Respondents	Percentage
Fund Transfer	60	30
Online Payments	70	35
Cash Withdrawal	35	17.5
Shopping/Recharge	25	12.5
Others	10	5
<b>Total</b>	<b>200</b>	<b>100</b>

Online payments and fund transfers are the most common reasons students' use digital banking.

**Table 5.9: Satisfaction Level with Digital Banking Services**

Satisfaction Level	Number of Respondents	Percentage
Satisfied	130	65
Neutral	40	20
Not Satisfied	30	15
<b>Total</b>	<b>200</b>	<b>100</b>

A majority of students express satisfaction with digital banking services, showing positive perception of convenience and usability.

**Table 5.10: Usage of Digital Banking Products**

Product Used	Number of Respondents	Percentage
Debit Card	150	75
Net Banking	30	15
Mobile Wallets (e.g., Google Pay, Phone Pe)	140	70
UPI	145	72.5
Others	10	5
<b>Total</b>	<b>200</b>	—

**Note: Multiple Responses Allowed.**

**Source: Field Survey**

Students widely use mobile wallets, UPI, and debit cards, indicating digital literacy and high adoption of e-banking platforms. A binomial

logistic regression model is constructed to find out the factors affecting the usage of various digital banking products of the respondents.

**Table 5.11: Results of Estimated Logistic Regression (Dependent Variable: Use of Digital Banking Services)**

Variables	B	S.E.	Wald	P-value
Age	0.011	0.018	0.374	0.541
Gender	-0.09	0.328	0.086	0.769
Monthly Income	0.894	0.389	5.285	0.021**
Educational Qualification	2.245	0.475	22.350	0.000***
Knowledge of Internet Use	2.687	0.446	13.409	0.000***
Awareness of Digital Banking Services	1.921	0.462	9.571	0.002***

#### Summary Statistics:

- **Number of Observations:** 200
- **Cox & Snell R<sup>2</sup>:** 0.401
- **Nagelkerke R<sup>2</sup>:** 0.472
- **Model Significance (Chi-square test):**  $p < 0.01$

The logistic regression analysis was conducted to identify the socio-economic and technological factors influencing students' use of digital banking services among students in the Dibrugarh district. The results indicate that **educational qualification, knowledge of internet use, and awareness of digital banking services** are highly significant predictors of digital banking adoption among students, with p-values less than 0.01. This suggests that students who are more educated, possess better internet literacy, and are aware of digital banking facilities are significantly

more likely to use such services. Additionally, **monthly income** was found to be a statistically significant factor ( $p < 0.05$ ), indicating that students with higher financial resources or allowances tend to use digital banking more frequently. On the other hand, **age** and **gender** were found to have no significant effect on the usage of digital banking services, implying that digital banking usage is fairly consistent across these demographics within the student population. The overall model shows a good fit, with a **Cox and Snell R<sup>2</sup> of 0.401** and **Nagelkerke R<sup>2</sup> of 0.472**, indicating that the model explains a substantial proportion of the variance in digital banking usage among students.

## CONCLUSION

The primary objective of the present study was to examine the usage patterns of digital banking services among students in Dibrugarh district, Assam, and to identify the socio-economic and technological factors influencing their adoption. The findings reveal that digital banking has gained significant traction among students, driven by increased awareness, accessibility, and digital literacy. Most of the student respondents were found to be well-informed about the major digital banking products such as debit cards, mobile wallets, and online fund transfers, and expressed a high level of satisfaction with these services. The logistic regression analysis highlighted that educational attainment, internet knowledge, and awareness of digital banking services are the key determinants influencing students' usage of digital banking. Income level also showed a significant impact, indicating that students with better financial resources are more likely to adopt digital banking services. In contrast, variables like age and gender did not show any significant influence in this context. Overall, the study concludes that students are becoming increasingly comfortable with digital modes of banking, particularly when they are digitally literate and financially capable.

## References:

1. Smadi, O. M. (2012). "Factors Affecting Adoption of Electronic Banking: An Analysis of the Perspectives of Banks' Customer" *Journal of Business and Social Science*, Vol.3, No-17, pp. 294-308.
2. Rompho, N. (2014). "Factors Affecting Customer Satisfaction in Online Banking Service", *Journal of Marketing, Development and Competitiveness*, Vol.8, No.2, pp. 50-60.
3. Mavhiki, S., Nyamwanza, T., & Shumba, L. (2015). Impact of mobile banking on traditional banking practices in Zimbabwe.
4. Massilamany, M., & Nadarajan, D. (2017). Factors That Influencing Adoption of Internet Banking in Malaysia, *International Journal of Business and Management*, Vol.12(3), pp126.
5. Severino; Tonderai (2017). Adoption of Digital Banking in India, *Asia Pacific Journal of Research*, 1, 52.
6. Rajan, A.P. & Saranya, G. (2018). "Digital Banking Services: Customer Perspectives", *Journal of Emerging Technologies and Innovative Research*, Vol.5, No.12, pp. 306-310.
7. Ahn, S. J., & Lee, S. H. (2019). The effect of consumers' perceived value on acceptance of an internet only bank service, *Sustainability*, Vol. 11(17), pp. 4599.
8. Ahmed, S., & Sur, S. (2021). Change in the uses pattern of digital banking services by Indian rural MSMEs during demonetization and Covid-19 pandemic-related restrictions, *Vilakshan-XIMB Journal of Management*.
9. Rajan, N., George A., Saravanan, S.V., Kavitha, J., Gopalakrishnan, C.S. (2022). An Analysis on Customer Perception towards Fintech Adoption, *Journal of Logistics, Informatics and Service Science*, Vol.9, No.3, pp.146-158.
10. Adityawan, Y., Arief, M., Alamsjah, F., & Bandur, A. (2023). The Role of Digital Innovation in Improving Performance Study on Islamic Banking in Indonesia, *Journal of System and Management Sciences*, Vol. 13(1), pp.103-116.

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# WOMEN WORKFORCE IN INDIA: CHANGING TRENDS

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## Abstract

The participation of women in India's workforce has undergone significant transformations over the past century, shaped by colonial legacies, post-independence development policies, economic liberalization, and the digital revolution. While improvements in education, technological adoption, and policy interventions have expanded opportunities for women, India's female labour force participation rate (LFPR) remains one of the lowest globally, averaging 25–27% in 2022–23 compared to a global average of nearly 47%. This paper traces the historical evolution of women's work in India—from agrarian and household-based labour in the pre-independence era to the expansion of public sector roles in the early decades after independence, the rise of IT and service industries post-1991 liberalization, and the emergence of gig and digital platforms in the twenty-first century. It examines current participation trends, highlighting the persistent urban–rural divide, sectoral shifts from agriculture to services, and growing entrepreneurship among women. Despite these gains, enduring challenges such as the gender pay gap, occupational segregation, career discontinuity post-marriage or childbirth, and limited representation in leadership continue to constrain women's economic potential. The paper argues for multi-pronged interventions, including childcare infrastructure, reskilling in emerging technologies, stronger enforcement of equal pay and workplace safety, leadership mentoring, and social protection for gig workers. Strengthening women's workforce participation is not only a matter of gender equity but also an economic imperative, with the potential to unlock India's demographic dividend and contribute significantly to inclusive and sustainable growth.

**Keywords:** Women workforce, labour force participation, gender equality, India, employment trends

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## 1. Introduction

Women's workforce participation is an essential driver of social progress and economic growth. According to the World Bank (2022), increasing female labour participation can boost India's GDP by nearly 27% by 2030. However, despite India's strong pool of educated women and expanding service sector, female labour participation has remained relatively stagnant compared to global averages. This research paper investigates the changing trends in women's workforce participation in India, contextualizing them within historical, structural, and socio-economic dynamics.

## 2. Historical Evolution of Women's Work in India

The trajectory of women's work in India reflects deep socio-economic transformations shaped by colonial policies, post-independence development models, economic liberalization, and the digital revolution of the twenty-first century. Each phase has left a distinctive imprint on the opportunities available to women and on the ways their labour was valued and recorded.

- a. Pre-Independence Era: Before independence, women's economic participation was closely tied to agrarian structures, artisanal traditions, and

household economies. A vast majority of women worked in agriculture—either as cultivators on family farms or as unpaid helpers—yet their contribution was seldom recognized in formal statistics. Women also played a vital role in handicrafts such as weaving, pottery, basket-making, and other forms of cottage industries that sustained rural economies. Additionally, they engaged in home-based work like food processing and garment making, which blurred the lines between productive and reproductive labour. Under colonial economic policies, however, many indigenous industries—such as handloom weaving—were disrupted, reducing women's economic independence and forcing them into low-paid or subsistence-level work.

- b. **Post-Independence (1950s–1980s):** The decades following independence marked a gradual expansion of women's participation in new occupational domains. The Indian state's investment in welfare sectors such as education, healthcare, and administration created employment opportunities for women in teaching, nursing, clerical work, and government services. Public sector undertakings and cooperative textile industries also absorbed women workers, especially in states like Gujarat, Maharashtra, and Tamil Nadu. While the female labour force participation rate (FLFPR) remained relatively modest, the symbolic significance of women entering salaried professions was profound. This period witnessed the slow but steady entry of middle-class women into white-collar jobs, which helped redefine social attitudes towards women's paid work outside the home.
- c. **Economic Liberalization (1991 onwards):** The 1990s brought a radical shift in the structure of India's economy with liberalization, privatization, and globalization. Economic reforms opened the country to foreign investment and global markets, which created entirely new sectors of employment. Information technology (IT), business process outsourcing (BPO), banking, and financial

services emerged as large-scale employers of educated urban women. Global outsourcing, particularly call centers and back-office operations, provided women with opportunities for financial independence and exposure to international work cultures. Simultaneously, export-oriented industries such as garments, electronics, and food processing employed women in large numbers, particularly from lower-income groups. Yet, this phase also accentuated class divides: while urban, educated women thrived in new corporate spaces, rural and less-educated women often faced declining opportunities in agriculture due to mechanization and land fragmentation.

- d. **Twenty-First Century:** The twenty-first century has been characterized by both progress and paradox. On one hand, women have broken new ground in technology-driven sectors, start-ups, and entrepreneurship. Access to higher education, professional training, and digital platforms has expanded women's potential to engage in diverse forms of economic activity—from coding and app development to e-commerce ventures and gig economy work. On the other hand, national-level statistics reveal a paradoxical decline in female labour force participation despite rising literacy and education levels. Structural factors such as the informalization of jobs, inadequate childcare infrastructure, gendered household responsibilities, and social norms restricting mobility have limited women's sustained participation in the workforce. Thus, while the visibility of women in leadership roles, entrepreneurship, and STEM fields has increased, large sections of women, particularly in rural areas, remain concentrated in precarious or unpaid forms of labour.

### 3. Current Participation Trends

The present landscape of women's workforce participation in India reflects both progress and persistent challenges. While women have increasingly entered diverse sectors, their

overall labour force participation remains significantly lower than men and below the global average.

- a. **Labour Force Participation:** According to the *Periodic Labour Force Survey (PLFS) 2022–23*, India's female Labour Force Participation Rate (LFPR) is estimated at 27%, compared to 77% for men (Ministry of Statistics and Programme Implementation [MoSPI], 2023). This figure underscores a stark gender gap in economic engagement. Globally, women's LFPR averages around 47% (International Labour Organization [ILO], 2021), suggesting that India lags behind not only advanced economies but also several developing nations. The low LFPR highlights structural constraints, including limited availability of quality jobs, socio-cultural expectations, and the double burden of household responsibilities that disproportionately fall on women (Deshpande, 2020).
- b. **Urban–Rural Divide:** The participation of women in the workforce also reveals sharp urban–rural differences. In rural areas, women are largely employed in agriculture, construction, and informal daily wage labour (Mehrotra & Parida, 2019). Many engage as unpaid family workers or self-employed cultivators, often in subsistence farming. These roles, while vital for household survival, seldom provide financial security or social recognition. In contrast, urban women are more visible in education, healthcare, banking, IT-BPM services, and increasingly in gig economy roles such as app-based delivery, ride-hailing, and freelance work (FICCI, 2022). However, urban employment opportunities tend to be accessible mostly to educated and skilled women, while large sections of the urban poor remain in casual or domestic work.
- c. **Sectoral Shifts:** Over the past two decades, India has witnessed significant sectoral shifts in women's

employment patterns. Employment in agriculture, which accounted for about 73% of female workers in 2005, has declined to around 55% by 2020 (World Bank, 2021). This decline has been accompanied by a growing presence of women in the services sector, particularly in IT-BPM, finance, education, retail, and healthcare, which now employ an expanding share of educated women (NASSCOM, 2021). At the same time, manufacturing industries, especially textiles, garments, and electronics, continue to absorb large numbers of women, though often in low-paid and insecure positions (ILO, 2018). In recent years, gig platforms have emerged as a new but contested avenue for women's participation—providing flexibility and income opportunities, but often without adequate labour protections, benefits, or long-term security (Mehrotra, 2021).

#### 4. Drivers of Change

Several structural and socio-economic factors are reshaping the contours of women's workforce participation in India.

- a. **Education Expansion:** One of the most significant drivers has been the rapid expansion of higher education. Women now constitute nearly 43% of STEM graduates in India, a proportion higher than in many developed economies (UNESCO, 2021). This has broadened their entry into engineering, technology, medicine, and research fields, helping dismantle long-held stereotypes about women's aptitude in technical domains.
- b. **Technology and Remote Work:** The rise of IT/ITES industries, digital platforms, and freelancing opportunities has created flexible avenues for women's employment. Digital literacy and remote work technologies have reduced geographical barriers, allowing women to contribute economically while

balancing domestic responsibilities (Madgavkar et al., 2022).

- c. **Government Schemes:** Targeted policy interventions such as *Skill India*, *Stand-Up India*, and *MUDRA loans* have been designed to foster women's entrepreneurship and self-reliance. These initiatives have particularly empowered women from marginalized groups by easing credit access and enhancing skill development (Ministry of Finance, 2022).
- d. **Corporate Diversity Initiatives:** Private sector organizations have increasingly embraced diversity policies, offering flexible work arrangements, extended maternity leave, leadership mentoring, and returnship programs to retain women in the workforce (KPMG, 2021). These measures address structural barriers that often force women to exit jobs after marriage or childbirth.
- e. **Socio-Cultural Change:** Changing family structures and aspirations have also contributed to a gradual acceptance of dual-income households. Urban middle-class families, in particular, increasingly view women's work as both a financial necessity and a symbol of empowerment, leading to shifts in cultural attitudes towards female employment (Deshpande, 2020).

## 5. Emerging Trends

- a. **Women in Leadership:** Although entry-level participation is rising, women remain underrepresented in senior management, holding only 18% of leadership roles in India (McKinsey, 2022). This reflects persistent barriers such as glass ceilings and unconscious biases in promotion practices.
- b. **Gig and Platform Economy:** Digital platforms such as Urban Company, Zomato, and Upwork are increasingly being utilized by women for flexible income generation. These platforms have opened alternative livelihood pathways, especially for women

seeking part-time or home-based work (Mehrotra, 2021).

- c. **Entrepreneurship:** India now ranks third globally in women-led startups, with growing participation in fintech, edtech, and healthtech sectors (NASSCOM, 2021). The increasing visibility of female entrepreneurs not only drives innovation but also redefines gender norms in business.
- d. **Hybrid/Remote Work.:** Post-COVID digital adoption has normalized hybrid and remote work models, enabling many women to re-enter the workforce after career breaks. For women balancing family responsibilities, these arrangements provide flexibility without entirely sacrificing career progression (ILO, 2021).

## Challenges

Despite notable progress in women's workforce participation in India, several structural challenges continue to persist. India's female labour force participation rate (LFPR) remains significantly lower than both the global and South Asian averages, reflecting the scale of gender disparity in employment opportunities (World Bank, 2022). The gender pay gap also persists as a critical concern, with women earning 20–25% less than men for similar work, underscoring systemic inequities in wage structures (International Labour Organization [ILO], 2021).

Moreover, women remain underrepresented in senior executive and board-level positions, exemplifying the persistence of the “glass ceiling” in both corporate and public sectors (McKinsey, 2022). Career discontinuity further exacerbates these challenges, as many women exit the workforce post-marriage or childbirth. This interruption often leads to skill attrition, wage penalties, and reduced opportunities for upward mobility (Mehrotra & Parida, 2019).

In rural India, informalization of work continues to dominate women's employment. A vast majority of rural women remain engaged in insecure, low-paid, and unprotected jobs that lack access to legal safeguards, health



insurance, or pensions (Chen & Raveendran, 2012). Additionally, cultural barriers—such as safety concerns, mobility restrictions, and deeply entrenched patriarchal norms—still inhibit women’s ability to participate fully in economic activities (Mehrotra & Parida, 2019).

## Policy Implications and Recommendations

To overcome these barriers, a comprehensive and multi-pronged policy approach is essential. Expanding access to affordable childcare, crèches, and enhanced maternity benefits is crucial to reduce career discontinuity and enable women to balance professional and domestic responsibilities. Equally important is the introduction of reskilling programs targeted at preparing women for emerging opportunities in artificial intelligence, data analytics, renewable energy, and other green jobs, which represent the future of work.

Policy measures must also ensure stricter enforcement of equal pay provisions under the Equal Remuneration Act and stronger compliance with the Prevention of Sexual Harassment (POSH) Act. Creating safe and equitable work environments will encourage sustained female workforce participation. At the same time, leadership pathways for women need to be institutionalized through quotas, mentoring initiatives, and networking platforms that help women ascend to decision-making roles.

Finally, with the rapid expansion of the gig and platform economy, regulatory frameworks must evolve to include social security provisions for women workers. Ensuring access to health insurance, pensions, and maternity support for gig workers would help safeguard women’s economic security in this growing sector (ILO, 2021).

## References

1. Chen, M., & Raveendran, G. (2012). *Urban employment in India: Recent trends and patterns*. UN Women.
2. International Labour Organization. (2021). *Global wage report 2020–21: Wages and minimum wages in the time of COVID-19*. Geneva: ILO.
3. McKinsey & Company. (2022). *Women in the workplace 2022*. McKinsey & Company.
4. Mehrotra, S., & Parida, J. K. (2019). Why is the labour force participation of women declining in India? *World Development*, 122, 123–133. <https://doi.org/10.1016/j.worlddev.2019.05.009>
5. World Bank. (2022). *World development indicators: Labor force participation rate, female (% of female population ages 15+)*. World Bank Data. <https://data.worldbank.org>
6. Deshpande, A. (2020). *The Covid-19 pandemic and gendered division of paid and unpaid work: Evidence from India*. *Indian Journal of Labour Economics*, 63(1), 41–49. <https://doi.org/10.1007/s41027-020-00265-w>
7. Federation of Indian Chambers of Commerce and Industry [FICCI]. (2022). *Empowering the gig workforce in India*. FICCI-NITI Aayog Report.
8. International Labour Organization. (2018). *Care work and care jobs for the future of decent work*. ILO.
9. International Labour Organization. (2021). *ILOSTAT database: Labour force participation rate by sex and age*. <https://ilostat.ilo.org>
10. Mehrotra, S., & Parida, J. K. (2019). Why is the labour force participation of women declining in India?. *World Development*, 122, 123–133. <https://doi.org/10.1016/j.worlddev.2019.05.009>
11. Mehrotra, S. (2021). *The Indian gig economy: Emerging trends and policy issues*. *Economic & Political Weekly*, 56(28), 45–53.
12. Ministry of Statistics and Programme Implementation [MoSPI]. (2023). *Periodic Labour Force Survey (PLFS) annual report 2022–23*. Government of India.
13. NASSCOM. (2021). *Women and IT sector in India: A decade of change*.

- National Association of Software and Service Companies.
14. World Bank. (2021). *World Development Indicators: Employment in agriculture, female (% of female employment)*.  
<https://data.worldbank.org>
  15. Deshpande, A. (2020). *The Covid-19 pandemic and gendered division of paid and unpaid work: Evidence from India*. Indian Journal of Labour Economics, 63(1), 41–49.  
<https://doi.org/10.1007/s41027-020-00265-w>
  16. International Labour Organization. (2021). *ILOSTAT database: Labour force participation rate by sex and age*.  
<https://ilostat.ilo.org>
  17. KPMG. (2021). *Women in leadership: Progress and prospects in corporate India*. KPMG India Report.
  18. Madgavkar, A., Manyika, J., Krishnan, M., Ellingrud, K., & Yee, L. (2022). *The power of parity: Advancing women's equality in Asia Pacific*. McKinsey Global Institute.
  19. McKinsey & Company. (2022). *Women in the workplace: India perspective*. McKinsey Global Institute.
  20. Mehrotra, S. (2021). *The Indian gig economy: Emerging trends and policy issues*. Economic & Political Weekly, 56(28), 45–53.
  21. Mehrotra, S., & Parida, J. K. (2019). *Why is the labour force participation of women declining in India?*. World Development, 122, 123–133.  
<https://doi.org/10.1016/j.worlddev.2019.05.009>
  22. Ministry of Finance. (2022). *Annual report on government schemes for entrepreneurship and MSMEs*. Government of India.
  23. NASSCOM. (2021). *Women and IT sector in India: A decade of change*. National Association of Software and Service Companies.
  24. UNESCO. (2021). *Women in STEM in South Asia: Education and employment trends*. UNESCO Institute for Statistics.

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# **A STUDY ON INDIGENOUS TECHNOLOGIES SHAPING VIKSIT BHARAT WITH REFERENCE TO e-NATIONAL AGRICULTURE MARKET (e-NAM)**

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## **Abstract**

Our country is traditionally based on old technologies. With the introduction and development of information technology resulted in the wide scale deployment of e-National Agriculture Market in India. This has evolved into the introduction of Indigenous Technologies and their associated services. Agriculture Market and farmers are becoming increasingly interested and have started collaborating in order to provide indigenous technologies capabilities because of various reasons. This has already resulted in a change in economic development of our nation from developing country to Viksit Bharat. Many players introduced various technologies with features designed to meet the expectations of Agriculture merchants and farmers in the Agriculture Market. The present study deals with the use of Indigenous Technologies among different sections of merchants and farmers. The main objectives of the present study are the factors which lead to better consumer acceptance regarding e-NAM shaping Viksit Bharat.

**Keywords:** Indigenous Technologies, National Agriculture Market, Viksit Bharat, Farmers, Merchants.

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## **Introduction**

Technology is the scientific application of knowledge, skills and resources for the purpose of meeting the wants and aspirations of a people. Technology mentions to a device, tool or piece of apparatus. Indigenous Technologies is the actual knowledge of a given population that reflects the experiences based on tradition and includes more current experiences with modern technologies (Haverkort, 1995). Indigenous Agricultural Practices (IAPs) are an

unwritten body of acquaintance. There is no organized record to describe what they are, what they do and how they do, what they do, how they can be changed, their operations, their boundaries, their applications and many more. It is held on the diversification of the different brains, languages and skills in as many groups, cultures and environments as are available today (Atte, 1989). Hence, there is enormous pressure on the people of India to collect, preserve, validate and adopt Indigenous Agricultural Practices (IAPs) so as to reduce dependence on external inputs, to reduce the cost of farming and to propagate eco-friendly

agriculture (Sundramari and Ranganathan, 2003).

On the Occasion of National Science Day, researcher observed that every year on February 28, honours the discovery of the Raman Effect by Indian physicist Sir C.V. Raman. This year's theme, "Indigenous Technologies for Viksit Bharat", highlights the importance of domestic innovations and scientific progress in our nation. The day aims to encourage scientific temper, inspire youth towards careers in science, and celebrate India's rich scientific custom. National Science Day aims to encourage scientific thinking and highlight the importance of science in day-to-day life. Educational institutions, scientific institutions, and various other organizations over the India to organise various programs such as seminars, workshops, and exhibitions to celebrate in the occasion. The day assists as a reminder of India's rich scientific heritage and encourages domestic scientific research and innovation.

The theme for National Science Day 2024 was "Indigenous Technologies for Viksit Bharat". The theme highlighted the importance of India's scientific progress and homegrown innovations. The day's goals included:

- ❖ Promoting scientific temper
- ❖ Inspiring young persons to pursue careers in science
- ❖ Celebrating India's rich scientific heritage
- ❖ Raising awareness about indigenous technologies that can contribute to the country's development and well-being

India is at a milestone in its history. The 21st century will be India's century, as the country pole-jumping into the future confident of its capabilities. India recently became the fifth-largest economy in the world, according to the latest GDP and will be the India poised to become the world's third largest economy by 2027, as its GDP crosses US\$ 5.8 trillion (IMF estimates). By 2047, India is poised to be a US\$ 30 trillion economy with all the attributes of a developed nation. It will be a Viksit Bharat.

## **National Agriculture Market (e-NAM)**

National Agriculture Market (e-NAM) is a pan-India electronic trading portal which networks the existing Agricultural Produce Market Committee (APMC) mandis to create a unified national market for agricultural commodities. This market is launched by Prime Minister Shri Narendra Modi on 14th April, 2016, e-NAM is completely funded by the Central Government and is implemented by Small Farmers Agribusiness Consortium (SFAC), under the aegis of Ministry of Agriculture and Farmers' Welfare. e-NAM platform promotes better marketing opportunities for the farmers to sell their produce through online competitive and transparent price discovery system and online payment facility.

The e-NAM portal provides single window services for all APMC related information and services. This includes commodity arrivals, quality & prices, buy & sell offers and e-payment settlement directly into farmers' account, among other services. It aims to promote uniformity in agriculture marketing by streamlining of procedures across the integrated markets, removing information asymmetry between buyers and sellers and promoting real-time price discovery based on actual demand and supply.

## **Objectives of National Agriculture Market (e-NAM)**

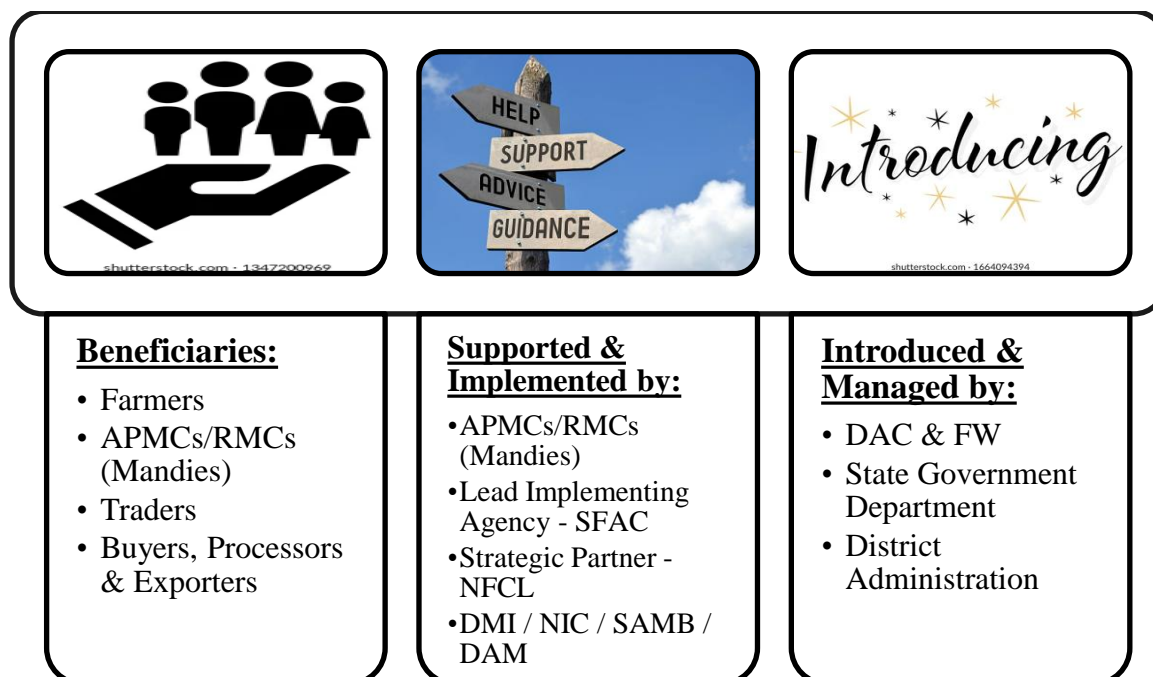
The following are of the objectives National Agriculture Market (e-NAM):

- To integrate markets first at the level of the States and eventually across the country through a common online market platform, to facilitate pan-India trade in agricultural commodities.
- To streamline marketing/transaction procedures and make them uniform across all markets to promote efficient functioning of the markets.
- To promote better marketing opportunities for farmers/sellers through online access to more buyers/markets, removal of information asymmetry between farmer and trader, better and real-time

price discovery based on actual demand and supply of agri-commodities, transparency in auction process, prices commensurate with quality of produce, online payment etc. that contribute to marketing efficiency.

- To establish quality assaying systems for quality assurance to promote informed bidding by buyers.
- To promote stable prices and availability of quality produce to consumers.

**Figure 1 : Stakeholders:** The different stakeholders of the Scheme are:



## OBJECTIVES OF THE STUDY

The following are the objectives of the research paper entitled to “A study on indigenous technologies shaping Viksit Bharat with reference to e-National Agriculture Market (e-NAM)”:

- To understand the concept of indigenous technologies.
- To understand the pros and cons of using these indigenous technologies.
- To understand the different types of agriculture markets available in India.
- To understand the perception of customers on the usage of various agriculture product markets.

- The factors which lead to better consumer acceptance regarding e-NAM shaping Viksit Bharat.
- To understand the problems faced by the farmers while using the e-National Agriculture Market.

## HYPOTHESIS OF THE STUDY

In the light of overall objectives of the study and after review of existing researches on the subject, the following hypothesis has been developed for the purposes of testing:

1. The Indigenous Technologies activity in India and well-being of the beneficiaries are not interdependent;

2. The standard of the concept of Viksit Bharat and the e-National Agriculture Market are not associated;

## RESEARCH METHODOLOGY:

The study is descriptive cum analytical in nature. Both primary and secondary data were used for the study. Primary data was collected from farmers, vegetable merchants, whole seller, retailer who use these indigenous technologies to e-National Agriculture Markets for agriculture products. Secondary data for the study was gathered through extensive and intensive survey of existing literature, research papers, journals and many more. The literatures, research papers, journals which were selected for review gave an idea about the possible details that would be gathered, and supported the conclusions that we got from the primary data. Other sources of information used in this study were obtained from agriculture markets, online websites, newspapers and magazines.

**Sources of Data:** The study is descriptive cum analytical in nature. The data for the study has been collected from both primary and secondary source. The primary data has been collected from students, staff, friends, relatives who use these inline payment Apps. Secondary data for the study was gathered from extensive and intensive survey of literature. other sources of information used in this study were obtained from online sites, newspapers and magazines.

**Population:** The sample for the study has been selected from whole of India. Demographic

questions were included in the questionnaire to understand the influence of demographic factors in the use of payment apps.

**Sample Size:** Sample size was 120 with no particular reference to any area. It was made compulsory for any person who wanted to respond. This was done to find the relationship if any, between the demographic factors and the opinions made by the respondents.

**Tool for analysis:** In this study, the tool used for analyzing the collected data is percentage analysis. This can be done through various statistical tools. i.e., Chi-Square Test. In this study tools used for analyzing the data collected is percentage analysis.

**Presentation:** The collected data is primarily presented in the form of tables to provide a better understanding of data.

## Limitations of the Study

- The period of study is limited as it is a part of our farmers and Agriculture Merchants.
- Many of the respondents did not fill up the questionnaire properly. So, their responses could not be trusted.
- A few respondents had sent partially filled questionnaires. So, they could not be used for further analysis.

## ANALYSIS AND INTERPRETATION

**Table 1: Demographic Profile of Respondents**

Category	No. of Respondents	Percentage of Respondents (%)
<b>Gender</b>		
Male	78	65.00
Female	42	35.00
Others	0	0
<b>Total</b>	<b>120</b>	<b>100</b>
<b>Age</b>		
20 – 30	12	10.00

30 – 40	25	20.83
40 – 50	60	50.00
50 – 60	17	14.17
Above 60	06	05.00
<b>Total</b>	<b>120</b>	<b>100</b>
<b>Farmer Types</b>		
Skilled Farmers	52	43.33
Unskilled Farmers	68	56.67
<b>Total</b>	<b>120</b>	<b>100</b>
<b>Monthly Income</b>		
Below 20,000	12	10.00
20,000 – 40,000	24	20.00
40,000 – 60,000	52	43.33
60,000 – 80,000	17	14.17
80,000 – 1,00,000	09	07.50
Above 1,00,000	06	05.00
<b>Total</b>	<b>120</b>	<b>100</b>

Sources: Data collected by researcher

## Interpretation

In the present study it is observed that 35% of the respondents are females and 65% males. In the age category it was observed that 10% of the respondents are in the age group of 20-30, 20.83% in 30-40, 50% in 40-50 and 14.17% of respondents are in 50-60 age groups and remaining are in above 60 years old. Here more respondents are in the age group of 40-50 as most of the respondents are farmers from whom we collected the data.

To understand the farmers types background of the respondents, question regarding that were included. Among the respondents 43.33% are Skilled Farmers and 56.67% are Unskilled Farmers. The responses reveal that the questionnaire reached a wider section of the merchants but certain sections are not represented adequately.

Since income is a major factor that determines the use of latest Technologies, respondents were asked to indicate their income status. It is observed that 10% of the respondents have monthly income lower than ₹ 20,000, 20% between ₹ 20,000 and ₹ 40,000, 43.33% between ₹ 40,000 and ₹ 60,000, 14.17% between ₹ 60,000 and ₹ 80,000, 7.5% between ₹ 80,000 and ₹ 1, 00,000 and 5% are above ₹ 1,00,000.

## TEST OF SIGNIFICANCE

In the study to test the hypothesis chi-square test was undertaken.

The chi-square test is used to test if a sample of data came from a population with a specific distribution.

*The chi-square test is defined for the hypothesis:*

**Hypothesis I** - The Indigenous Technologies activity in India and well-being of the beneficiaries are not interdependent and

**Hypothesis II** - The standard of the concept of Viksit Bharat and the e-National Agriculture Market are not associated.

Test - For the chi-square goodness-of-fit computation, the data are divided Statistic: into  $k$  bins and the test statistic are defined as:

$$\chi^2 = \sum_{i=1}^k (\mathbf{O}_i - \mathbf{E}_i)^2 / \mathbf{E}_i$$

where  $\mathbf{O}_i$  is the observed frequency for bin  $i$  and  $\mathbf{E}_i$  is the expected frequency for bin  $i$ . The expected frequency is calculated by:

$$\mathbf{E}_i = N \{F(Y_u) - F(Y_l)\}$$

where  $F$  is the cumulative Distribution function for the distribution being tested,  $Y_u$  is the upper limit for class  $i$ ,  $Y_l$  is the lower limit for class  $i$ , and  $N$  is the sample size.

The chi-square test is used with descriptive data in the form of frequencies. It is a test of independence and is used to estimate the likelihood that some factors other than chance account for the observed relationship. Since the null hypothesis states that there is no relationship between the variables under study, the chi-square test merely evaluates the probability that the observed relationship results from chance.

The chi-square test represents a useful method of comparing experimentally obtained results with those to be expected theoretically on some hypothesis.

The difference between the observed and expected frequencies are squared and divided by the expected number in each case, and the

sum of these quotients is  $\chi^2$ . The more closely the observed results approximate to the expected, the smaller the chi-square and the closer the agreement between observed data and the hypothesis being tested. Contrariwise, the larger the chi-square the greater the probability of a real divergence of experimentally observed from expected results.

**Hypothesis I** – The Indigenous Technologies activity in India and well-being of the beneficiaries are not interdependent.

In a sample survey of people's opinion answers to the following two questions:

- Do you agree that the Indigenous Technologies activity in India and well-being of the beneficiaries are not interdependent?
- Are you in favor of giving the Information technology sector full overseeing responsibility to the Central Government for Viksit Bharat?

**Table: Following are the tabulated of question from Hypothesis – I**  
**Question (a)**

	Yes	No	Total
Yes	59	33	92
No	20	08	28
Total	79	41	120

#### Question (b)

Can you infer or not that the Information technology sector situation will improve upon deliver to Central Government for Viksit Bharat? When the researcher has that the value of  $\chi^2$  for degree of freedom at 5% level of significance is 3.841.

$$f_{e11} = \frac{(92 \times 79)}{120} = 60.57$$

$$f_{e12} = \frac{(92 \times 41)}{120} = 31.43$$

$$f_{e21} = \frac{(28 \times 79)}{120} = 18.43$$

$$f_{e22} = \frac{(28 \times 41)}{120} = 9.57$$

The researcher knows that  $\chi^2$  Distribution

#### Findings:

*Null Hypothesis ( $H_0$ ):* The option on the Information technology sector situation will improve upon deliver to Central Government for Viksit Bharat. Following are the computed expected frequency of the entire cell:



$$\chi^2 = \sum \left[ \frac{(f_o - f_e)^2}{f_e} \right]$$

$$\begin{aligned} \chi^2 &= \sum \left[ \frac{(59 - 60.57)^2}{60.57} + \frac{(33 - 31.43)^2}{31.43} + \frac{(20 - 18.43)^2}{18.43} + \frac{(8 - 9.57)^2}{9.57} \right] \\ &= \frac{2.46}{60.57} + \frac{2.46}{31.43} + \frac{2.46}{18.43} + \frac{2.46}{9.57} = 0.51 \end{aligned}$$

i.e.  $\chi^2 = 0.51$  and

Degree of Freedom (v) = (2 - 1) (2 - 1) = 1

**Decision:** The researcher found that the tabulated value of Chi square is higher than (i.e., 3.841) the computed value of chi square (i.e., 0.51). Hence, the Null Hypothesis is accepted and the option on the Information Technology sector situation will improve upon deliver to Central Government for Viksit Bharat.

**Hypothesis II** – The standard of the concept of Viksit Bharat and the e-National Agriculture Market are not associated.

In a sample survey of People opinion answers to the following two questions:

- Do you agree that the standard of Indigenous Technology and the e-National Agriculture Market activities are not associated?
- Are you in favour of the Information Technology (IT) work being carried out on the Agriculture Markets by the Central Government of India?

**Table No: Following are the tabulated of question from Hypothesis – II**  
**Question (a)**

	Yes	No	Total
Yes	67	15	82
No	22	16	38
Total	89	31	120

**Question (b)**-Can you infer or not that the Information Technology (IT) work done by the Central Government would holocaust our IT sectors? When the researcher has that the value of  $\chi^2$  for degree of freedom at 5% level of significance is 3.841.

$$\begin{aligned} f_{e11} &= \frac{(82 \times 89)}{120} = 60.82 \\ f_{e12} &= \frac{(82 \times 31)}{120} = 21.18 \\ f_{e21} &= \frac{(38 \times 89)}{120} = 28.18 \\ f_{e22} &= \frac{(38 \times 31)}{120} = 9.82 \end{aligned}$$

The researcher knows that  $\chi^2$  Distribution

$$\chi^2 = \sum \left[ \frac{(f_o - f_e)^2}{f_e} \right]$$

#### Findings:

**Null Hypothesis ( $H_0$ ):** If Indigenous Technology on a e-National Agriculture Market area that is being undertaken by the Central Government will protect our IT Sectors.

Following are the computed expected frequency of the entire cell:

$$\begin{aligned}
 \chi^2 &= \sum \left[ \frac{(67 - 60.82)^2}{60.82} + \frac{(15 - 21.18)^2}{21.18} + \frac{(22 - 28.18)^2}{28.18} + \frac{(16 - 9.82)^2}{9.82} \right] \\
 &= \frac{38.19}{60.82} + \frac{38.19}{21.18} + \frac{38.19}{28.18} + \frac{38.19}{9.82} = 7.68
 \end{aligned}$$

i.e.  $\chi^2 = 7.68$  and

Degree of Freedom (v) = (2 – 1) (2 – 1) = 1

**Decision:** The researcher found that the tabulated value of Chi square is lower than (i.e., 3.841) the computed value of chi square (i.e., 7.68). Hence, the Null Hypothesis is not accepted and the option if Indigenous Technologies on a e-National Agriculture Market area that is being undertaken by the Central Government will not protect our IT sectors.

## CONCLUSION

The study reveals that the majority of users of Indigenous Technologies are males. It may be because in our society, they are the decision takers or the majority of Farmers and Agriculture Merchants are taken by them. If this contention is the reason for the majority, it is to be noted that the percentage of females using Indigenous Technologies are close to that of the males and that is indicative of a social change happening around us. In this study majority of respondents are from the 40 – 60 age group. This cannot be considered as an indicator of youth using Indigenous Technologies for Viksit Bharat in respect of e-National Agriculture Market more because majority of the questionnaire reached the hands of the quadragenarian aged between 40 and 60 years old. Regarding the use IT Sectors more than 55% used by Unskilled Farmers because basically illiterate peoples are involved in agricultural activities. Other studies also show that middle income people (i.e., Income between ₹ 40,000 to ₹ 60,000) is the most participable farmers and merchants. It is interesting to note that the majority (56.67%) admit that they use information technology services regarding these e-National Agriculture Market (e-NAM) from their Farmers and Agricultural Merchants. Most of the responses indicated that these technologies are used for

selling or buying agriculture products between markets and that they are used occasionally. This may be an indication of occasional users using the IT Services Sector for transferring agricultural products between markets and the majority of them transfer only small markets. This observation is difficult to explain with the responses obtained in this study. Majority of the responses vote for the concept of Viksit Bharat 2047. The major criteria for liking Technology sectors are its simplicity and that there should be a provision for speedy correction of any transaction error happens for agriculture markets. In our study, it is observed that these are convenient and easy to use and there are only few problems while using these technologies that can be attributed to the design features of the apps. Many of the problems reported are of personal in character.

In a nut shell it can be said that Farmers and Agriculture merchants are on surge of using appropriate indigenous Technologies for e-National Agriculture Market. Indigenous Technologies are becoming an indispensable part of our economy making our nation become develop economy and fulfil all condition of Viksit Bharat up to the year 2047. If this is the case, there will be more players coming into the field and there will be competition among them. It necessitates continuous development of these technologies to remain in the forefront.

## References

1. Neethu Mol Jacob, Paul Lazarus, Shilpa Mathew, B. J. and J. (2019). An Analysis of financial inclusion in India. *International Journal of Agriculture Sciences*, 11(4), 87–95. <https://doi.org/10.15740/has/ijcbm/9.1/87-95>.
2. <https://www.gktoday.in/viksit-bharat->

- 2047-voice-ofyouth-initiative/  
3. World Bank.  
4. www.rusa.nic.in. Accessed May 10, 2018  
5. Gohaini, M. Record 14 per cent of aspirants clear central teachers test. TNN, Chennai. Times of India eNewspaper. April 3, 2015.  
6. Acharya, M. (2024, February 7). Viksit Bharat 2047: Meaning, Vision, Objective, Registration. Cleartax. <https://cleartax.in/s/viksit-bharat-2047>  
7. Bhattacharya, S., Tiwari, K. K., Tayyab, M., Singh, D., Gautam, R. P., & Rani, S. (2018). EDUCATIONAL STATISTICS AT a GLANCE. GOVERNMENT OF INDIA.  
[https://www.education.gov.in/sites/upload\\_files/mhrd/files/statistics-new/ESAG-2018.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf)  
8. NIPUN Bharat: Department of School Education & Literacy. (n.d.). <https://nipunbharat.education.gov.in/>  
9. Viksit Bharat: Prime Minister Narendra Modi's vision for a developed India - News18. (2024, March 22). News18. <https://www.news18.com/opinion/opinion-viksit-bharat-prime-minister-narendramodis-vision-for-a-developed-india-8824143.html>

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# **IMPACT OF HUMAN RESOURCE DEVELOPMENT PRACTICES ON FACULTY PERFORMANCE IN HIGHER EDUCATION INSTITUTIONS IN KALYANA KARNATAKA**

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## **Abstract**

This research investigates the impact of Human Resource Development (HRD) practices on faculty performance within Higher Education Institutions (HEIs) in Kalyana Karnataka. Utilizing a quantitative, correlational design, the study surveyed 350 faculty members to assess their perceptions of HRD initiatives, and self-reported performance. The findings reveal a significant positive correlation between comprehensive HRD practices and faculty performance ( $r = 0.65$ ,  $p < 0.001$ ). Multiple regression analysis further indicates that specific HRD practices, such as training and career development, are strong predictors of these outcomes. The study concludes that strategic investment in HRD is crucial for enhancing faculty capabilities and well-being, ultimately contributing to institutional effectiveness and the quality of education. The results offer practical implications for HEI administrators and policymakers to design and implement targeted HRD frameworks that address the unique needs of the academic workforce.

**Keywords:** Human Resource Development (HRD) practices, Higher Education Institutions (HEIs), Kalyana Karnataka (KK), Faculty Performance.

## **INTRODUCTION**

Human Resource Development (HRD) is a strategic and integral aspect of organizational management that focuses on enhancing the skills, knowledge, and capabilities of employees. Human resource development reduces the uncertainty of the future and thereby does a better job of coping with the future dynamic environment. Not only does successful development lead to a better chance of success but it also helps organizations to

cope with changes and it requires managers to define the organization's objectives.

Professional development of faculty of higher education in India started formally with the establishment of academic staff colleges in 1986. Since the last three decades, this domain has undergone several changes in its format, objectives and content, but has not developed into a robust and professional area with deep research foundations. A critical look at the decisions taken by the Ministry of Human Resource Development and the University

Grants Commission reveals the reasons behind the current chaotic scenario. Policy changes, and the establishment and enrichment of dedicated nodal centers of faculty development, are essential to address the pressing concerns.

Human Resource development in Educational Institutions has become an important aspect to be answered for multidimensional questions. Proper education for every human being can be a panacea to all the social stigmas; that are being encountered in day-to-day life. Proper education is possible with a perfect process and its implementation by recruiting excellent Human Resource development and utilizing their services in a well-planned way. Education has been recognized as a perfect tool for social transformation, enlarging employment opportunities through broad-based thought implementation.

Though there are many benefits, it is faced with challenges as well. Organizations that have managed their challenges will have been successful others on the other hand have redrawn from the process.

Research in common parlance refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation. The Advanced Dictionary of Current English lays down the meaning of research as "a careful investigation or inquiry, especially through search for new facts in any branch of knowledge.

Effective human resource development can motivate, reward, develop and offer challenging tasks so that the employee continues and contribute to the success of the organization. To develop a sound HRM system, the organization should have effective Human Resource development to meet the current and future needs of institutions. Educational Institutions in India have had a rapid rate of growth over the past decade. Unfortunately, the organizations are not following the welfare measures in the best utilization of Human Resources to promote a skilful student community. Insufficient manpower or lack of

stalwarts in the field is the major setback to intellectual investment. There must be innovative methods in selecting human resources and a scrupulous development to practice with perfect adherence in this regard. Investment in these areas has to be enhanced. Safety and security of the employees must be taken care of, and constant motivation and reward systems for the performers must be fixed to improve the situation.

In this process, there must be a flawless pattern to invite efficiency into the fold. In addition to the qualifications, there must be some tests, which could discover the assets of human resource development such as commitment, values, moral binding and dedication to work etc.

## REVIEW OF LITERATURE

Several researchers emphasize the fundamental role of continuous professional development.

Manorama (1999) asserts that ongoing in-service education is a basic requirement for quality at all educational levels. Her work points out a significant gap where many graduates and post-graduates are employed as teachers without prior pedagogical training, thereby undermining teaching quality and the effectiveness of HRD programs. This sentiment is echoed by Viswanathan (2007), who, in his study of Kerala's higher education system, observes that quantitative growth has been accompanied by a qualitative decline. He explicitly links this decline to the quality of teachers and proposes that it can only be addressed through structured HRD practices. These practices include **quality recruitment, orientation and refresher courses, sabbatical leaves, and a fair performance appraisal system.**

The distinction between expenditure and investment is a central argument made by Mahon (2000). He contends that higher education has historically focused on the expenditure side of the ledger, neglecting to make true **investments in human resources.** This failure, he argues, has been a primary

cause of the decline in the quality of human capital within the sector.

Furthermore, the complexity and inequalities of the Indian higher education system are underscored by Joshi and Ahir (2013). They describe a system with entangled regulatory bodies and a Gross Enrolment Ratio (GER) that, at 15%, remains below the world average. Their research highlights the growing dominance of the private sector, which accounts for the majority of institutions and enrollments, and points out persistent **disparities based on gender, ethnicity, and economic status**. This complex and unequal context makes effective HRD even more challenging but also more critical.

Finally, Blanco-Ramirez and Berger (2014) introduce the crucial concept of "**value**" in discussions of educational quality. They argue that quality cannot be discussed in a vacuum; it must be connected to the specific context and demands of the local setting, including **relevance, access, and investment**. This perspective suggests that effective HRD programs must be tailored to the unique needs of institutions and their communities, rather than being a one-size-fits-all solution.

In summary, the literature review establishes a strong case for the urgent need for a strategic and contextualized approach to HRD in Indian higher education. The reviewed studies highlight the current system's weaknesses—including inadequate teacher training, a focus on expenditure over investment, a complex regulatory environment, and persistent inequalities—and collectively suggest that HRD is the key to addressing these challenges and improving overall quality.

### 3. STATEMENT OF THE PROBLEM:

Despite the critical role of faculty in HEIs, there is a perceived gap in the systematic application and evaluation of HRD practices in many Indian institutions. Faculty members often juggle diverse responsibilities—from teaching and mentoring students to conducting research and engaging in administrative duties—with limited access to structured professional

development. This lack of a robust HRD framework can lead to stagnant skill sets, low morale, and a disconnection between institutional goals and individual performance. Previous studies have linked HRD to positive outcomes in various industries, but the specific dynamics within HEIs, such as the balance between academic freedom and performance metrics, remain underexplored. This study aims to address this gap by empirically examining whether a direct relationship exists between the implementation of HRD practices and key outcomes such as faculty performance and job satisfaction.

### 4. SCOPE OF THE STUDY:

Human resources in educational institutions include teachers, staff working in educational institutions, educational administrators at the state and central level, Planners and policymakers of education and such. This study is confined to Teaching faculties. The nucleus for the present study on human resource development in higher education institutions is in the area of Kalyana-Karnataka Region. It includes the southern districts of Kalaburgi, Bidar, Yadagir, Raichuru, Koppal and Bellary.

### 5. RESEARCH OBJECTIVES

This study is guided by the following objectives:

- To identify the primary HRD practices implemented in selected Indian HEIs.
- To measure the perceived levels of faculty performance.
- To investigate the nature of the relationship between HRD practices and faculty performance.

### 6. HYPOTHESIS

Based on the theoretical framework and literature review, the following hypothesis is formulated:

**H<sub>1</sub>:** There is a significant positive relationship between comprehensive HRD practices and faculty

performance in higher education institutions.

**H<sub>0</sub>:** There is no significant positive relationship between comprehensive HRD practices and faculty performance in higher education institutions.

## 7. SIGNIFICANCE OF THE STUDY

The findings of this research hold significant value for multiple stakeholders. For **HEI administrators and leaders**, the results will provide data-driven insights to inform the design of strategic HRD programs that can enhance faculty effectiveness and well-being. For **policymakers**, the study offers empirical evidence to support policy reforms aimed at standardizing and improving HRD frameworks across the national higher education system. Finally, for **faculty members** themselves, the research highlights the importance of institutional support for career growth and professional development, potentially empowering them to advocate for better resources. By shedding light on the critical link between investment in human resources and institutional success, this study seeks to contribute to the ongoing discourse on improving the quality and relevance of higher education in India.

## RESEARCH METHODOLOGY

This study adopted a quantitative, correlational research design. A survey approach will be used to collect data from a sample of faculty members. This design is suitable for examining relationships between variables and testing hypothesis.

- **Sampling Design:** In this study, 350 responses were collected with the help of a convenient sampling methodology. It is planned to study Human Resource Development Practices in Universities and colleges including both Government and Private in Kalyana- Karnataka region.

- **Sources of Data:** The data were collected from both primary and secondary sources. As Primary Source, the researcher has visited personally to the HEIs and collected firsthand information through Questionnaire. Secondary sources of the data are also used i.e., records, reports, files, other published and unpublished materials of the Higher Educational institutions.
- **Tools and Techniques:** To measure the perceived prevalence and effectiveness of various HRD practices (e.g., training programs, professional development opportunities, mentoring, career planning, and performance feedback mechanisms) and to measure faculty performance across key dimensions (e.g., teaching effectiveness, research output, administrative responsibilities, and student mentoring) **Likert scale** has been utilized.

In light of the objectives of the study, the collected data were coded and analyzed using **Correlation Analysis (Pearson's r)** to examine the strength and direction of relationships between HRD practices on faculty performance and **Multiple Regression Analysis** to determine the predictive power of various HRD practices on faculty performance satisfaction, while controlling for demographic variables.

## RESULTS AND DISCUSSIONS

The analysis of the demographic data revealed that the sample was well-distributed, with a slight male majority (58%) and a balanced representation across different age groups. The largest group of respondents were Assistant Professors (50%), reflecting the typical faculty structure in HEIs.

**Table 1: Descriptive Statistics of Key Variables (N=350)**

Variable	Mean	Standard Deviation (SD)
Overall HRD Practices	3.52	0.88
Overall Faculty Performance	3.91	0.72
Training & Dev. (B1)	3.65	0.92
Performance Feedback (B2)	3.20	1.10
Career Progression (B3)	3.01	1.25
Research Support (B6)	3.89	0.85

Source: Primary Data

As shown in Table 1, the **mean score for HRD practices (3.52)** is slightly above the neutral point, suggesting that while some initiatives exist, they are not perceived as fully comprehensive or effective by the faculty. **Faculty performance**

has the highest mean score (**3.91**), indicating a generally high level of self-reported effectiveness. A more detailed look at specific items reveals that **Research Support (3.89)** is perceived as a relative strength.

**Table 2: Pearson Correlation Matrix**

Variable	HRD Practices	Faculty Performance
HRD Practices	1	--
Faculty Performance	<b>0.65*</b>	1

Source: Primary Data

Table 2 presents the results of the correlation analysis. The findings show a strong, positive, and statistically significant relationship between **HRD Practices and Faculty Performance** ( $r=0.65$ ,  $p<0.001$ ). This indicates that institutions with better HRD programs tend to have higher-performing faculty. A similar strong and significant relationship exists between **HRD Practices and Job Satisfaction** ( $r=0.58$ ,  $p<0.001$ ), confirming that HRD initiatives are linked to higher morale. The correlation between **Faculty Performance and Job Satisfaction** ( $r=0.49$ ,  $p<0.001$ ) is also positive and significant, suggesting that effective performance contributes to a feeling of accomplishment and satisfaction.

### Hypothesis Testing

**H<sub>1</sub>:** There is a significant positive relationship between comprehensive HRD practices and faculty performance in HEIs.

- **Result:** The Pearson's correlation coefficient was found to be  $r=0.65$ , with a p-value of  $p<0.001$ .
- **Interpretation:** The highly significant and strong positive correlation supports Hypothesis H<sub>1</sub>. This means that as faculty members' perception of robust HRD practices increases, so does their self-reported performance. The strength of this relationship ( $r=0.65$ ) is notable, suggesting that HRD is not just a peripheral activity but a central driver of faculty effectiveness. This finding resonates with the principles of human capital theory, which posits that investments



**Table 3: Regression of Performance on HRD Practices**

Variable	Beta ( $\beta$ )	t-value	p-value	VIF
(Constant)	1.25	4.88	< 0.001	-
Training & Dev.	<b>0.42*</b>	6.54	< 0.001	1.21
Research Support	<b>0.31*</b>	5.12	< 0.001	1.35
Career Progression	0.08	1.15	0.251	1.40

Source: Primary Data

The regression analysis provides a more detailed look into which specific HRD practices are the most influential. **Table 3** shows that **Training & Professional Development ( $\beta=0.42$ )** and **Research Support ( $\beta=0.31$ )** are the strongest predictors of faculty performance. This is logical, as these are the tools faculty need to excel in their teaching and research roles. The model is statistically significant and explains 42% of the variance in performance.

## CONCLUSION

The overall positive correlation between HRD practices and Faculty performance is a powerful finding. It debunks any notion that HRD is a "soft" or non-essential function in academia. The results show a clear **return on investment** for institutions that prioritize their faculty's development. This is a crucial finding for HEI leadership, as it provides a solid justification for allocating resources to HRD initiatives.

## REFERENCES:

1. Lanco-Ramirez, G., & Berger, J. B. (2014). Rankings, accreditation, and the international quest for quality organizing an approach to value in higher education. *Higher Education Research & Development*, 33(2), 405–418.
2. Joshi, K. M., & Ahir, K. V. (2013). Indian higher education: Some reflections. *Journal of Higher Education*, 2(1), 1-15.
3. Mahon, W. C. (2000). Investment vs. expenditure in higher education. *Journal of Educational Planning and Administration*, 14(4), 361-369.
4. Manorama, P. G. (1999). A study of the effectiveness of in-service education given to teachers in Chennai City [Unpublished doctoral dissertation]. University of Madras.
5. Viswanathan, C. N. (2007). Total quality management in higher education in Kerala [Unpublished doctoral dissertation]. Mahatma Gandhi University.
6. Ahmad, S., & Sahar, B. (2019). The relationship between human resource development practices and organizational commitment in higher education institutions. *Journal of Human Resource Management*, 22(3), 154-171.  
<https://doi.org/10.1177/0268397319854321>
7. Fink, A. (2021). *How to conduct surveys: A step-by-step guide* (6th ed.). SAGE Publications.
8. Herzberg, F. (1968). One more time: How do you motivate employees? *Harvard Business Review*, 46(1), 53-62.
9. Khan, R. A. (2020). Impact of training and development on employee performance in the higher education sector of Pakistan. *Journal of Education and Human Development*, 9(2), 1-10.  
<https://doi.org/10.15640/jehd.v9n2a1>
10. Sahoo, M. (2018). *Human resource development practices in Indian universities: A study of faculty perception*. Routledge India.

11. Srivastav, P., & Singh, V. K. (2021). Faculty empowerment and job satisfaction in technical education institutions of India. *Higher Education Research & Development*, 40(4), 785-800.  
<https://doi.org/10.1080/07294360.2020.1802967>
12. Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82-111.  
<https://doi.org/10.2307/257021>

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# **RURAL WOMEN ENTREPRENEURSHIP IN JHARKHAND: A STUDY OF SERAIKELLA-KHARSAWAN DISTRICT**

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## **Abstract**

Rural women entrepreneurship is emerging as a key driver of socio-economic development in tribal and underdeveloped districts of Jharkhand. This study focuses on Seraikella-Kharsawan, where women-led micro-enterprises contribute to household income, social empowerment, and community well-being. The paper relies on secondary data from government reports, district statistical handbooks, MSME ministry records, and census documents, supplemented by case studies of local entrepreneurs. Findings indicate a steady rise in rural women entrepreneurs over the past decade, largely supported by self-help groups and livelihood promotion schemes. However, persistent challenges such as limited access to finance, inadequate skill development, and weak market linkages continue to hinder growth. The study highlights the need for targeted policy interventions in financial inclusion, digital literacy, and cooperative networks to strengthen women's participation in rural entrepreneurship and enhance the socio-economic development of Seraikella-Kharsawan.

**Keywords:** empowerment, entrepreneurship, rural women, Seraikella-Kharsawan, socio-economic impact

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## **Introduction**

Jharkhand, carved out of Bihar in the year 2000, is one of India's most resource-rich states, possessing nearly 40% of the country's mineral reserves. Despite this abundance, the state continues to grapple with persistent underdevelopment, low per-capita income, and deep socio-economic disparities. Women, particularly those from tribal and rural communities, remain among the most marginalized groups in terms of economic participation.

Women entrepreneurs in Jharkhand are primarily engaged in micro-enterprises, including handicrafts, forest-based products, agro-processing, tailoring, food production,

and small-scale retailing. Government initiatives such as the Jharkhand State Livelihood Promotion Society (JSLPS), Udyam Registration Portal, and the National Rural Livelihood Mission (NRLM) have played an important role in encouraging women's participation through Self-Help Groups (SHGs) and rural enterprise promotion.

However, structural challenges such as limited access to credit, weak market linkages, inadequate digital literacy, and patriarchal constraints continue to hinder progress.

This paper examines the **scope, challenges, and socio-economic impact** of rural women entrepreneurship in Seraikella-Kharsawan. Drawing on secondary data and case studies, it

highlights the role of government schemes, local initiatives, and community-based organizations in shaping the entrepreneurial ecosystem.

## **Review of Literature**

Women entrepreneurship in rural India has been closely associated with micro-enterprises, self-help groups (SHGs), and cooperative activities. Scholars such as Sharma (2019) emphasize that these ventures not only supplement household income but also provide women with a platform for social recognition. Singh (2018) highlights that rural women-led enterprises are instrumental in poverty alleviation and employment generation, making them crucial for inclusive growth. However, despite their potential, socio-economic and cultural barriers often restrict women from realizing their full entrepreneurial capabilities, particularly in tribal districts where patriarchal traditions and structural constraints prevail (Kant & Kumar, 2020).

In the context of Jharkhand, a paradox emerges between its industrial hubs and rural underdevelopment. While industrial centers such as Jamshedpur and Adityapur showcase progress, many districts continue to grapple with limited infrastructure and poor livelihood opportunities (Das, 2021). Within this backdrop, rural women entrepreneurs engage primarily in small-scale activities like handicrafts, lac-based products, livestock rearing, tailoring, and food processing. The interventions of the Jharkhand State Livelihood Promotion Society (JSLPS) have expanded SHG participation across the state, although income levels for women entrepreneurs remain modest.

The socio-economic benefits of women's entrepreneurship are well-documented. Nair and Pandey (2017) observe that micro-enterprises run by rural women directly enhance access to education, healthcare, and nutrition within families. In Seraikella-Kharsawan specifically, data from the District Statistical Handbook (2022) indicates that nearly 60 percent of SHG members are engaged in income-generating activities. This

participation not only strengthens household income but also empowers women to contribute to community decision-making processes.

Despite these achievements, rural women entrepreneurs face persistent challenges. Access to credit remains a major hurdle, as many women lack collateral and awareness of government schemes (Rathore, 2020). Patriarchal restrictions limit mobility and decision-making autonomy (Verma, 2018). Moreover, low levels of education and skills reduce efficiency in financial management and marketing, while inadequate digital literacy and poor market linkages prevent expansion beyond local economies (Singh & Roy, 2021).

Government and institutional support has been critical in mitigating these barriers to some extent. Programs like JSLPS, DAY-NRLM, and MSME schemes have created platforms for financial inclusion and entrepreneurial training. NGOs such as Pradan and Nav Bharat Jagriti Kendra (NBJK) have further supplemented these efforts by offering training in tailoring, handicrafts, and food processing, thereby equipping women with practical skills to sustain enterprises (Kumari, 2019).

The socio-economic impact of rural women entrepreneurship, particularly in tribal and underdeveloped regions, extends beyond income generation. Economically, it has led to increased savings, asset creation, and livelihood diversification. Socially, it has enhanced women's bargaining power and decision-making roles within families and communities. Culturally, it has contributed to the preservation of indigenous crafts, such as lac handicrafts in Seraikella. Evidence from the MSME Ministry (2021) also reveals that women-owned enterprises demonstrated resilience during the COVID-19 pandemic, ensuring household sustenance despite economic disruptions.

Nonetheless, research gaps remain. While broader studies on women entrepreneurship in Jharkhand exist, micro-level analyses focusing specifically on districts like Seraikella-Kharsawan are limited. Most academic attention has centered on more industrialized regions such as Ranchi, Jamshedpur, and

Dhanbad, leaving tribal and rural pockets underexplored.

Given this backdrop, the present study seeks to fill the gap by examining the growth of rural women entrepreneurship in Seraikella-Kharsawan. Its objectives are fourfold: to analyze growth trends of women-led enterprises in the district; to assess their socio-economic impact on households and communities; to identify barriers including financial, skill-based, and market-related challenges; and to recommend policy measures for fostering sustainable and inclusive entrepreneurship in tribal and rural contexts.

## **Women Entrepreneurship in Seraikella-Kharsawan: A Regional Study**

### **Regional Profile**

Seraikella-Kharsawan district, located in the southern part of Jharkhand, represents a distinct socio-economic and cultural landscape that makes it a significant site for the study of rural and tribal women's entrepreneurship. The population is predominantly rural, with major tribal groups such as the Ho, Munda, and Santhal forming the demographic core. These communities have historically maintained a close relationship with nature through agriculture, animal husbandry, and the use of forest produce, which continue to dominate the local economy.

The district's proximity to Jamshedpur and the industrial hub of Adityapur has provided partial exposure to industrial development, yet the benefits of urban-industrial growth have not been evenly distributed. Rural areas of Seraikella-Kharsawan remain economically fragile, with uneven access to basic infrastructure, education, and healthcare. Within this framework, women occupy a unique position. Tribal traditions often grant them greater social autonomy compared to patriarchal settings elsewhere in India. However, their economic agency remains constrained due to limited access to finance, digital tools, and institutional support.

Recent years have witnessed incremental socio-economic change driven by the penetration of self-help groups (SHGs), training programs, and rural livelihood missions. These interventions have enhanced women's self-confidence, skills, and household incomes, marking a gradual transition from subsistence-based participation to entrepreneurial engagement.

### **Methodology**

This study is based on secondary data and case evidence to capture both macro-level patterns and micro-level experiences of rural women entrepreneurs in the district. The secondary sources consulted include the *Jharkhand Economic Survey (2023–24)*, Ministry of MSME reports such as the URP and UAP, the *District Statistical Handbook of Seraikella-Kharsawan*, census documents, and *JSLPS e-bulletins (2023)*.

In addition, illustrative case studies have been drawn from SHG records and government-supported livelihood initiatives. These case narratives highlight not only the individual trajectories of women entrepreneurs but also the enabling and constraining factors that shape their entrepreneurial journeys.

### **Case Studies**

#### **Case Study 1: Goat Rearing – Isha Rani Rajak (Gamharia Block)**

Isha Rani Rajak exemplifies how access to SHG credit can transform a household enterprise into a sustainable livelihood source. By borrowing ₹70,000 through her SHG, she expanded goat rearing, which now generates an annual income exceeding ₹1,00,000. This increase in income enabled her to invest in her children's education and improve access to healthcare. Beyond the material benefits, Isha Rani has also gained social recognition within her village, becoming a role model for other women seeking to balance traditional roles with entrepreneurial initiatives.

## Case Study 2: Bamboo Handicrafts –

### Urmila Mahali (Pata Village)

The story of Urmila Mahali highlights the scalability of indigenous crafts when combined with branding and institutional support. With a loan of ₹21,000 secured through her SHG, she expanded bamboo handicraft production under the state-backed *Brand Palash*. Her annual income now exceeds ₹4.2 lakh, making her enterprise one of the most successful in the region. Importantly, Urmila has moved beyond personal success by training other women, thereby fostering collective empowerment. Her journey underscores the importance of market linkages, branding, and entrepreneurial mentorship in rural enterprise development.

## Findings and Interpretation

The evidence from both secondary data and case studies suggests that women's entrepreneurship in Seraikella-Kharsawan is on a steady upward trajectory. At the national level, women-owned MSMEs account for 20.5% of all registered units, employ nearly 18.73% of the workforce, and contribute 10.22% of the turnover (MSME Ministry, 2021). These national trends find resonance at the district level, where SHG and Farmer Producer Organization (FPO)-based enterprises are emerging as engines of local economic participation.

The socio-economic impacts of women's enterprises extend beyond financial metrics. Micro-level studies indicate that entrepreneurial income is often reinvested into household priorities such as education, healthcare, and nutrition (Nair & Pandey, 2017). In Seraikella-Kharsawan specifically, nearly 60% of SHG members are engaged in income-generating activities (District Statistical Handbook, 2022). This shift signifies a move from dependence on subsistence agriculture to diversified livelihood strategies that combine tradition with innovation.

However, scaling these enterprises remains a challenge. Women entrepreneurs in the district face persistent barriers such as financial illiteracy, limited access to formal credit and

collateral, inadequate transport and market connectivity, and patriarchal norms that restrict decision-making. While tribal culture allows relatively more autonomy for women, socio-economic barriers—particularly low levels of education and digital literacy—continue to limit their potential (Singh & Roy, 2021).

## Discussion

The case studies suggest that institutional interventions such as SHG credit, branding initiatives like *Brand Palash*, and the role of NGOs are crucial in enabling women's enterprises to grow. However, the uneven distribution of opportunities and the absence of robust market linkages hinder long-term sustainability. A clear research gap exists, as micro-level studies in Seraikella-Kharsawan remain limited compared to districts like Ranchi, Jamshedpur, and Dhanbad. This lack of localized research constrains policy design that could address the district's specific challenges.

## Conclusion and Policy Suggestions

The experience of Seraikella-Kharsawan highlights the resilience and entrepreneurial capacity of rural women, particularly in tribal communities. While their initiatives demonstrate the potential to transform households and communities, structural barriers remain significant. Addressing these barriers requires a multi-pronged policy approach:

1. **Skill Training and Digital Literacy** – Training programs must integrate digital skills, e-commerce platforms, and online bookkeeping, enabling women to access larger markets.
2. **Access to Finance** – Loan procedures should be simplified, and SHG-bank linkages strengthened to provide affordable and timely credit.
3. **Market Connectivity** – Rural haats, cooperative marketing models, and improved transport infrastructure can help women entrepreneurs reach broader consumer bases.
4. **Mentorship and Monitoring** – District-level mentorship cells should

be established to provide continuous support, networking opportunities, and performance monitoring.

5. **Formalization of Enterprises** – Incentivizing Udyam Registration and formal business practices can integrate women-led enterprises into the broader MSME ecosystem, opening access to government benefits and wider markets.

By bridging these structural gaps, the entrepreneurial energy of tribal women in Seraikella-Kharsawan can be effectively harnessed. Their success stories, such as those of Isha Rani Rajak and Urmila Mahali, illustrate not only the possibilities of rural entrepreneurship but also the broader transformative potential for socio-economic development in tribal India.

## References

1. Chaudhary, A. K., & Kumari, R. (2023). Role of NGOs in the development of women's entrepreneurship in Jharkhand. *IJRASET*, 11(5), 1234–1242.
2. Government of Jharkhand. (2024). *Jharkhand Economic Survey 2023–24*. Finance Department.
3. Jain, A., & Singh, M. (2021). Women entrepreneurs in tribal regions of Jharkhand: Opportunities and challenges. *Journal of Rural Policy Studies*, 12(2), 45–59.
4. Jharkhand State Livelihood Promotion Society (JSLPS). (2023). *E-bulletin: Success stories of SHG women entrepreneurs*. Retrieved from <https://jslps.org>
5. Kumar, M. (2022). Entrepreneurial empowerment of rural women in Jharkhand: Challenges and prospects. *IJCRT*, 10(8), 571–580.
6. Ministry of MSME. (2023). *Udyam Registration Portal Reports (URP & UAP)*. Government of India.
7. NITI Aayog. (2022). *Strategy for women entrepreneurship in India*. Government of India.
8. Times of India. (2025, May 18). Repurposed school buildings help in boosting women's incomes (Brand Palash initiative).

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# URANIUM MINING IN JADUGODA: ECONOMIC SIGNIFICANCE AND SOCIO- ENVIRONMENTAL IMPLICATIONS

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## Abstract

This study examines the socio-economic, environmental, and strategic dimensions of uranium mining in Jadugoda, Jharkhand. As India's first uranium mining site, established in 1967 under the Uranium Corporation of India Limited (UCIL), Jadugoda plays a vital role in ensuring national nuclear energy security and strategic autonomy. Secondary data from government reports, NGO surveys, journal articles, and media sources (2018–2024) reveal that the region contributes nearly one-third of India's uranium supply, generating employment and regional economic growth. However, these benefits are accompanied by significant socio-environmental costs, including land displacement, loss of livelihoods, and health risks such as cancer, infertility, and congenital deformities among local tribal populations.

The findings highlight a stark contradiction between official claims of safety compliance and independent studies that report groundwater contamination and radiation-linked illnesses. Governance challenges, inadequate rehabilitation, and limited community participation further exacerbate social unrest. The study argues that uranium mining in Jadugoda embodies a paradox of development—advancing national energy security while undermining local welfare and sustainability. Policy recommendations include strengthening health monitoring, conducting third-party environmental audits, ensuring fair rehabilitation, reforming corporate social responsibility initiatives, and fostering participatory governance. The study concludes that the future of uranium mining in Jharkhand must adopt a model of inclusive and sustainable development, aligning national progress with social justice and environmental protection.

**Keywords** - Uranium Mining, Jadugoda, UCIL, Tribal Communities, Environmental Impact, Sustainable Development, Nuclear Energy Security

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## 1. Introduction:

Uranium, a strategic mineral resource, is crucial for nuclear energy generation and defence applications in India. Jadugoda, situated in East Singhbhum district of Jharkhand, became the country's first uranium mining site with the establishment of **Uranium Corporation of India Limited (UCIL) in 1967**. Over the years, Jadugoda has emerged as the backbone of India's nuclear fuel supply chain, contributing significantly to national energy security.

Jharkhand is endowed with vast mineral resources, and uranium mining has added strategic value to the state's economy. However, the development has come at a high social and ecological cost. Reports from NGOs, researchers, and local media highlight that Jadugoda's tribal population has been adversely affected by displacement, environmental degradation, and health issues linked to radiation exposure.



The dual reality of economic importance and socio-environmental risks makes Jadugoda an important case study for examining the relationship between resource exploitation and sustainable development.

### 1.1 Background of the Study:

- i. **Historical Context:** UCIL began operations in Jadugoda in 1967. It manages several underground mines, ore processing plants, and tailing ponds in East Singhbhum.
- ii. **Economic Importance:** Uranium from Jadugoda feeds India's nuclear reactors, ensuring strategic independence in energy and defense.
- iii. **Local Impact:** Despite its contribution, the tribal communities of Jadugoda face challenges such as radiation-linked health issues, land displacement, and loss of livelihoods.

### 1.2 Statistical Data (as per available reports):

- i. UCIL operates 3 underground mines (Jadugoda, Bhatin, Narwapahar) and 1 open-pit mine (Turamdih) in Jharkhand.
- ii. According to UCIL's Annual Report (2022), Jadugoda contributes to nearly 25–30% of India's uranium production.
- iii. A study by JOAR (2020) reported that over 30 villages within 5 km radius of the mines are exposed to health risks due to tailing ponds and radiation.
- iv. A survey by Down to Earth (2018) noted that 62% of households near Jadugoda reported at least one family member suffering from chronic illnesses such as cancer, infertility, or congenital deformities.

## 2. Literature Review:

The study of uranium mining in Jadugoda has received significant academic, policy, and media attention, particularly due to its economic, environmental, and socio-political implications. The following section reviews

key contributions from 2019 to 2024, supplemented with government reports and institutional findings.

### 2.1 Economic and Strategic Importance:

Jadugoda mines, operated by Uranium Corporation of India Limited (UCIL), continue to be the backbone of India's domestic uranium production. According to the Department of Atomic Energy (DAE) Annual Report (2022), nearly 25–30% of uranium used in India's Pressurized Heavy Water Reactors (PHWRs) is sourced from Jharkhand mines including Jadugoda, Bhatin, and Turamdih. Scholars such as **Mukherjee (2020)** emphasize that domestic uranium mining reduces reliance on costly imports from countries like Kazakhstan and Canada, thereby strengthening India's strategic autonomy in the global nuclear order.

Further, **UCIL Annual Reports (2020–2023)** highlight contributions toward regional economic growth, including direct employment of nearly 5,000 individuals and indirect livelihood opportunities for over 20,000 families. A **Hindustan Times (2023)** report also pointed out that UCIL's CSR projects have improved basic infrastructure, schools, and hospitals in East Singhbhum. Nevertheless, critics argue that economic gains remain limited to a small section of the population, while broader developmental benefits have not reached the marginalized tribal communities.

### 2.2 Environmental and Health Concerns:

Environmental degradation and public health hazards remain the most widely studied aspect of uranium mining. Research by Mishra et al. (2021, *Journal of Environmental Health*) documented elevated levels of radiation and heavy metals in groundwater samples around Jadugoda, raising concerns about chronic health risks. Similarly, *The Hindu* (2022) reported that villagers near the tailing ponds complained of increased cancer

rates, congenital deformities, and fertility issues.

A Central Ground Water Board (CGWB) Report (2021) found traces of uranium and other heavy metals in groundwater in pockets of Jharkhand, though UCIL has consistently denied unsafe radiation levels, citing monitoring systems in compliance with Atomic Energy Regulatory Board (AERB) standards. Still, independent surveys conducted by **Basu and Sinha (2020)** stress that health monitoring of local populations has been inadequate, creating a persistent research gap.

### 2.3 Social and Tribal Displacement:

Studies also reveal that uranium mining has caused displacement and disrupted traditional tribal livelihoods. **Chaudhary (2019)** in *Economic and Political Weekly* argued that uranium extraction in Jadugoda disproportionately affects tribal populations who rely on forests and agriculture. A **Down To Earth (2021)** investigative report highlighted that land acquisition and relocation compensation remain contentious, with many displaced families yet to receive adequate rehabilitation.

The **Jharkhand Economic Survey (2023)** confirmed that while mining and allied industries contribute to state GDP, their benefits have not equitably reached tribal districts like East Singhbhum, creating development imbalances. This resonates with **Kujur (2022)**, who asserts that lack of transparent rehabilitation policies fuels social resentment and periodic protest movements.

### 2.4 Governance, Safety, and Policy Responses:

The Government of India has consistently maintained that UCIL operations are safe and critical to national energy security. **DAE Policy Notes (2020, 2022)** reiterated that radiation levels are within permissible limits and that tailing ponds are

engineered to prevent contamination. In contrast, civil society organizations such as Jharkhand Organization Against Radiation (JOAR) argue that there is insufficient transparency in radiation safety data

In 2024, a report by The Indian Express revealed growing demands for third-party environmental audits of UCIL operations to build public trust. Meanwhile, the International Atomic Energy Agency (IAEA, 2023) acknowledged India's adherence to global nuclear safety norms but recommended enhanced environmental monitoring in sensitive mining zones.

### 2.5 Research Gaps Identified:

Despite the vast literature, several gaps remain. First, there is a lack of long-term epidemiological studies on radiation exposure and its impact on tribal health. Second, government and UCIL data often conflict with independent studies, creating credibility issues. Third, while economic studies highlight uranium's strategic value, few works have analyzed the opportunity costs of mining versus sustainable alternatives for local development. Finally, recent scholarship (2022–2024) stresses the urgent need for participatory governance, where local communities are consulted in environmental and mining policy decisions.

## 3. Objectives of the Study:

1. To examine the economic importance of uranium mining in Jadugoda.
2. To analyse the environmental and health consequences of mining activities.
3. To evaluate the socio-economic implications for local communities.
4. To suggest measures for sustainable and inclusive mining practices.

#### 4. Research Methodology:

The present study adopts a qualitative and descriptive research design, primarily relying on secondary data to evaluate the socio-economic, environmental, and strategic dimensions of uranium mining in Jadugoda, Jharkhand. The methodology has been structured in the following manner:

##### 4.1 Nature of the Study:

This research is exploratory and analytical in nature. It seeks to examine the dual impact of uranium mining—its economic and strategic importance for India on the one hand, and its socio-environmental consequences for the indigenous population on the other.

##### 4.2 Sources of Data:

The study is based exclusively on secondary sources. Data has been collected from:

- Government publications, such as the Department of Atomic Energy (DAE) Annual Reports, UCIL Annual Reports (2020–2023), and the Jharkhand Economic Survey.
- Reports from international agencies such as the International Atomic Energy Agency (IAEA).
- Research articles published in reputed journals between 2019 and 2024.
- NGO reports, particularly from the Jharkhandi Organization Against Radiation (JOAR).
- Media reports and surveys (e.g., *The Hindu*, *Hindustan Times*, *Down to Earth*).

##### 4.3 Method of Analysis:

A thematic analysis approach has been adopted. Data has been systematically reviewed and classified under four broad themes: (i) economic contribution, (ii)

environmental and health impacts, (iii) socio-economic implications for tribal communities, and (iv) governance and policy responses. Comparative analysis has been used to contrast government/UCIL claims with independent research findings.

##### 4.4 Area of Study:

The geographical focus of the study is the Jadugoda uranium mining belt in East Singhbhum district of Jharkhand, including villages within a 5–10 kilometer radius of the mines and tailing ponds. This region has been chosen as it represents both the core production site of UCIL and the primary location where socio-environmental effects are concentrated.

##### 4.5 Limitations of the Study:

The study faces certain limitations:

1. It is based entirely on secondary data, as primary surveys and field visits were constrained by safety concerns related to radiation exposure and restricted access to UCIL sites.
2. There exists a significant disparity between official data and independent research findings, which creates challenges in establishing absolute accuracy.
3. The absence of long-term epidemiological studies on radiation-related health outcomes limits the scope of conclusive evidence.

In spite of these limitations, the study provides a comprehensive understanding of the socio-economic and environmental implications of uranium mining in Jadugoda, while also highlighting gaps in existing literature and policy frameworks.

#### 5. Data Analysis and Findings:

The analysis of secondary data highlights the contrasting dimensions of uranium mining in Jadugoda. While the region has played a crucial

role in meeting India's strategic and economic needs, the local tribal communities have experienced adverse social and health outcomes. The findings are presented under four thematic categories:

### 5.1 Economic Contribution:

- According to UCIL Annual Reports (2020–2023), the Jadugoda, Bhatin, and Turamdih mines contribute nearly 25–30% of India's uranium production, making Jharkhand the backbone of the domestic nuclear fuel supply chain.
- UCIL directly employs nearly 5,000 workers and provides indirect livelihood opportunities to over 20,000 families through allied activities (Hindustan Times, 2023).
- The company has also invested in corporate social responsibility (CSR) projects, including schools, healthcare facilities, and drinking water supply, particularly in East Singhbhum.

### 5.2 Environmental and Health Impacts:

- Independent studies (Mishra et al., 2021; Basu & Sinha, 2020) report elevated levels of **uranium and heavy metals** in groundwater samples around Jadugoda.
- A Central Ground Water Board (2021) survey confirmed traces of uranium contamination in certain pockets, although UCIL and the Department of Atomic Energy maintain that radiation levels remain within AERB permissible limits.
- Reports from *The Hindu* (2022) and JOAR (2020) highlight increasing cases of **cancer**, infertility, congenital deformities, and chronic illnesses among residents of villages within a 5 km radius of the mines and tailing ponds.

- A survey by *Down to Earth* (2018) noted that nearly **62% of households** in the surrounding villages reported at least one family member suffering from chronic health problems.

### 5.3 Socio-Economic Implications:

- Tribal communities have faced **land displacement, livelihood loss, and inadequate rehabilitation** due to land acquisition for mining and tailing ponds.
- Chaudhary (2019) argues that mining disproportionately impacts indigenous groups who depend on agriculture and forest resources for survival.
- The Jharkhand Economic Survey (2023) confirmed that although mining contributes significantly to state GDP, benefits have not equitably reached marginalized communities.

### 5.4 Governance and Policy Response:

- The Government of India, through the Department of Atomic Energy, has consistently maintained that safety standards are met and that UCIL operations follow international norms.
- However, civil society organizations such as JOAR continue to demand greater transparency, independent radiation audits, and improved rehabilitation policies.
- Recent calls (*Indian Express*, 2024) for third-party environmental audits indicate a growing trust deficit between the local communities and UCIL.

### 5.5 Key Observations:

- There exists a clear contradiction between official claims and independent findings regarding environmental and health impacts.
- While economic benefits are visible at the national and regional levels, tribal populations remain excluded from sustainable development.

- Lack of long-term **epidemiological studies** limits the ability to fully understand the impact of radiation exposure on human health.

## 6. Discussion:

The findings of this study reveal the dual dimensions of uranium mining in Jadugoda, which align with observations from previous literature. On one side, the mines are crucial for India's strategic and economic development, while on the other, they generate long-term socio-environmental costs for the indigenous population.

### 6.1 National and Economic Significance:

The results confirm earlier studies (Mukherjee, 2020; DAE Annual Report, 2022) which emphasize that Jadugoda mines supply nearly one-third of India's uranium demand, thereby reducing dependence on imports. This strategic autonomy is particularly vital for India's nuclear energy security and defence capabilities. The economic contribution, including direct employment of nearly 5,000 workers and indirect support to around 20,000 families, indicates that uranium mining is a significant source of regional growth. However, the benefits are **concentrated within a limited section of the population**, echoing critiques made by Chaudhary (2019) and Kujur (2022).

### 6.2 Environmental and Health Contradictions:

The data analysis highlights a serious conflict between official claims and independent findings. While UCIL and the Department of Atomic Energy maintain that radiation levels are within Atomic Energy Regulatory Board (AERB) standards, independent studies (Mishra et al., 2021; Basu & Sinha, 2020) and NGO surveys (JOAR, 2020) report widespread contamination of groundwater and rising cases of cancer, infertility, and congenital deformities. This contradiction raises questions of transparency, credibility, and trust in government data. The absence of

long-term epidemiological studies has left many health-related concerns unresolved.

### 6.3 Socio-Economic Displacement and Marginalization:

The study findings resonate with reports from *Down to Earth* (2018, 2021) and the Jharkhand Economic Survey (2023), which highlight that tribal populations have been disproportionately affected by displacement and livelihood loss. Compensation and rehabilitation efforts remain inadequate, resulting in social unrest and resistance movements. Thus, the mining model adopted in Jadugoda reinforces a pattern of **resource exploitation** without equitable development, consistent with broader debates on extractive industries in tribal regions of India.

### 6.4 Governance and Policy Challenges:

The literature as well as findings suggest that uranium mining in Jadugoda is governed through a top-down policy framework. While the government emphasizes compliance with international nuclear safety norms (IAEA, 2023), local communities continue to demand **greater** participatory governance and third-party environmental audits. The lack of community engagement has widened the trust deficit, which could have long-term implications for both social stability and sustainable resource management.

### 6.5 Balancing National Interest and Local Welfare:

Overall, the discussion points to a fundamental dilemma: uranium mining strengthens India's energy and defence security, but this comes at the cost of tribal health, environment, and social equity. The challenge, therefore, is not whether uranium mining should continue, but how it can be made more sustainable, transparent, and inclusive. Addressing this balance requires stronger health monitoring systems, transparent environmental audits, improved rehabilitation packages, and greater community participation in decision-making.

## **7. Suggestions / Policy Recommendations**

The findings and discussion of the study indicate that while uranium mining in Jadugoda contributes significantly to India's strategic interests, it also creates profound socio-economic and environmental challenges for the indigenous communities. To achieve a balance between national development and local welfare, the following policy recommendations are proposed:

### **7.1 Strengthening Health Monitoring and Medical Facilities:**

- Establish specialized health centers in East Singhbhum with expertise in radiation-related diseases such as cancer, infertility, and congenital disorders.
- Conduct independent and periodic epidemiological surveys to assess the long-term health impacts of radiation exposure on local populations.
- Provide free medical care and insurance coverage to affected families, funded jointly by UCIL and government agencies.

### **7.2 Environmental Safety and Transparency:**

- Introduce third-party environmental audits of UCIL operations, with findings made publicly available.
- Strengthen monitoring of groundwater and soil quality around tailing ponds, with independent verification by agencies beyond UCIL and DAE.
- Ensure stricter compliance with Atomic Energy Regulatory Board (AERB) norms and international best practices recommended by the International Atomic Energy Agency (IAEA).

### **7.3 Fair Rehabilitation and Livelihood Support:**

- Guarantee fair and transparent land acquisition processes with proper compensation packages.
- Develop alternative livelihood opportunities for displaced and

affected families, focusing on agriculture, skill training, and micro-enterprises.

- Implement long-term rehabilitation policies that prioritize housing, education, and social security for displaced tribal communities.

### **7.4 Corporate Social Responsibility (CSR) Reforms:**

- Expand UCIL's CSR projects beyond basic infrastructure to include sustainable development programs such as clean drinking water supply, vocational training, and women's entrepreneurship initiatives.
- Establish a monitoring committee, including local community representatives, to oversee the planning and implementation of CSR activities.

### **7.5 Participatory Governance and Community Engagement:**

- Involve local tribal leaders, NGOs, and civil society organizations in decision-making related to mining and rehabilitation policies.
- Create community grievance redressal forums to address local concerns promptly and transparently.
- Promote awareness campaigns on radiation safety, health rights, and government schemes among tribal populations.

### **7.6 Exploring Sustainable Alternatives:**

- Encourage research into renewable energy options (such as solar and wind) to gradually reduce dependence on uranium mining in sensitive ecological zones.
- Promote eco-friendly livelihood models (such as forest-based industries, handicrafts, and agro-based enterprises) to diversify local economic opportunities.

## Conclusion:

Uranium mining in Jadugoda represents a paradox of development—while it has played a pivotal role in strengthening India's nuclear energy security and strategic autonomy, it has simultaneously imposed severe social, environmental, and health burdens on the indigenous tribal population. The analysis demonstrates that nearly one-third of India's uranium supply originates from Jadugoda, underscoring its national economic importance. However, the disproportionate costs borne by local communities—displacement, radiation-linked illnesses, and livelihood insecurity—highlight a deep imbalance between national interest and local welfare.

The findings reveal a consistent contradiction between official claims of safety and independent reports that document widespread environmental contamination and health hazards. This divergence has eroded trust between the government, UCIL, and the affected population. Moreover, existing rehabilitation and compensation mechanisms have failed to adequately address the long-term socio-economic consequences for displaced tribal households.

In light of these challenges, it becomes evident that the question is not whether uranium mining should continue, but how it can be conducted in a manner that is socially just, environmentally sustainable, and economically inclusive. Strengthened health infrastructure, transparent environmental audits, fair rehabilitation policies, and participatory governance frameworks are essential for achieving this balance. Additionally, exploring renewable energy alternatives and diversifying local livelihoods can reduce overdependence on extractive industries in sensitive ecological regions.

In conclusion, Jadugoda stands as a critical test case for India's broader development trajectory—whether economic growth and strategic advancement can coexist with social justice and environmental sustainability. The future of uranium mining in Jharkhand must therefore be reoriented toward a model of

inclusive development, where the benefits of national progress do not come at the cost of the health, rights, and dignity of its most vulnerable citizens.

## References:

1. Atomic Energy Regulatory Board (AERB). (2022). *Annual report on radiation safety in uranium mining and milling*. Mumbai: AERB.
2. Banerjee, R., & Basu, S. (2020). Health impacts of uranium mining: A case study of Jadugoda, Jharkhand. *Economic and Political Weekly*, 55(48), 34–41.
3. Basu, P., & Sinha, R. (2020). Radiation exposure and health risks in mining-affected communities: Evidence from Jharkhand. *Indian Journal of Public Health*, 64(3), 201–207.
4. Centre for Science and Environment (CSE). (2019). *Uranium mining and its impact on tribal health in Jharkhand*. New Delhi: CSE.
5. Chaudhary, S. (2019). Resource extraction and tribal displacement: The case of uranium mining in Jharkhand. *Economic and Political Weekly*, 54(12), 52–59.
6. Central Ground Water Board (CGWB). (2021). *Groundwater quality assessment in uranium mining regions of Jharkhand*. Ministry of Jal Shakti, Government of India.
7. Dey, A., & Mishra, R. (2021). Uranium mining in India: Development versus displacement. *Journal of Environmental Studies*, 18(2), 112–124.
8. Down to Earth. (2018, July 15). Illnesses haunt uranium mining villages in Jadugoda. *Down to Earth*. <https://www.downtoearth.org.in>
9. Down to Earth. (2021, March 22). Displacement without rehabilitation: Tribal plight in uranium mining zones. *Down to Earth*. <https://www.downtoearth.org.in>
10. Government of Jharkhand. (2023). *Jharkhand Economic Survey 2022–23*. Ranchi: Finance Department.
11. Hindustan Times. (2023, May 10). UCIL's role in regional growth and CSR

- activities in East Singhbhum. *Hindustan Times*. <https://www.hindustantimes.com>
12. International Atomic Energy Agency (IAEA). (2023). *Radiation protection and environmental monitoring in uranium mining*. Vienna: IAEA.
  13. Jharkhandi Organization Against Radiation (JOAR). (2020). *Impact assessment of uranium tailing ponds in Jadugoda*. Ranchi: JOAR.
  14. Kujur, R. (2022). Displacement and tribal resistance in uranium mining regions of Jharkhand. *Journal of Tribal Studies*, 15(2), 87–99.
  15. Mishra, S., & Kumari, P. (2022). Socio-economic challenges of displaced tribal communities in uranium mining regions: Evidence from Jadugoda. *Journal of Social and Economic Development*, 24(3), 256–270.
  16. Mishra, V., Singh, A., & Prasad, N. (2021). Groundwater contamination and public health risks near uranium mines in Jharkhand. *Journal of Environmental Health*, 83(9), 18–27.
  17. Mukherjee, A. (2020). Uranium mining and India's nuclear energy security: Strategic implications. *Asian Journal of Energy Policy*, 12(1), 33–47.
  18. Tata Institute of Social Sciences (TISS). (2019). *Health survey of uranium mining affected villages in Jharkhand*.

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# **POLICY IN PRACTICE; WHAT ARE THE 'MISSING COGS'- THE CASE OF SWACHH BHARAT ABHIYAN**

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## **Abstract**

Governance incorporates various normative criterion according to which public institutions and its agencies operate. Nonadherence to such norms indicates deviancy that can adversely affect the outcome of government policies. Drawing on the concept of Quality of Government and Policy Communication, this article evaluates the processes through which sanitation and cleanliness policies were implemented in urban and rural India. The empirical evidence was collected through field visits from Kharagpur town and villages under Gopali Gram Panchayat, India. The evaluation reveals that the processes of governance, in addition to lack of comprehensiveness, inclusion, responsiveness, were devoid of participatory and emphatic predisposition, and an ignorance towards framing cleanliness narratives. It concludes with a prescriptive note, underlying the significance of incorporating openness, impartiality, and communicative dimensions in the policy implementation stage.

**Key Words-** Policy implementation, Sanitation and Cleanliness, Openness, Impartiality, Communications

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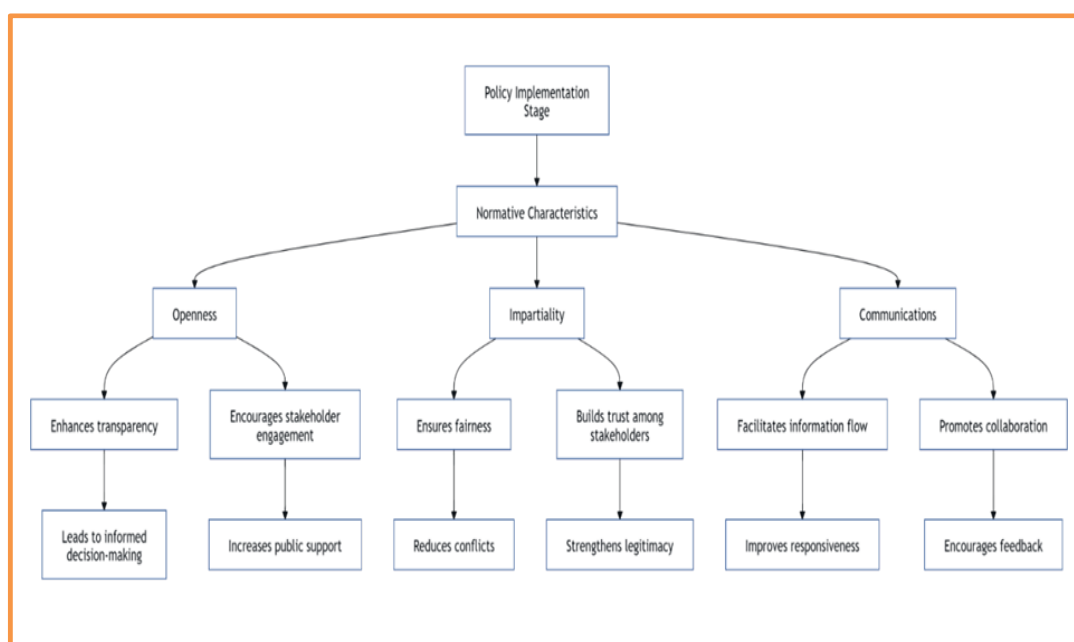
## **Introduction**

Progressive governance is marked by openness and inclusiveness in the policy process, aspects that facilitate achievement of developmental goals. Sanitation and Cleanliness are the basic requirements of a good life which are linked to other indicators of wellbeing and development. And it is axiomatic that living in unhygienic environment and having poor sanitation has adverse impact on health, which trickle downs to effect negatively people's livelihood earning capabilities. In developing countries, these two challenges are lingering; complete sanitation coverage and effective waste management are still ineffective and inefficient. India is no exception to this. Despite its significant development trajectories and increasing GDP, basic issues of sanitation and cleanliness have not been tackled effectively on the ground. A mesh of factors is responsible for this, ranging from loopholes in policy design to ineffective and lackadaisical implementation of policies. Poor monitoring of policies and inadequate

maintenance of public toilets, administrative dis-orientation towards public service, and excessive focus on the top-down and infrastructure-centric approach are common reasons attributed to the ineffectiveness of sanitation policies (Hueso & Bell, 2013; Khanna, 2015; Gadadhara, 2019; Eyraud, 2022; Guruswamy, 2022; Choubey, 2023). It is notable that conditions of sanitation and cleanliness in medium-sized towns and rural areas are below the satisfactory level. Despite having ambitious national and state sanitation and waste management policies, why achieving cleanliness in mid-town and rural areas is still a challenge. What are the 'missing cogs' embedded in the implementation stage of policy process? Through a field-based study conducted in Kharagpur town and Gopali gram panchayat in West Bengal, this paper attempts to answer the above-mentioned research questions. Data were collected through formal and informal interviews with government officials, citizens, and local civil society organizations. As the focus was on the

qualitative aspect of citizen and government interface, both closed and open-ended questions were used to understand the processes involved in the policy implementation. The findings of this study reaffirm that along with government and its agencies, civil society organizations and citizens are responsible for the prevalence of unsatisfactory sanitary and cleanliness situations and that collective orientation of the people matters most when it comes to cleanliness as it is the carrier of the idea of

sanitation and cleanliness and a co-creator of a clean environment. Such action- oriented collective consciousness requires open, impartial, and two-sided communication of policy at the implementation stage. On a normative front, this paper emphasized the need for an open, impartial, and communicative delivery of policy, alongside other characteristics of governance such as inclusiveness, comprehensiveness, and participation.



**Diagram 1. Normative Characteristics in Policy Implementation Stage**

The paper is structured in the following manner, conceptual framework for analysis, major national sanitation policies, praxis of sanitation policies followed by a prescriptive account on what should be done and a conclusion.

### **Conceptual Lens: Quality of Government and Policy communication**

A coherent and specific definition of Quality of Government is impartiality of government institutions that implement government policies (Rothstein, 2011, pp. 12-14). Impartial policy implementation by public institutions has a long-lasting impact that is beyond economic

growth of a country. It has considerable effects on non-economic phenomena such as subjective happiness of individuals, citizens supportive orientation for government, and social and democratic consolidation. On the other hand, low quality of government is characterized by unpredictability by citizens as to what government bureaucrats can and cannot do. Policy Communication is an approach that focuses on the flow of information at different stages of policy process, primarily policymaking and policy-implementation. Involvement of various stakeholders and mechanism and processes of communication are its integral elements. Its ideas and principles are rooted in the liberal democratic political configurations that ensure people rights to

freedom of expression. Sinha (2021) asserts that policy communication is essential for ensuring that policies made for the public are inclusive and responsive. Atmosphere of change, importantly social change, can be developed through communication, a communication that is participatory (Servaes, 2006, pp. 201-218; Kumar, 2011; Thomas & Fliert, 2014). Therefore, taking both impartiality and communication as necessary hallmarks of public policy and governance, this paper assesses the implementation of sanitation and waste management policies in urban and rural areas.

### **Sanitation and Waste Management: Policy Prescriptions**

India has launched significant national policies regarding sanitation and waste management. Yet, the expected change has not been achieved. Key sanitation measures taken by Indian government are Rural Sanitation Programme in 1954, Central Rural Sanitation Programme (CRSP) in 1986, Total Sanitation Campaign (TSC) in 1999, Nirmal Bharat Abhiyan (NBA) in 2012, Swachh Bharat Abhiyan (SBA or Clean India Mission) in 2014 (Seth & Jain, 2024; Swachh Bharat Mission (SBM)/Total Sanitation Campaign (TSC). N.d). The first sanitation initiative was launched by Indian government as part of first five-year plan aimed at improving the life quality of life of rural communities by building sanitary infrastructure and hygiene-conscious communities. In 1986, CRSP was implemented with the same goals and objective, additionally putting a more emphasis on providing women privacy and dignity. The focus of these sanitation initiatives was on building sanitation facilities in rural areas. TSC adopted a demand-driven approach to facilitate sanitation coverage in rural areas. Believing once people will have awareness, understanding, and capacity, it relied on Information Communication and Education (IEC), development of human resource and capacity for generation of people's demand

for improving sanitation and hygiene. Financial incentives were also provided to Below Poverty Line (BPL) households for construction of individual household latrines and their usage. For zealous and competitive implementation of the initiative by gram panchayats, Nirmal Gram Puraskar (Pure Village Award) was also introduced. The third national sanitation policy, NBA, was launched in 2012 with an objective to accelerate the sanitation coverage in rural areas. After two years, it was replaced by Swachh Bharat Abhiyan which was launched on 2<sup>nd</sup> October 2014. It had an overarching goal of making India clean by 2019 and importantly associated the mission with the vision of Mahatma Gandhi. It had two sub-missions, Swachh Bharat (Urban) and Swachh Bharat (Rural). It is evident from these policy initiatives that availability and accessibility to proper sanitation services and a clean environment is recognized as a basic requirement for a good life. Alongside public and private toilets, sanitation requires segregated collection of waste<sup>1</sup>, its proper disposal, and safe scientific treatment. This implies ensuring that all households possess personal toilets, availability of public toilets at strategic locations like markets, bus stops and railway stations, regular collection of segregated wastes by local authorities, and their disposal and management. The effectiveness of sanitation and cleanliness policies is not merely a matter of financial investments—it fundamentally depends on normative values such as dignity, responsibility, and civic commitment.

### **Praxis of Sanitation policies: locating impartiality and communication**

In developing countries, government have been the major initiator for bringing social change and creating a healthy and table society. Ensuring universalization of housing, availability of drinking water, sanitation facility, employment opportunity, basic literary, among others, are few primary responsibilities of state. Along with the government, citizens and other societal organizations also have roles in these areas of human development. Therefore, with regard to achieving cleanliness stakeholders are

varied, government, various civil society organization, private sectors, and citizens.

Despite having policies and multiple actors, to date the problem of sanitation and cleanliness is lingering in India. After Independence, India was largely a rural country with agricultural economy. Open defecation, houses without toilets and water supply, no systematic drainage system were the highlights of rural life. The urban areas were in relatively better condition in terms of having water supply in houses with bathrooms. However, due to absence of public toilets open defecation was practiced especially in areas where migrated people resided. Also, the Urban slums had this problem. Open defecation was not only an issue in urban India; additionally, waste management also was concerning. Among myriad policies for growth and development, programs and policies for ensuring healthy and hygienic practices among people were launched. However, challenges of sanitation and cleanliness persist. The next section discusses the implementation of SBM in Kharagpur town and Gopali Gram Panchayat.

Kharagpur is a town in the Paschim (West) Medinipur district of West Bengal with a population of 2,07,604 and is known for its multicultural character. Demographic composition of the town includes various religious communities- Hindu, Muslim, Christian, Sikh, Buddhist, Jain, and others. Kharagpur Municipality is the administrative body which governs all day-to-day matters. Gopali Gram Panchayat is a local administrative unit that falls under Kharagpur 1, a community development block under Kharagpur subdivision in West Bengal. In total there are 28 villages under its jurisdiction (Census of India, 2011).

Though the Swachh Bharat Abhiyan was launched in 2014, its comprehensive implementation started in 2021 in Kharagpur. In the Gopali Gram Panchayat its implementation started earlier in 2016. In both these urban and rural areas, cleanliness was not up to mark and the processes deviate from standards mentioned in the policy

guidelines. In Kharagpur, from 2014 to 2021 many public toilets were constructed at strategic locations and dilapidated ones were repaired. According to the Chief executive officer of Kharagpur Municipality, a total of 8000 Individual household Latrines (IHL) and 139 community toilets had been built. Additionally, regarding waste management, the process was initiated first in three wards on an experimental basis, and at present it is operationalized in all the wards. The municipal waste management is based on the principle of Reduce, Reuse, and Recycle. First, the wastes are reduced by segregation into dry and wet category. Then, the segregated wet wastes are used to make composite pits which would generate manure that would be used to enrich soil for gardening and plantation. Recycle is the process of management of waste at Waste Management Centers. In the rural areas, the primary focus was on ending open defecation through building of Individual Household toilets. The exact number of constructed and repaired toilets was undisclosed by the executive officer<sup>2</sup>. While interacting with the residents on this issue, it was observed that most of the toilets built were unsustainable; they were poorly built, and the recipients were grossly unhappy with the quality of the toilets. Also, few people living in the margins of village were left out of the sanitation services, having no toilets at home. On the awareness front, not much has been done by the authorities, both in the urban and local areas. No systematic inclusion of civil society organizations to disseminate the ideas and practices of cleanliness and citizens role therein were observed. Contrary to policy directives, an apathetic attitude towards spreading awareness. When asked about the awareness campaign, the public officer gave a disdainful statement - 'they (indicating the poor rural people) do not need any awareness about sanitation and cleanliness, what they need is strict actions such as a stick blow.' Such an attitude contradicts the guidelines of the mission. On the contrary, a resident, whose house is adjacent to the Gopali gram panchayat, complained that the government institution itself is the 'source of litter'. A resident said, 'from the windows of a gram

panchayat, litter (papers, plastic packets, bottles, and boards) are thrown on our land.’ Therefore, the condition of sanitation services and cleanliness in the selected areas lacked comprehensiveness, inclusiveness, responsiveness, and importantly quality and communicative dimension on which the success of such policy depends. A distant and indifferent predisposition to problems faced by people along with an ignorant stance regarding the importance of disseminating the idea of cleanliness among the public both on the part of government authorities and civil society organizations aggravate the issue of sanitation and cleanliness.

### **Incorporation of the ‘missing cog’: A necessity**

The prevailing situation of Kharagpur and Gopali Gram Panchayat prompts us to contemplate on the process through which the sanitation policies have been implemented. There is evidence that SBM has estranged from its core objective of creating a collective consciousness that value cleanliness (Shayim, 2019). If the process is improper and unsustainable, the same will be reflected in the outcome of policy. The processes of sanitation service fail to completely incorporate- comprehensiveness, inclusivity, and responsiveness. Another major characteristic of such a process is the absence of participatory and emphatic orientation on the part of government. In addition, it exuded an ignorant stance on spreading the idea of cleanliness. Comprehensiveness requires that all the aspects of the services being delivered are considered, its initial service delivery mechanism and sustainability of those services. In both the cases, although services were delivered, their sustainability was not considered. Connected to it is the issue of inclusivity, which requires that all the entitled people receive the benefits and services of the policy. A woman left out of the consideration of being a recipient of services she is entitled to, and, therefore, is compelled to defecate in the open field is a matter of inclusion. Another closely related matter was responsiveness. When there is dissatisfaction and resentment about the quality of governance by the citizens to the authorities,

how responsibly and within what time frame the concerned officials reach out is crucial. Getting a response, delayed or prompt, or no response tells a lot about the ability and willingness of government. Despite complaints and expressed dissatisfaction, there were no redressal and outreach measures by the authorities, indicating lack of inclusivity.

As participation implies active involvement of all those having an interest in the success of a policy or action in a constructive way. Success and sustainability of policies requires well- coordinated participation of all as it is through the engagement of multiple actors that policies can be implemented efficiently and effectively (Almeida, 2024). In this case, no active involvement of local clubs and organizations were made. A well-coordinated initiative was completely missing. Discrepant attitude and inaction of public officials, makes the implementation of directives of Cleanliness policies harder. Although, such tendencies were not strongly observed in urban governance, positive actions regarding awareness were not taken by the municipal authority.

From the above description and analysis, it must be clear that there are problems in the process of policy implementation. Paper description of policies appears to be inclusive, comprehensive, and responsive, but in the practical realm, they are devoid of all these characteristics. The realization of these characteristics depends on providing precedence to the missing cogs. The missing cogs I argue are Openness, impartiality and communications (shown in diagram 1) in the implementation phase of policy, which give the policies a truly democratic character at the local level. The next section explains these dimensions.

### **The Way Out: A Prescriptive account**

Administration, public officials, and agencies through which policies are delivered to the targeted beneficiaries should be open, impartial and communicative. An open and impartial authority will see every citizen as equals without considering their class, caste,

and political affiliations as well as treat them with respect. Even though the doors of the administration are formally open for all citizens, those who were once treated unfairly due to their demographic characteristics shy away from actively and optimistically approach the authorities. Therefore, openness and impartiality are essential. At the grassroot level where citizens experience the government, it is essential that they do not find the administrative authority closed and partial. Associated with this dimension is the communicative aspect of public policy whose successful operationalization is profoundly correlated with the first two dimensions. There must exist exchange of ideas and information mainly between the government bodies and the citizenry. It might also include other agencies and organizations such as CSO and private sector, if involved. This two-way open and impartial communication facilitates not only in effectively delivering policy benefits but also in improving policymaking in future. Presence of these dimensions in the implementation phase of policy democratizes the policy in practice and improve the quality of governance. As shown in diagram 1, openness leads to informed decision making and increase public support, impartiality reduces conflict and strengthens legitimacy, and communications improves responsiveness and encourages feedback.

A citizen who is dissatisfied with the services entitled to him through a policy should be able to express his dissatisfaction to the concerned authorities. In turn, the public officials dealing with it should also demonstrate democratic spirit, rule of law and policy guidelines by being willing to listen to the grievances without any discrimination and genuinely express what corrective measures would be taken. This might appear as a highly normative criterion, but inclusion of such standards has potential to address the loopholes raised by many researchers and observers regarding the failure and ineffectiveness of sanitation policies.

## Conclusion

Sanitation policies, mainly the Swachh Bharat Abhiyan, cannot be called a complete failure. It has brought about some changes in terms of availability of toilets and to a great degree tackled the problem of open defecation. However, segregation of waste at source and their management are not up to mark. While the problem of open defecation in both rural and urban areas is negligible, waste management is a serious issue that is to be addressed comprehensively in both the areas. It might appear that persistence of uncleanness and problem of scattered wastes and all the normative lacunas in governance could be eliminated and addressed with the unflinching adherence to the policy directives and attempts to make processes participatory, responsive and inclusive. But these characteristics are not sufficed. Until the quality in governance through the integral incorporation of impartiality and communications does not materialize, effective, sustained, responsive processes at the implementation stage cannot be ensured. Change in the orientation of the government institutions is required. The matter of ensuring that all spaces are clean, and no one is forced to defecate in the open is to be taken with utmost seriousness. As from this seriousness, flows the intent to streamline the process of policy implementation to the normative criteria of governance. Another way out is the bottom-up force of change, that would require activism by non-governmental organizations or citizens concerned about the environment they reside in.

## References

1. Rothstein, Bo. (2011). *The Quality of Government: Corruption, Social Trust, and Inequality in International Perspective*. Chicago: The University of Chicago Press.
2. Swachh Bharat Mission (SBM)/Total Sanitation Campaign (TSC). (n.d.). Public Health Engineering Department, Government of Meghalaya. Retrieved May 23, 2025

- from  
<https://megphed.gov.in/tsc.htm#:~:text=The%20rural%20sanitation%20programme%20in,giving%20emphasis%20on%20rural%20sanitation>
3. Khanna, Pretika. (2015, December 16). Nirmal Bharat Abhiyan failed to achieve its desired targets: CAG. *Mint*. Retrieved from <https://www.livemint.com/Politics/ghYnnKN03hSgre4cwSrwqN/Nirmal-Bharat-Abhiyan-failed-to-achieve-its-desired-targets.html>
  4. Kumar. R. (2011). Development Communication: A Purposive Communication with Social Conscious- An Indian Perspective. *Global Media Journal*, 2 (2), 14-19.
  5. Servaes. Jan. (Eds.) (2006). *Communication for Development and Social Change*. India. Sage.
  6. Thomas. P.N & Fliert. E.V.D. (2014). *Interrogating the Theory and Practice of Communication for Change*. UK. Palgrave Macmillan.
  7. Hueso & Bell. (2013), 'An Untold story of policy failure: the total sanitation campaign in India'. *Water Policy*, 1 (18).
  8. Kapil, Shayim. (2019, April 29). 'Swachh Bharat is now about toilets built, not change in attitude: Experts. *Down to Earth*. Retrieved: April 5, 2024 from <https://www.downtoearth.org.in/news/water/swachh-bharat-is-now-about-toilets-built-not-change-in-attitude-experts-64236>
  9. Mohapatra, Gadadhara. (2019). Projected Behavioral Change in Swachh Bharat Abhiyan: A Policy Perspective. *Indian Journal of Public Administration*, 65 (2), 451- 475.
  10. Almeida, F. (2024). The role of partnerships in municipal sustainable development in Portugal. *International Journal of Urban Sustainable Development*, 16(1), 231–244.
  11. Sinha, Dipankar. (2021). PUBLIC POLICY COMMUNICATION Reclaiming a 'nearly lost' theme. In Basu, Rumki. *Democracy and Public Policy in the Post-COVID-19 World: Choices and Outcomes* (47-59). New Delhi: Routledge. Seth, P., & Jain, P. (2024). India's National Sanitation Policies: Evolution, Impact and Recommendations. *Asia-Pacific Journal of Rural Development*, 33(1), 108-128.
  12. Eyraud, Julien. (2022). "Clean India": Why the undeniable success of the Swachh Bharat Mission does not signal the end of open defecation. *Alternative Humanitaires*.
  13. Guruswamy, Mohan. (2022). What has led to the failure of Swachh Bharat Abhiyan?. *Deccan Chronicle*. Retrieved May 23, 2025 from <https://www.deccanchronicle.com/opinion/columnists/140222/mohan-guruswamy-what-has-led-to-failure-of-swachh-bharat-abhiyan.html>
  14. Choubey, Jitendra. (2023). Most People Say toilets under Swachh mission in bad state Survey. *The New Indian Express*, Retrieved May 23, 2025 from <https://www.newindianexpress.com/nation/2023/Oct/02/most-people-say-public-toilets-under-swachh-mission-in-bad-state-survey-2620095.html>
  15. Census of India. (2011). *District Census Handbook: Paschim Medinipur*. Directorate of Census Operations West Bengal. Retrieved May 23, 2025 from <https://censusindia.gov.in/census.website/data/handbooks>

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# GREEN MARKETING APPROACHES: A STUDY OF BENEFITS AND EMERGING ISSUES

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## ABSTRACT

In recent years, growing environmental problems like air and water pollution, climate change, and the overuse of natural resources have forced businesses to rethink how they operate. As people become more aware of these issues, they are choosing products that are safe for the environment. In response, many companies have started using green marketing- not just to promote their products, but also to show their commitment to sustainability. Green marketing helps companies build a good brand image, earn customer trust, and even qualify for government benefits like tax reductions or carbon credits. However, there are still challenges like the high cost of green products, lack of customer awareness, fake environmental claims (greenwashing), and limited access to sustainable resources. This study focuses on the concept of green marketing and explains how businesses are using the Green Marketing Mix 7Ps to develop and market eco-friendly products. For example, companies now use recyclable packaging, reduce plastic use, adopt energy-efficient production methods, and even train staff to follow environmentally friendly practices.

Overall, the study discusses that green marketing is no longer optional. In today's world, where consumers demand transparency and sustainability, it is a necessary approach for businesses that want long-term success and wish to contribute to a cleaner, greener future.

**Keywords:-** *Green Marketing, Green Marketing Mix 7Ps, Advantages, Issues, Green Products*

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## Introduction

In today's era, the increasing levels of pollution, climate change, global warming, species extinction, and depletion of natural resources at the global level are matters of serious concern. To address these environmental issues, several initiatives and actions are being taken at national and international levels. Governments across the world are implementing strict rules and regulations, and people are also cooperating, as consumers are becoming more environmentally conscious. Various strategies and initiatives are being adopted for environmental protection, one of which is green

marketing. Green marketing promotes environmentally friendly products and services, focusing on producing items that have minimal or no negative impact on the environment. Some companies and organizations have already started adopting green marketing, which has provided them with several benefits, such as improved brand image, competitive advantage, and the ability to attract eco-conscious customers.



## **Literature Review**

**Laabh Singh (2013)** in his study opportunities and challenges of green marketing in India said that some companies are fulfilling the goals of their organization by adopting green marketing as an opportunity. The author says that this is the right time to adopt green marketing at the global level. All countries should make strict laws for this because it is very important to adopt green marketing to save the world from pollution and in view of the increasing threat of global warming. It is the responsibility of the marketer to tell and explain to the consumer the need and benefits of green products compared to non – green products. The author suggests that the consumer needs to be made aware about the benefits and qualities of green products. The government also needs to take initiative for this.

**B. Suresh Lal (2015)** discussed the need for green marketing in India and studied its opportunities and problems. The concept of green marketing is still in its initial stage and a lot of research is needed on green marketing to explore its full potential. If the customers are concerned about environmental issues, then if you don't want to buy green products, you will have to improve the performance of your product, strengthen customer loyalty and find opportunities to get higher prices. All organizations must reduce the harmful environmental impact of their activities.

**Namrata Shrivastava et. al (2022)** studied the relationship between green marketing and sustainable development in challenges and opportunities in green marketing and sustainable development and examined various strategies that support sustainable development and found challenges. According to the author, green marketing is very important to stop pollution in the world. Consumers are willing to spend more for a clean and green environment. Finally, consumers and industrial buyers can put pressure on businesses to adopt environmental protection in their corporate culture. Ensuring that all businesses limit the negative environmental impact of their actions.

**Pavan Mishra et al. (2014)**, in their work “Green Marketing: Challenges and

Opportunities for Business”, stated that this is the right time to adopt green marketing at the global level. If all countries implement strict regulations in this regard, it can bring a major transformation in the business world, as green marketing is essential to prevent pollution. It is the responsibility of marketers to make consumers aware of the benefits of green products. Consumers, industrial buyers, and suppliers should create pressure regarding environmental concerns and promote eco-friendly activities.

### **Objective of the study:**

- To study the definition and concept of green marketing
- To understand the green marketing mix 7Ps
- To study the benefits and issues of green marketing

### **Concept and Definition of Green Marketing:**

Green marketing is the practice of promoting goods that are perceived to be safe for the environment. It includes a wide range of operations, such as modifying the product, altering the production method, creating sustainable packaging, and changing the advertising. It's difficult to define green marketing, though. Sustainable marketing and environmental marketing are various terms that are frequently utilized simultaneously.

Green, environmental, and eco-marketing are some of the emerging marketing strategies that aim at challenging existing marketing ideas and practices and offer a very different viewpoint in addition to refocusing, modifying, or improving them. More precisely, these strategies aim to rectify the misalignment between the ecological and social realities of the broader marketing environment and marketing as it is currently conducted.

According to American Marketing Association – Green marketing is the marketing of products that are presumed to be environmentally safe. This includes a broad range of activities, including product modification, changes to the

production process, sustainable packaging, and modifying advertising strategies.

According to Ottman (1993) – Green marketing is taking into account environmental considerations in all aspects of marketing, including product design, production, packaging, and communication. The Green Marketing Mix is a set of strategies and tactics companies use to promote eco-friendly products and services. Green Marketing Mix begins with the usual 4 P's (Product, Price, Place, and Promotion) and adds 3 more P's—People, Process, and Physical Evidence. This makes the strategy more complete for companies that want to include sustainability in their marketing efforts.

- **Green Product:** The producer must manufacture a product that is made from recyclable materials, energy efficient, and reduces the negative impact on the environment. A green product is one that is produced in a way that creates the minimal harm to the environment. This includes adapting sustainable materials, reducing waste, and ensuring that the product can be recycled or naturally disposed of in an environmentally friendly way. The emphasis is on being eco-friendly and responsibly sourcing the materials used in producing the product.
- **Green Price:** Price refers to the cost at which green products are offered to consumers. Compared to the conventional alternatives, the price of the green products may be a little higher, but it is good for the long run. However, the price should reflect the value that the eco-friendly features bring to both the customer and the environment. It targets people who are concerned about the environment.
- **Green Place (Distribution):** Green distribution focuses on reducing carbon footprint; the process of the delivery of the products should be through sustainable ways. It involves efficient logistics, reducing carbon emissions, adapting eco-friendly distribution channels, and utilising local sourcing to
- reduce transportation-related carbon emissions. E-commerce companies use sustainable transportation that needs low energy and fuel for the delivery of the ordered products.
- **Green Promotion:** Promotion in green marketing is about communicating to people how a product or service benefits the environment. It aims to make consumers aware of the eco-friendly features and attributes and encourage them to adopt sustainable choices. Companies also demonstrate eco-certifications, like Fair Trade, Energy Star, or Green Seal, and employ social media campaigns to increase awareness about environmental issues and motivate toward green products.
- **Green People (Customer Interaction):** The people part of green marketing is about getting employees, customers, and other stakeholders involved in supporting eco-friendly practices. It's about making sure that everyone in the company understands how important sustainability is. It also includes training employees on eco-friendly practices to make sure they support green goals and engaging customers by offering loyalty programs, making them aware of sustainability, and motivating them to adopt eco-friendly habits.
- **Green Process (Sustainability in Operations):** Process means how products are made, packed, and delivered to customers. Green processes aim to reduce waste, save resources, and make business operations more eco-friendly. Incorporating energy-efficient production processes, using renewable energy sources, and adopting zero-waste policies in manufacturing processes help lessen the environmental footprint of business operations.
- **Green Physical Evidence (Tangible Environmental Proof):** Physical evidence is what customers can see, feel, or experience when they interact with a brand. In green marketing, it

highlights the company's efforts to be eco-friendly through things like branding, packaging, and the design of products. Eco-labelling and clear advertisement on packaging about the product's environmental impact help the consumer to ensure that it is a green brand and its product is a green product.

#### **Advantages of green marketing:**

- **Improve Credibility** – This is the most important opportunity because the organization which has an excellent image. An organization with a positive attitude will not only attract more customers but will also attract business partners who value its credibility. If you are looking for ways to increase the credibility of your organization, then green marketing is the best option for you.
- **Enhanced Brand Image and Reputation** – Consumers adopt eco-friendly practices consumers consider companies with environmental values to be more responsible and trustworthy than other companies. Also, consumers are supporting companies and brands that are in line with their values, especially environmental values.
- **Growing Eco-conscious consumer base** – Consumers are concerned about environmental pollution. As people are becoming more aware of climate change, pollution and sustainability, they are choosing brands that are in line with their values and do not harm the environment. The rise of eco-friendly packaging, electronic vehicles, organic food shows how green products are gaining market share.
- **Market Differentiation and Competitive edge** – Companies which adopt green marketing

sustainable solutions provides them with subsidies, tax benefits and other companies provides grants. Policies such as environmental swaps and carbon credits support green businesses.

- **Improve Brand Loyalty and Trust** – Companies that are committed to their social and environmental customers are more loyal to the companies that fulfill their responsibilities and trust them more.
- **Innovation and Product Development** – Green Marketing in product design and trust encourages innovation. It encourages companies to invest in sustainable technologies, environmentally friendly packaging and renewable materials.
- **Long-term cost saving** – Although the initial investment in green technology may be higher, but sustainable practices often lead to operational efficiencies, such as energy savings and reduced waste, which reduce costs in the long run.

#### **Issues of Green Marketing:**

- **High cost of implementation** – New initiatives often require implementation of green marketing strategies technologies, sustainable raw materials and certifications add to the cost of the product. These increased costs can lead to higher prices, which limits adoption by consumers.
- **Greenwashing and consumer skepticism** – Exaggerated or false claims of environmental benefits greenwashing poses a significant risk by creating mistrust among consumers, which can damage brand reputations and reduce the effectiveness of green marketing efforts.
- **Limited consumer awareness and education** – Still prevents many consumers from adopting green products and there is no complete

understanding of green marketing and its benefits. Without education and awareness campaigns, green marketing campaigns will not be able to effectively influence purchasing behavior.

- Supply chain complexity – Ensuring sustainability throughout the supply chain is challenging and costly. Maintaining green standards requires constant monitoring and collaboration with suppliers.
- Lack of standardized certifications - Inconsistent environmental labels and certifications in different countries. This can confuse both businesses and consumers. Also, the lack of a common standard reduces consumer confidence.
- Price sensitivity – Since green products cost more than conventional products, many consumers, especially those in the low- income group, prioritize price over sustainability. Also the lack of a reasonable price for green products may limit their access to the market.

### **Research Methodology:**

Research methodology is a way to systematically solve the research problem. In this study research methodology is used in descriptive in nature and based on secondary data. For the study, I have used secondary data and information through the research articles, Books, Newspaper, E-Journal and Magazine.

### **Discussion:**

Green marketing is becoming an essential approach for modern businesses due to growing environmental issues like pollution, climate change, and resource depletion. As consumers grow more eco-conscious, they desire to have products and services that are environmentally responsible. To stay relevant and competitive, many companies are now adopting green marketing strategies that align with these shifting values.

The Green Marketing Mix (7Ps) offers a complete framework for sustainable business practices. These elements help reduce environmental harm through green product design, fair pricing, responsible advertising, and staff engagement in eco-friendly actions. Each 'P' plays a key role in achieving sustainability goals.

Green marketing offers many benefits. It improves a company's image, builds customer trust, increases loyalty, and attracts eco-aware buyers. Over time, it can also lower costs through energy savings and waste reduction. It encourages innovation, helps companies stand out, and often qualifies them for government incentives or tax breaks.

### **Conclusion:**

Green marketing serves a vital dual purpose: it helps protect the environment while simultaneously adding significant value to businesses. By embracing sustainable practices and promoting eco-friendly products and services, companies can meet the growing consumer demand for responsible consumption. This shift is not just beneficial for the planet but also enhances a company's reputation and builds stronger relationships with customers who increasingly prioritize environmental responsibility in their purchasing decisions.

Although, adopting green marketing strategies comes with challenges such as higher production costs, limited consumer awareness, and the risk of greenwashing, these obstacles can be managed effectively through careful planning, transparency, and continuous education. For example, companies that invest in honest communication and provide clear information about their environmental efforts tend to build greater trust and loyalty among customers. Moreover, educating consumers about the true benefits of green products encourages more informed and sustainable purchasing choices.

From a business perspective, green marketing drives innovation by encouraging the development of new technologies, sustainable

packaging, and energy-efficient processes. In the long run, these investments often lead to cost savings through reduced waste and lower energy consumption. Additionally, governments and regulatory bodies are increasingly offering incentives such as tax breaks, subsidies, and carbon credits to businesses that demonstrate commitment to sustainability, which further supports their growth.

In conclusion, green marketing is no longer just a trend or a niche approach; it has become a critical necessity in today's competitive and socially conscious market. Companies that fail to adapt risk losing relevance as consumers continue to demand more sustainable options. Therefore, integrating green marketing into core business strategies is essential for long-term corporate success, environmental stewardship, and contributing meaningfully to the global efforts against climate change and resource depletion.

## References

1. [https://en.wikipedia.org/wiki/Green\\_marketing](https://en.wikipedia.org/wiki/Green_marketing)
2. Belz F., Peattie K.(2009): Sustainability Marketing: A Global Perspective. John Wiley & Sons
3. Ottman, J. (1993), "Green Marketing: Challenges and Opportunities for the New Marketing Age"
4. Peattie, K. (1995). Environmental marketing management: Meeting the green challenge. Financial Times Management.
5. Kotler, P., & Keller, K. L. (2016). Marketing Management (15th ed.). Pearson Education.
6. Belz, F. M., & Peattie, K. (2009). Sustainability marketing: A global perspective. Wiley-Blackwell
7. <https://www.goseeko.com/reader/question-bank/university-of-mumbai-maharashtra/bcom/general/third-year/semester/commerce-v-marketing-4/unit-2-marketing-decisions-i-14>
8. Shrivastava, N., Mishra, M., Shaw, K., Awinashi, M., Pradhan, M., & Thakre, M. (2022). Challenges and opportunities in green marketing and sustainable development. *UCG Care Group, 1*(52), 12.
9. Mishra, P., & Sharma, P. (2014). Green marketing: Challenges and opportunities for business. *BVIMR Management Edge, 7*(1).
10. Lal, B. S. (2015). Green marketing: opportunities and issues. *International Journal of*.
11. Singh, L. (2013). Opportunities and challenges of green marketing in India . *International Journal of Creative Research Thought*.

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# MIGRATION- A CONCEPTUAL ANALYSIS

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**Abstract:** (Migration is nothing but a social, economic and universal phenomenon in modern times, through which human beings move from one place to another place in pursuit of certain high goals like avenues of better employment, better wages, better working and living conditions, better quality of life and better livelihood. In the modern day world migration study is a very important study drawing the attention of the social scientists as migration study focuses on livelihood aspects of individual as well as masses. In this context, the basic objective of this article is to unravel the theories of migration with a conceptual analysis)

**Key Words:** (Human Migration, Livelihood, Internal Migration, Redundant, Surplus labour)

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Migration from one area to another in search of improved livelihood is a key feature of human nature. We learn from history that humans are perpetual wanderers. It is observed that since time immemorial people have migrating from one place to another as individuals, families and groups for various reasons. It was a regular practice of ancient human being to wander hither and thither in search of food, to maintain their livelihood and to find out a secure home. With the gradual changing of time, human being became civilized and led decent lives. Further, the rise of nation-state discourse restricts their movements. Thus, migration from one area to another area in search of livelihood is a key trait of human history. Migration is nothing but a social, economic and universal phenomenon in modern times, through which human beings move from one place to another place in pursuit of certain high goals like avenues of better employment, better wages, better working and living conditions, better quality of life and better livelihood (Lewy:1954).

## 1 Concepts and Definitions of Migration:

In the modern day world migration study is a very important study drawing the attention of the social scientists as migration study focuses on livelihood aspects of individual as well as a mass. Looking into the different types of migrations like, international and internal a

number of scholars have developed different literatures in this field. But theorization of migration is very difficult task as compared to various national and international transitions. Most of the social scientists agree that migration is an important determining factor leading to population change. Migration study helps in understanding the dynamics and the level of the society in different economic configurations (Burgess 2013). Migration study is an inter-disciplinary approach which covers a broad variety of the researchers, enriching it from the fields of demography, sociology, economics, social psychology, geography, etc. (Krieger, H. 2004).

The word migration has been derived from the Latin word “migrate” which means change of one’s residence. Generally, when a person is enumerated in the census at a different place than his/her place of birth, he/she is considered a migrant. Usually, marriage is the most common reason for migration among females and work or employment related migration among males. But, migration associated with socio-economic and cultural reasons and if the movement is meant for the in search of livelihood by leaving the ancestral villages that is known as distress migration. The most authentic definition of migration is found in Oxford Advanced Learners Dictionary which defines migration as “movement of people from one place to another to live there”. But scholars

differs and argue that though, human mobility has always persisted, hence, it is very difficult to treat all types of human mobility are migration. Ravi Srivastava, an eminent scholar of migration defines that “migration is a form of mobility in which people change their residential location across defined administrative boundaries for a variety of reasons, which may be involuntary or voluntary mixture of both reasons (Srivastava, 2012). The National Sample Survey Organization, which is more credible one, defines migrant as one who has changed his/her usual place of residence. Further, migration is different from commuting. Looking into the dislocation of people within or outside the country migration can be either internal or international. There is a great deal of difference between international and internal migration. International migration has been defined as the “movement outside the political or administrative boundary of the state for employment and other reasons; or in other words, population movement across a political or administrative boundary, which entails a change or usual residence” (Bilsborrow, 1998). However, internal migration is defined as the movement of people within a state, country or continent. Internal migrant is a person who resides in a place other than his/her place of birth or one who has changed his/her usual place of residence to another place.

The data on migration by the last residence in India as per Census 2001 reveals that the total number of migrants has been 314 million. It is very surprising that out of these migrants by last residence, 268 million (85%) have been intra-state migrants, and 5.1 million (1.6%) migrated from outside of the country. When people migrate from rural to urban they have to encounter a number of problems for their survival. But, they face it very bravely as their income are increased from their earlier rural villages and somehow they lead a better life in their place of destination.

Rural-urban migration gives ample economic opportunities to migrants to run a better life in the destination place from their source origin place. At the same time, the migrant may create a number of problems in the cities like overburdened infrastructure, urban poverty and

crime on this “rural spill over”. To prevent the rural-urban migration a number of anti-poverty strategies including wage employment programmes are being initiated in the rural areas to address the rural unemployment

The recent migration data gives a gloomy picture of migration in different states of India. The Economic Survey of India, 2017 figures out that the magnitude of Inter-State migration in India was close to 9 million annually between 2011 and 2016, while Census, 2011 reveals the total number of internal migrants in the country (accounting for inter-and intra-state movement) at a staggering 139 million. It is observed that Uttar Pradesh and Bihar are the biggest source states, followed by Madhya Pradesh, Punjab, Rajasthan, Uttarakhand, Jammu and Kashmir and West Bengal. It is also found that the major destination states are Delhi, Maharashtra, Tamil Nadu, Gujarat, Andhra Pradesh, and Kerala.

Thus, human migration is the movement of people from one place to another, either within the country of origin or outside the country. These migrant people are engaged in the specific skilled or unskilled jobs. People can either to move in their own wish which is termed as voluntary migration or sometimes they are forced to move which is known as involuntary migration. The form of migration is occurred in different ways. It may be occurred between continents, within a continent or a single country. Further, migration can even occur when people move out of the city and into the country.

## **2. Theoretical Debate on Migration**

There are innumerable number of literature which deals with the migration and livelihood. Further, a number of models regarding migration and its dimensions have been discussed. Some of the important models have been advocated by Ravenstein’s “Laws of Migration”, Lewis-Fei-Ranis Model, Sjaastad Model, Lee’s Model, Harris-Todaro Model which are most prominent. It would be pertinent to discuss all the models for the better understanding the different dimensions of migration.

## **2.1 Ravenstein's "Laws of Migration":**

E.G. Ravenstein literature was the first literature regarding modern migration in 1885. He conducted an empirical study in U.K in 1881 and developed a concept of migration. He has developed a macro-economic static behavioural model in theoretical terms. Ravenstein gave a lucid description which is based on the structural factors and individual choice, is popularly known as the "Laws of Migration", which refers to as "the mode in which the deficiency of hands in one part of the country is supplied from other parts where population is redundant". This model says that migrant prefer to move short distances and communication plays important role in squeezing the distances. According to Ravenstein, the move in due course, produces the "current of migration" in the direction of the capital rich areas, which attract and absorb them, and subsequently the compensating counter-current. The long distance migration is preferred to big commercial and industrial centers. This model says that migration is more prominent among the natives of towns than the rural people and females are more migratory than males. But, the frequency of migration varies from region to region.

This model argues that distress seasonal migration is occurred most of the developing countries like India. The socio-economic parameters are mainly responsible for this distress migration. This format is not applicable to western nations. However, E.G. Ravenstein has not given the reasons of migration in his model. No doubt, it is obvious that migration occurs from the areas of low opportunity to the area of high opportunity, as hypothesized in this theory. Further, this model says that the nature of migrations is temporary due to distress and compulsion. In this context, the nature of work would be informal activity as hop-picker and agricultural labourer.

## **2.2 Lewis-Fei-Rains Model**

The model prescribed by W.Arthur Lewis in 1951 was very comprehensive so far as migration is concerned. This theory gives a

detail discussion regarding the causes of rural urban labour transfer and explains how the structural factors in a macro setting cause migration. This model is also based on the neo-classical framework which synthesizes the urban demand conditions in the goods market and labour supply, particularly from the rural locations. Further, this model argues that in a two sector economy, consequent upon the increase in demand, the labourers from the labour surplus traditional subsistence sector in the rural areas move to the urban modern sector, where the wage is a fixed premium over the wage in the former location. This process leads to the equalization of wage rates in both areas. This theory assumes that perfect competition is prevailed in the society and equilibrium is maintained through the laissez-faire mechanism. Market position will be stable when the entire surplus labour will be evacuated from traditional sector and will be absorbed in the modern sector.

Most of the study highlights that Lew's model is essentially a model of economic development and it is not at all a model of migration. This model is not addressing the distress seasonal migration prevalent in the rural areas of developing countries. Dasgupta (1981) dislikes and criticizes the assumption of near-zero marginal productivity (redundant) and surplus labor in the primary sector likes agriculture. Further, Dasgupta opines that the role of informal sector where the unskilled migrants can easily enter and where the remuneration is low and unstable. The same is also disagreed by Smita (2008) by giving an argument that the popular surplus-deficit argument is not applicable in case of distress seasonal migration for the reason that migration is out of distress and that employers prefer migrants to the local labourers. Smita also pointed out that the wage of a distress migrant is secondary as he or she has no option at all.

## **2.3 Sjaastad Model**

Sjaastad (1962) has given a very unique model of migration in his study "Inter-State Migration in US" where he has highlighted the costs and returns of human migration and considers migration as an investment decision in a resource allocation frame work. According to



this model migration is an equilibrating mechanism in a dynamic economy. This theory identified both public and private costs which are equally important in determine migration. The private costs have two components like money cost which include the expenditure on migration and the non-money costs, which is later being composed of the opportunity cost in migration including psychic cost. Sjaastad considered the non-money costs comprise the significant part of cost and opportunity cost is the real source cost. Psychic cost cannot be a part of investment in migration. At the same time, he argued that private returns in term of the money and non-money returns, out of which the former includes the earnings differential and the consumption benefits and later locational benefits.

#### **2.4 Everett S. Lee Model:**

Everett S. Lee has discussed migration by taking the push and pull factor into account. Lee has developed a different set of hypotheses for a different angle of migration. He argued that the volume of migration depends on their demand in the destination area, depending on the market condition (Lee, 1966). According to Lee in the volume of migration, the following points are most important:

- diversity in the area, a high degree of difference among the regions should result in a high migration rate,
- diversity of people, higher the inequality among the people at origin place in terms of race, education, income, or tradition, than greater the volume of migration,
- Fluctuation in the economy.

As a whole, the push factor in the origin area and the pull factors in the destination areas are the main cause of migration. Further, he also highlights the positive and negative factors influencing migration and suggested that in this context counter balancing is most important.

#### **2.5 Harris-Todaro Model:**

Harris Todaro (1969) in his behavioural model discussed the causes and implication of growing unemployment in the urban sector and

how the rural migration to some extent brings a solution to the urban problem. Todor put forth his views that migration in LDCs as a two – stage phenomenon rejecting the earlier notion that the low productive rural migrants directly migrate the urban high productive job. According to him, in the first stage the rural unskilled migrant migrates to an urban area and initially he or she is absorbed temporarily in the urban traditional sector, then in the second stage he or she is engaged in the urban modern sector. The joblessness in the rural areas and in search of job in the urban areas by the rural people is the fundamental issues concerning the decision to migrate and the proportionate size of the urban traditional sector. He further, argued that the decision to migrate basically depends upon two variables like the rural-urban wage differential and the probability of obtaining an urban job.

#### **2.6 The Ranis and Fei Model of Rural-Urban Migration:**

John Fei and Gaustav Ranis were instrumental in bringing this theory in the year 1961. In this model Ranis and Fei argued that the excessive supply of labour from agricultural sector to industrial sector would help in development of both the sectors. They were in the opinion that the process of development starts with the transfer of surplus labour from subsistence (agriculture) sector to capitalist (industrial) sector which leads to increase in its marginal productivity from zero to a wage level similar to institutional wage rate. This model of rural-urban migration is based on by assuming the dual economy of agricultural and industrial sector where output produced in agrarian sector by using only land and labour while the production in industrial sector by using both capital and labour. Further, this theory says, when more people are engaged in the agricultural sector the marginal product will be similar to zero and the excessive labour will be transferred to industrial sector. In this process, there would not be any bad impact to agricultural sector also. This model is an extended version of Lews model of migration. Further, the Ranis and Fei model of migration highlights that the agricultural workers add to agricultural output but they produce lower than the institutional wage rate and they will be

transfer to industrial sector without getting any option and if this process will continue for a longer period of time agricultural workers' output will be equal to the institutional rate. Further, this model also speaks about the self-sustained growth where all the surplus labours will be absorbed by the industrial sector. In such a situation, the firm workers' output will be greater than the institutional wage rate. Ranis and Fei argue that this is the self-sustained growth when all the surplus labour of agricultural sector was exhausted and the agricultural sector becomes commercialized. In this way, this model gives top priority to both agricultural and industrial sector where as Lewis model is purely one sided model giving more emphasis to industrial sector only.

### **2.7 The World System Theory:**

The world system theory was a very unique theory related to migration which was propounded by Immanuel Wallerstein in 1974. It speaks about the historical-structural approaches to migration. Through this theory Wallerstein argues that migration is closely linked with the different attributes and determinants with structural changes in the world market. Further, this theory classified the world into three categories namely, periphery countries, semi-periphery countries and core countries. The periphery and semi-periphery nation associated with low skill and labour intensive production while the core developed nations associated with higher skill and capital intensive production. According to this theory, migrant move from peripheral and semi peripheral developing nations to core capitalist developed nation.

The World System theory considers migration is a function of globalization which means integration of different countries and introduction of new production processes and ideas. However, this process creates a loophole the flow of capital or machineries from core country to periphery country lead to increase in the agricultural production in developing peripheral country. Here the people will be forced to move internally to developed in cities and town and it would create excessive unemployment in urban areas.

### **2.8 The Dual or Segmented Labour Market Theory:**

The Dual or Segmented Labour Market Theory of migration primarily believes that migration occurred due to push and pull factor. Originally, this theory was developed by Michael J. Piore in 1979. This theory is based on the premise that migration takes place not because of individual or collective decision, rather it is the product of cheap labour in developed nations. Further, this theory speaks that migration takes place due to pull factors associated with developed nations. According to this theory when the labour will migrate to a particular country; two market segment would be created in the destination country. One will be primary labour market and another will be secondary labour market. In the primary market the native people will work with a higher wage rate with job security; whereas in the secondary market migrants will join with a low wage rate with less prestige and security. In this way the migrant will bound to work in the receiving nation with low wage rate having no security of job.

### **2.9 The Network Theory of Migration:**

The network theory of migration describes that link exist between the people of origin and destination leading to the expansion of migration. Due to the close connection and wide network between sending and receiving countries migration takes place and it continues to fulfill the aspiration of both the countries. The intimate link between the sending and receiving nations give birth to huge migration. This theory also believes in the push and pull factors of migration. The inter-personal relations with the family, relatives, friends and kith and kin play a vital role in establishing good relations, necessary information and financial back up to migrants in the destination country (Arango,2000).

### **2.10 The Migration System Theory:**

The system theory of migration is propounded by Akin Mabogunje. This theory is deeply connected and similar with network theory of migration. Further, considering the both micro and macro factors into account this theory

advocates that migration always contribute and bring development and change in the sphere of social, cultural, economic and institutional conditions in both sending and receiving countries. Through migration both the countries are uplifted by fair development and promotion of migration is found abundantly.

### **2.11 The Institutional Theory of Migration:**

The institutional theory of migration focuses about the gloomy situation arising out of a large number of labours wants to cross the international borders for migration. The international situations become imbalance or mismatch due to huge number of surplus labour of a country wants to migrate abroad with the limited visa. In order to rescue from this situation the private organizations resorts to illegal or frauds methods to overcome this grave issue. Sometimes, the private organizations are adopted some illegal methods like counteracting legal or travel documents, develops personal relations by arranging marriages between migrants and legal residents of the destination country, also arrange credit facilities for their safe journey. The same incident is also found in case of distress seasonal migration. It is also observed that in the KBK districts of Odisha also. In KBK districts of Odisha the Dalal (agents) frequently visit the rural areas and make heavy advance payment to labourers to work in the brick kilns of Andhra Pradesh, Tamil Nadu, and Telengana during the lean agricultural season. Accordingly, the labourers of KBK areas by accepting heavy amount in advance move to the above areas and work in various distant places. Thus, the institutional theory gives emphasis development through migration.

### **2.12 The Cumulative Causation Theory of Migration:**

The Cumulative causation theory is propounded by Gunnar Myrdal in the year 1956 which explain the main cause of migration as self-sustaining and self-perpetuating. This theory attributes two main factors like backwash effect and spread effect into consideration while explaining the uneven development of backward areas. This theory, further, supports migration as it is produced

income to migrating people and helps in the development of both the senders and receiving countries in a long run. Later on this theory was developed by D. Massey who also put forth same views by supporting the original theory as contributed by Gunnar Myrdal. The main essence of this theory was that due to backwash effect the entire elements move towards centre by which more development can be possible in the centre as resource will be mobilized to it. Further, periphery cannot be neglected so long as convergence effects will transfer to it by spread effect. In this way, this theory believes in strong economic integration between centre and periphery. This theory is most helpful in studying the cases of distress migration as it supports the development of both the migrants of sending and receiving countries.

### **Conclusion:**

Going through the various theories and models of migration it can be concluded that migration can be attributed to multiple causes. In the developing countries like India, one can find the most important factor of migration is “Push and Pull factor”. In the case of backward and poverty stricken states like Odisha, and particularly, in its KBK (Kalahandi-Bolangir-Koraput) districts, distress seasonal migration is found since last three decades. It requires a holistic measures to deal with this grave humancentric problem to avoid any loss of life and property from the migrant prone areas.

### **Reference:**

1. Chandrasekhar, S. and Sharma, A.(2014), “Urbanization and Spatial Pattern of
2. Internal Migration in India”, IGIDr.
3. Flippen, C. (2013), “Relative Deprivation and Internal Migration in the United
4. States: A Comparison of Black and White men”, American Journal of Sociology,
5. Vol.118, No.5, PP. 1161-1198.
6. Mazumdar et al. (2013), “Migration and Gender in India”, Economic and
7. Political Weekly, Vol.48, No.10, PP.54-64

8. Ali, Z. and Sharma, A. (2014), "Migration trends from Coastal and Western Odisha", *Economic and Political Weekly*, vol.49, Issue. 1, PP.1-19.
9. Sanyal, T. and Maity, K. (2018), "On Labour Migration in India: Trends, Causes and Impacts", *Economic Affairs*, Vol. 63, No.1, PP.57-69,
10. Mohapatra, A.K., and Jha, S. (2020), "Determinants of Reverse Internal Migration in India: A Behavioural Perspective", *Indian Journal of Economics and Business*, Vol.18, No.1, PP.383-398.
11. Sangita, S. (2017), "Poverty and Migration: Evidence of Distress Migration in India", *I.A.R.I.W.*, PP.1-35.
12. Sikdar, S. and Mishra, P. (2020), "Reverse Migration during Lockdown; A Snapshot of Public Policies", *NIPFP Working Paper Series*, No.318, PP.1-6.

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# ROLE OF FINANCIAL INCLUSION IN INDIA: OPPORTUNITIES AND CHALLENGES

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## **Abstract:**

Financial inclusion plays a vital role in promoting equitable economic growth and social development in the country. It is a process of providing access to appropriate financial services and products, such as credit, pension, insurance and savings, at affordable prices to vulnerable and low-income groups. Over the last few decades, the Reserve Bank of India (RBI) and the Government of India have launched several important initiatives, such as Pradhan Mantri Jan Dhan Yojana (PMJDY), Atal Pension Yojana (APY), Direct Benefit Transfer (DBT), Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Fasal Bima Yojana, Pradhan Mantri Mudra Yojana, etc. Financial inclusion has many opportunities. It empowers individuals by influencing savings habits, providing credit for entrepreneurship, alleviating poverty and facilitating inclusive participation. It also helps in strengthening the formal banking system, increasing transparency and promoting Sustainable Development Goals (SDGs). However, there are many challenges facing financial inclusion such as lack of financial literacy, lack of infrastructure, lack of internet connectivity, gender inequality, digital divide, etc. Despite the growing number of account holders, its usage remains limited due to cultural and socio-economic reasons. This paper explores the dual concepts of opportunities and challenges in promoting financial inclusion in India. It emphasizes the need for coordinated policy measures, advanced technology, financial education and building appropriate partnership bridges between the public and private sectors to ensure full financial inclusion in India.

**Keywords:** Financial Inclusion, Opportunities, Challenges, India, and Financial Inclusion Index (FII).

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## **Introduction**

Financial inclusion plays a vital role in equitable economic growth, which implies the process of providing access to relevant financial products and services to needy vulnerable sections, such as low-income groups and vulnerable groups, at an affordable price and in a transparent manner. India being a developing country where a large part of the population uses traditional methods for their financial needs and is deprived of formal banking services, the importance of financial inclusion cannot be overstated. It plays a vital role in alleviating poverty, reducing income inequalities and promoting sustainable and inclusive growth.

The journey of financial inclusion in India has started in the last two decades. Financial

services in India are largely concentrated in urban and semi-urban areas, leaving the rural population outside the formal banking system. Despite having a wide network of banks across the country, millions of people are dependent on informal methods like moneylenders, which exploit them.

In 2014, a new scheme called Pradhan Mantri Jan Dhan Yojana (PMJDY) was launched by our Government, which aims to bring every household into the structured banking system. With the announcement of this scheme, millions of bank accounts were opened.

However, the objective of this scheme is not just to open bank accounts. For real inclusion, it is important to provide services like credit facility, insurance, savings account and pension

facility to the marginalized and vulnerable sections.

There are many other factors promoting financial inclusion in India, such as the digital revolution has promoted the use of mobile phones and the advent of Unified Payment Interface (UPI) has transformed the field of services. Fintech companies, digital wallets, phone banking and Aadhaar-based financial services have expanded financial services even to remote areas of the country. The widespread use of new technology has reduced transaction costs and removed geographical barriers, helping millions of people to access the formal banking system.

Moreover, financial inclusion is being recognized as a key cornerstone for the attainment of the United Nations Sustainable Development Goals (SDGs). It helps in directly contributing to goals such as poverty eradication, reducing inequality and economic growth. In India, financial inclusion is also linked to national missions such as “Make in India”, “Startup India” and “Digital India” which aim to enhance an ecosystem of economic and innovation sector.

In the last few years, self-help groups (SHGs), business correspondents (BCs) and microfinance institutions (MFIs) have played a vital role in expanding financial services to the grassroots level. This model shows the power of community-based and last-mile delivery process in overcoming physical and psychological barriers. There are many government initiatives that help in promoting financial services for all such as Atal Pension Yojana (APY), Direct Benefit Transfer (DBT), Standup India, Bharat Interface of Money, Pradhan Mantri Fasal Bima Yojana and many more.

### **Objective of the research**

1. To analyze the role of financial inclusion in India
2. To study the opportunities and challenges involved in boosting financial inclusion in India

### **Opportunities of financial inclusion**

#### **i. Helps to boost economic empowerment of poor:-**

Financial inclusion helps to provide access to savings and credit to marginalized populations, especially those in rural areas and low-income groups. This helps them to save and build assets, manage risks, pursue education, invest in health and undertake income-generating activities. For this, Self Help Groups (SHGs) and microfinance have helped vulnerable women and marginalized farmers to become financially self-reliant.

#### **ii. Helps to increase savings and investments:-**

One of the main objectives of financial inclusion is to ensure access to banking facilities to more and more people so that people can deposit their money in the bank and this process helps in creating the habit of saving and also helps in investing this savings in productive investments which promotes economic development. For this, digital tools like UPI and Jan-Dhan accounts have tried to make saving easy and safe for everyone.

#### **iii. Helps to provide credit and microfinance facility:-**

Through financial inclusion programs people can get formal credit which helps them save themselves from moneylenders who charge high interest rates. Credit for small scale industries helps in job creation and increasing productivity.

#### **iv. Promotes entrepreneurship:-**

Helps to promote entrepreneurship by providing easy loan facility to the poor and marginalized population, like Pradhan Mantri Mudra Yojana (PMMY) helps to provide small loans with collateral-free facility to small business owners to boost their business and build a stable business.

#### **v. Advancement of Technology:-**

The growing popularity of mobile banking, digital wallets, UPI and other

online platforms has increased the reach of financial services even in rural areas. This helps create opportunities for financial literacy, fintech startups and digital economies.

**vi. Enhanced Standard of living:-**

The financial inclusion program provides a number of services like loans, pension facilities, insurance, savings accounts, credit facilities, etc. that help people plan better for life goals like healthcare, education, and housing. This helps in the overall development of individuals.

**vii. Promote Women Empowerment:-**

Financial inclusion helps to promote gender equality as it provides equal financial facilities to both men and women so that women can take control of financial matters, start their own business and participate in decision making. Financial services help them to create better social and economic status.

**viii. Provide direct benefit transfer facility:-**

It helps the government to transfer pensions, subsidies and other benefits directly to the accounts of beneficiaries with the help of Direct Benefit Transfer (DBT). This initiative helps in reducing corruption, delays and leakages.

**ix. Creation of Job:-**

Financial inclusion programs provide easy credit facilities to needy people in an easy and convenient manner thereby giving them access to finance, creating new jobs and boosting businesses. Financial inclusion also helps expand local economies and increase consumption, leading to economic growth and increasing gross domestic product (GDP).

**x. Avoid Risk through Insurance:-**

With the help of micro insurance facilities, many people can get affordable health, crop or life insurance facility, which helps people from low-income groups to protect them from uncertain situations such as illness, natural disasters or crop failure.

**xi. Enhancing Financial System:-**

The financial inclusion program has also helped in increasing the reach of all banks in India as more and more people are participating in the formal banking systems, the banking sector has become more extensive and robust. This has boosted capital formation in the country and has also increased the financial stability of money in the country.

**Challenges of financial inclusion**

**i. Lack of basic financial literacy:-**

One of the challenges of financial inclusion in India is that a large population of India is not aware of the financial services provided by banks. These services such as insurance, pension, loan facility, investment or basic formal banking services. Thus, a large section of people are unable to access these services.

**ii. Lack of Banking Infrastructure:-**

It has been found that many rural areas in India still do not have any physical bank branches, ATMs and micro-finance institutions. Even if branches do exist, they are often understaffed or do not have proper banking infrastructure to facilitate banking services. Banks are reluctant to expand in rural areas due to the huge investment required to set up branches.

**iii. Digital Divide:-**

Despite all the efforts to develop digital finance, rural areas still suffer from poor internet connectivity and limited access to mobile phones. The rural population is still unable to use digital platforms like UPI, mobile banking and online transactions.

**iv. Lack of tailored financial products:-**

Many financial products are not designed according to the needs of the rural population, making it difficult for them to avail services such as loan facilities as these require people to provide collateral or follow strict documentation process.

**v. Gender Inequality:-**

This is one of the challenges of financial inclusion as women in India still face greater challenges in accessing financial services due to cultural issues, low literacy levels and lack of asset ownership. Many women in India still do not have the necessary documents and mobile phones in their name.

**vi. Lack of rigid financial policies and regulation:-**

Frequent changes in government policies and regulations can confuse rural customers about banking services. To promote financial inclusion in India, there needs to be coordination between all stakeholders such as NBFCs, banks, government agencies and telecom operators.

**vii. Lack of trust among rural population:-**

Most of the population in rural areas depends on informal financing due to bad experiences with banks such as fraud or hidden charges levied by banks. Some other reasons such as unfriendly behavior of bank employees or language barriers also discourage people from approaching a bank.

**viii. High establishment costs for banks:-**

Setting up branches in rural areas requires high costs in terms of technology implementation, human resources and monitoring expenses. This discourages private sector banks

as their main objective is to earn profits, and thus it becomes difficult to make huge profits from remote areas.

**Financial Inclusion Index- a measuring tool**

The Reserve Bank of India has released the Financial Inclusion Index (FII) to assess access to formal financial services such as savings account, insurance, pension, investments, postal services or banking. The FII is based on three indicators: access to financial services (35%), usage (45%), and quality (20%).

According to RBI's latest FII report published in July, India has a high level of financial inclusion, as the percentage of FIIs has increased from 64.2% in March 2024 to 67% in March 2025. This is a result of the government's continued efforts towards digitalization initiatives and the launch of schemes such as Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Fasal Bima Yojana, Atal Pension Yojana, Bharat Interface of Money, among many others to promote financial inclusion in India.

According to the Crisil Inclusix report, a score above 65.0 indicates a high level of financial inclusion and the latest update provided by the RBI shows that India's FII score in March 2025 is 67%, indicating a high level of financial inclusion. The FII score shows significant improvement in access, usage and quality, which are the three indicators of FII.

**Table 1.1 Showing Year-Wise Growth of Financial Inclusion Score in India**

Year	Financial Inclusion Score in India
2017	43.4
2018	46
2019	49.9
2020	53.1
2021	53.9
2022	56.4
2023	60.1
2024	64.2
2025	67

**Source:** <https://share.google/PlhLTxBW2cbNsrJBL>



## Conclusion

The financial inclusion program has been presented as a transformational strategy to bridge the socio-economic divide and support individuals at the grassroots level. Over the past two decades, significant steps have been taken to bring the unbanked population into the formal banking system through innovative frameworks, advancement of technology and coordination between public and private stakeholders. Financial inclusion has been making a long journey from a welfare-focused concept to a mainstream development goal which reflects its critical role in promoting social equity and inclusive growth in India.

Financial inclusion has a very wide range of opportunities. It provides individuals access to essential services such as savings, digital payments, credit facilities and insurance which in turn helps in promoting entrepreneurship, increasing income levels, poverty alleviation and boosting the overall economy of the country. Pradhan Mantri Jan Dhan Yojana (PMJDY), Atal Pension Yojana (APY), Aadhaar-Enabled Payment System Further, financial inclusion promotes gender equality, boosts rural development, and helps integrate low-income groups into the broader economy, thereby playing a vital role in achieving the Sustainable Development Goals (SDGs).

However, this progress is not without some challenges. Despite a massive increase in the total number of bank accounts and a rise in digital transactions, issues such as account dormancy, lack of proper basic financial literacy, inadequate infrastructure in remote areas and lack of trust in formal banking institutions continue to hinder the strengthening of financial inclusion. The digital divide, primarily in rural and tribal areas, further

exacerbates discrimination, leaving some communities behind. In addition, the complexity of financial services, lack of internet connectivity and limited products for vulnerable groups pose obstacles to full inclusive growth.

To address these challenges and harness the full potential of financial inclusion, a multi-pronged planned strategy is necessary. It helps in strengthening the financial ecosystem by improving digital infrastructure, promoting digital and financial literacy programs, improving cyber security, promoting gender equality policies and providing customized products according to local needs. This requires working in coordination with public-private partnerships, new fintech innovations, and proper regulatory support to create a holistic and accessible financial ecosystem in India.

## Reference

1. [https://www.rbi.org.in/scripts/BS\\_SpeechesView.aspx?Id=862](https://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=862)
2. <https://pmjdy.gov.in/>
3. <https://www.rbi.org.in/Scripts/AnnualPublications.aspx?head=Trend%20and%20Progress%20of%20Banking%20in%20India>
4. <https://www.npci.org.in/what-we-do/upi/product-overview>
5. <https://dea.gov.in/reports/annual-report>
6. <https://www.worldbank.org/en/topic/financialinclusion/overview>
7. <https://www.nabard.org/demo/auth/writereaddata/File/Financial%20Inclusion.pdf>
8. <https://www.rbi.org.in>

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# TREATMENT SEEKING BEHAVIOUR AMONG RURAL ELDERLY POPULATION: A CASE IN BANKURA, WEST BENGAL

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## Abstract

The rural elderly were doubly deprived due to lack of access to medical services and age associated ailments. Hundred respondents were interviewed randomly from Lowgram gram panchayat of Kotulpur block in Bankura based on interview schedules during March-April 2023. The principal objective of the study was to understand the treatment seeking behaviour and the challenges faced by the rural poor. The profile of the respondents were shown by univariate distribution and Chi-square statistic was conducted to see the association between background characteristics and treatment seeking behaviour. The results show elderly suffered from non-communicable diseases; common among them were hypertension, arthritis, loneliness and asthma. Further, elderly largely utilized private facilities for treatment over government hospitals. Quack practitioners were also preferred due to their familiarity and accessibility. Therefore, there is a need for targeted interventions to improve healthcare and increased emphasis on preventive measures and health education to reduce the burden of chronic diseases in this population.

**Keywords:** morbidity, non-communicable, perception, quack

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## 1. Introduction

Aging is a gradual, inevitable and irreversible phenomenon which is associated with loss of feasibility and increase in vulnerability. Modernization and advancement in the health care system is positively affecting the life span of individual but whether it is elevating the quality of life is debatable. Also, the increase in average life expectancy is changing the age structure of the population which is reflected in the current global and national demographic structure. The percentage shifting of population toward a higher proportion of the elderly age group of above 60 years is resulting in “population aging”. Report indicated that in India the share of older adults was estimated to increase from 8 per cent in 2015 to 20 per cent in 2050 (UNFPA, 2017).

As people age, they lose employment and become dependent on younger family members. As a result, they may lose independence and importance in social roles. They may experience financial hardship, loneliness, unimportance, isolation. Shifting disease burden, increased expenditure on health and long-term care, labour-force shortages, dissaving and potential problem with old age income security are the important aspects of aging population. Maintaining quality of life and health is often a challenge among most elderly population; it increases many fold in rural areas. The three factors that aging population impact on are health, economy and social areas. Economically non-productive elderly population in rural areas being left with very little of social and economic support (George *et al.* 2017).

Elderly in the rural areas was also suffering with chronic diseases as opposed to the belief that it was an urban phenomenon (Bhat and Kumar, 2014). About three-fourth of the people in rural areas were engaged in agriculture. Their economic condition was underdeveloped. Further, neglect of elderly people increased health problems due to malnutrition and improper food intake. There was lack of medical facilities and awareness in the rural areas. Elderly people in the village still believed in superstition and most of them avoided modern medicines. Although the life expectancy of the elderly had increased since the demographic transition, their well-being, standard of living and quality of life had decreased. The well-being of older population had been mandated in Article 41(5) of the Constitution of India, which directed that the state shall within the limits of its economic capacity and development, make effective provision for securing the right to public assistance in old age (Jacob *et al.* 2006). Understanding the morbidity pattern and treatment seeking behaviour of the elderly in rural area had been largely ignored in demographic literature which makes this study even more justifiable.

## **2. Review of literature**

### **2.1. Quality of Living**

Health is of universal interest and concern. Disease, disability, loss of functional capacity and eventually death are common occurrences in the human life cycle. Among the elderly it had been found that multi-morbidity is more prevalent than single morbidity (Das and Kar, 2024). The determinants of health of the older adults depends on various social factors like education, race, type of work, income, exercise and social support (Perez *et al.* 2022).

As medical systems improve, life expectancy increases, increasing the chances of chronic morbidity that will in turn affect the quality of living of the elderly population (Praveen *et al.* 2016). The major needs of elderly were found to be economic dependence, ignorance to their advice, sad attitude towards life, loneliness, distant government health facilities and lack of

awareness as well as utilization of geriatric welfare services (Goel *et al.* 2006).

### **2.2. Treatment seeking behaviour**

The severity of the morbidity condition increases many fold by treatment seeking behaviour of the individual. Treatment seeking behaviour, which is defined as a decision or action taken by an individual to maintain, attain, or regain good health and to prevent illness, has a significant impact on the severity of disease among elderly people. Few people may opt for traditional medicines, self-medication, or home remedies. Treatment seeking behaviour is influenced by socioeconomic factors. (Bhat and Kumar, 2016).

With this perspective this study is necessary to understand the situation of doubly deprived ageing population in the medically underserved rural areas. This study will help in understanding the disease pattern and evaluate health problems among rural elderly. Eventually this will help in planning comprehensive, promotional, curative, preventive, rehabilitative service.

Largely, this paper tries to understand the treatment seeking behaviour and the challenges faced by the rural poor in Bankura. The specific objectives were is to i) To see the morbidity pattern of aging population in a rural areas of Bankura ii) To comprehend the treatment seeking behaviour of aging population in rural area of Bankura.

Though morbidity pattern of Bankura had been studied there is a still a large gap in knowledge about health seeking behaviour among rural communities. Some researcher research on rural areas but they don't mention anything about communication system in rural areas.

## **3. Methodology**

**3.1. Study area-** This study was conducted in purposively selected district of Bankura. It is located in the North- Western part of the state of West Bengal. According to Census of India

2011, nine in ten people lived in rural areas in Bankura. The study area Lowgram, is situated 107 km away from state capital-Kolkata. Lowgram is a gram panchayat in Kotulpur block of Bankura district of West Bengal (see Figure 1). There are 28 villages in this panchayat. The total geographical area of the panchayat is 20.25 square km approximately. The geo-coordinate of the Lowgram is 23° 14' N and 87 °6 ' E respectively. The total population of this gram panchayat is 28378 comprising of 14547 males and 13831 females respectively.

**3.2. Data and Methods-** Primary study becomes pivotal in understanding the perception and opinion of the respondents on the various challenges and unexplored opportunities of the place. A total of 100 samples were selected randomly to avoid any unwanted biases. Semi-structured questionnaires were prepared and a face-to-face interview schedule was conducted between March and April 2024, which facilitated understanding the perception and attitudes of respondents.

**3.3. Statistical methods-** The profile of the respondents were shown by univariate distribution. To find out the association between morbidity pattern and treatment seeking behaviour by background characteristics chi-square statistic was conducted. Chi square test is a statistical test commonly used to compare intra variable differences according to a specific hypothesis. Also, to supplement quantitative information open ended questions were asked on perception of the supernatural power in healing diseases. Some of the responses were difficult to quantify and hence they had been recorded and presented in the text as quoted statements.

## 4. Results and analysis

### 4.1. Socio-demographic characteristics of the respondents

Among the total respondents the females were three out of ten. The respondents were grouped in three age groups- 60-65, 66-80 and above 80 years. Three out of ten respondents were in the age group of 60-65 years. The percentage of respondents 66-80 were 6 out of 10 and one in

ten were above 80 years. Among the caste category 7 out of ten were general, one-tenth belonged to Other Backward Caste (OBC) category, one-fifth to Scheduled Caste (SC). Within the household type, nine out of ten were living in a nuclear family. Within the marital status category eight out of ten were currently married; rest were widowed or widower. Non-marriage was not found in the village. Within the education category one-tenth were illiterate, four in ten had primary, one-tenth had secondary, one out of 10 had college level education respectively (Table 1). Within the occupation category four in ten were working and six in 10 were not working respectively. Although income data were mostly unreliable to get an approximation about the standard of living of living of the respondents annual household income were probed. Six out of 10 reported that they had income below Rupees I lakh, one-fifth said their monthly income was between Rupees one lakh and four lakhs, and one-fifth reported income of more than Rupees four lakhs respectively.

Among the social protection schemes the respondents were asked 'Whether they had Universal health insurance scheme called 'Swasthya Sathi?' and 'Whether they receive *Bardhokyo bhata* every month?' *Bardhokyo bhat* is the pension scheme administered by state's Women and Child Development and Social Welfare Department where the beneficiary receives Rupees 1,000 every month. Results show that every nine in 10 respondents was enrolled with *Swasthya Sathi* scheme and six in 10 were receiving the pension.

### 4.2. Morbidity pattern of the respondent

During the survey the respondents were asked "Are you suffering from any disease currently?" . Most of the respondents reported to be having more than one disease at the time of study. The various morbidities reported were deficiency of vitamin, protein, calcium, sodium, diabetes mellitus, eye problem, cancer, nerve problem, tumour, dental, dermatological problem, tuberculosis, spondylitis, gastritis, hernia, stroke, thyroid, pox, kidney, cardiac, dizziness etc.

Due to difficulty of reporting large number of diseases in the analysis we had taken those which were reported as primary and chronic disease and reported frequency were 15 or more. Rest were not discussed in the analysis (Table 2). The most prevalent diseases were self-reported arthritis, asthma and hypertension. Elderly females had a greater number of arthritis prevalence than males. About one-third (30 per-cent) of the arthritis patients were aging female and one-fifth (17 per-cent) were aging male. Within the age groups it was found that age group between 66-80 years were vulnerable for hypertension (one in four had them). The older age group were significantly more prone to arthritis (61 % above 80 years). Within caste category, respondents who belonged to SC caste were having higher prevalence of hypertension (very four in 10). Respondents who lived in a nuclear family over three in 10 had reported to have hypertension compared to 1 in ten from joint family. Married respondents were more likely to have reported any ailment in compared to widow or widower respondents. Respondents with primary education about one-third of them had reported having hypertension or asthma. Among the respondents who were still working 22 per cent reported hypertension, 33 per cent reported arthritis and 20 per cent reported asthma respectively. Within the income category, respondents with income less than one lakh about one in two reported to have either hypertension, asthma or arthritis respectively. Respondents with annual income of over four lakhs about 33 per cent had arthritis, 14 per cent had hypertension and 14 per cent had asthma respectively.

#### 4.3. Treatment seeking behaviour of the respondent

Health Care Seeking Behaviour refers to a decision or an action taken by an individual to maintain, attain, or regain good health and to prevent illness. This usually influences them choosing a public or private facility for health service; few may go for traditional medicines, self-medication or home remedies (Chauhan *et al.* 2014).

The Table 3 shows that half of the respondents both male and women went to private hospital

and there was no significant difference within gender. Within gender category, one-fourth of the respondents also visited quack doctors. The visit to government hospitals by both males and females were low. Also by age the results show that old-olds i.e elderly above 80 years were mostly dependent on the private health service (64 %) which was higher than the young-old respondents. (50 % of age group 60-65 years and 51 % of 66-80 years). Young-olds were more likely to visit the quacks (31 %) in compared to respondents in the age groups 66-80 years (26 %) and above 80 years (18 %) respectively. Among the respondents who were General by caste, one-fourth went to public hospitals, half went to private hospitals and the rest went to quack chambers respectively. Also respondents who belong to OBC caste (11 per-cent) rarely visited government hospital. Those who lived alone, half of them visited private clinic and one-fourth of them visited quack chamber. Half of the widow or widower depended on private health service. Widows (18 %) went to government hospital and three in 10 visited the quack chambers About 82 per-cent elderly who were graduates depended on private health service and 9 per-cent elderly visited to public health service and 9 per cent elder visited to quack chamber. Those up to primary education were more dependent on quack doctors (38 %) than respondents with higher level of education. People who were working (56 per-cent) mostly visited private health sector doctors than non-workers who mostly visited government hospital (25 %). Within the non-workers, which included housewives and retired personnel, 26 per cent visited quack doctor, 49 per cent visited private hospitals and 25 per cent visited government hospitals respectively.

The income significantly affected the treatment seeking behaviour of the respondents. Those who earned the highest i.e., those who earned more than four lakh rupees per annum visited private doctors. When further probed they reported to have preferred modern medicines over homeopathy and traditional healers. Respondents with income less than one lakh per annum either visited government hospitals (29 %) or quacks (29 %) respectively.

## 5. Discussion

Majority of the respondents in the study area were males which was contrary to other study where females outnumbered the males (Dasgupta *et al.* 2019). The predominant religion was found to be Hinduism. Studies indicated that about 75 per cent people in rural areas were engaged in agriculture. The poor economic condition of the rural population can be attributed to landless and unskilled population where rural women were more common to be poor than rural men (Khan, 2020). Therefore the elderly in general and women in particular living in the rural areas were woefully neglected.

The prevalence of communicable diseases among elderly people in the study area was low. Most elderly suffered from non-communicable diseases; common among them were hypertension, arthritis, loneliness and asthma. This corroborated with other studies which had found out that these diseases were common among men in Bankura (Das and Kar, 2024). Morbidity pattern in Tamil Nadu also reflected towards multi-morbidity which made the quality of life challenging for the elderly (Jacob *et al.* 2006). Results show that age affected the prevalence of diseases like arthritis where old-old were more prone to get affected than young-old respondents. This had been seen in other countries like Iran and Brazil where it was usual that illness will increase with age (Heydari *et al.* 2012; Lima *et al.* 2009).

Allopathic doctors were often not available in Lowgram and long travel was often required to nearby towns. Lack of transportation facilities and high cost of transportation often hindered them from availing healthcare facilities. The travel became an added hindrance along with the reduced physical mobility due to old age. During the study it was found that for some trying diseases they had to travel outside the state and mortgaged their land in the process. This can be corroborated from studies which showed that cost of treatment and non-availability of drug were factors for non-compliance to treatment (Sharma, 2002).

Results indicated that elderly largely used private and traditional treatments and rarely visited the government hospitals. Respondents indicated that often in case of any incidence of disease they go to the Shiva temple located in Sihas village and gets *Tel Pora* from priest. As a practice *Akanda* leaves were heated with *Tel Pora* and applied on the affected skin. A negligible proportion (five respondents) reported to go to the temple of *Sheetala maa* for any problem of eye. Some respondents reported that they visited quacks in the village due to lack of any doctors practising modern medicine. Also, it was only the quack doctor who visited the houses and knew the village well. As a result, those who were unable to walk or were alone like widows had few choices but to visit the local quacks. This was also supported from study on rural Bangladesh where it was found out that familiarity and accessibility determined the treatment seeking behaviour of an elderly person (Biswas *et al.* 2006).

One of the respondents believed that but natural that with aging people will be sick and therefore did not took medicines regularly as per advice of the doctor. In one house, an elderly man and his daughter-in-law were both sick and due to constraint of resources only latter were decided to be given the medicines. The respondents in Lowgram were disheartened with the nearby medical centre and they opined 'Only diseases like cough and cold can be cured in the hospital'. Though they were hopeful that 'Recently there is a new doctor who gives better treatment'. This can be substantiated with other studies which hinted that poverty and negative experience from the health centres were major determinants of health seeking behaviour. A study in similar set up in Bangladesh revealed that seeking treatment from formally qualified doctors were avoided due to high cost (Biswas *et al.* 2006). During this survey a visit to the hospital and interaction with the nurse of the sub-centre of health reflected on the lack of awareness among the villagers. She quipped 'Few villagers come to health centre except for pregnant women and women with children for polio feeding'. The health status of the individual in a given community or society largely depended on the health culture prevailing in the community. Health culture included the people's perception, beliefs, practices of the health care and treatment seeking behaviour.

**Table 1: Socio-economic characteristics of the respondents, Kotulpur block, Bankura, 2024**

Socio-economic characteristics	Category	Per cent	N
Sex	Female	30.0	30
	Male	70.0	70
Age	60 – 65	28.0	28
	66 – 80	59.0	59
	above 80	13.0	13
Caste	General	68.0	68
	OBC	11.0	11
	SC	21.0	21
Household type	Living alone	5.0	5
	Nuclear	83.0	83
	Joint	12.0	12
Marital status	Married	78.0	78
	Widow/widower	22.0	22
Education	illiterate	11.0	11
	Primary	37.0	37
	Madhyamik	16.0	16
	H. S	24.0	24
	Graduate	12.0	12
Occupation	Working	45.0	45
	Not working	55.0	55
Annual Income (in Rupees)	<1 lakh	59.0	59
	1- 4 lakhs	20.0	20
	>4 lakhs	21.0	21
Swastha Sathi card (Health insurance)	Yes	92.0	92
	No	8.0	8
Bardhakya bhata (Old age Pension)	Yes	64.0	64
	No	36.0	36
	Total	100.0	100

Source: Primary Survey

**Table 2: Pattern of morbidities by bakground characteristics Kotulpur block, Bankura, 2024**

Socio-economic characteristics	Category	Pressure	Arthritis	Asthma	Depression	Total
Sex	Female	30.0	23.3	20.0	20.0	30
	Male	17.1	24.3	15.7	15.7	70
Age	60 – 65	14.3	10.7***	14.3	14.3	28
	66 – 80	25.4	22.0	13.6	20.3	59
	above 80	15.4	61.5	38.5	7.7	13
Caste	General	16.2	25.0	16.2	17.6	68
	OBC	18.2	27.3	18.2	9.1	11
	SC	38.1	19.0	19.0	19.0	21
Household type	Nuclear	22.7	23.9	15.9	17.0	88
	Joint	8.3	25.0	25.0	16.7	12
Marital status	Married	19.2	23.1	17.9	19.2	78

	Widow/widower	27.3	27.3	13.6	9.1	22
Education	Illiterate	36.4**	36.4	27.3	0.0	11
	Primary	29.7	29.7	24.3	24.3	37
	Madhyamik	6.2	31.2	18.8	12.5	16
	H. S	4.2	4.2	4.2	16.7	24
	Graduate	33.3	25.0	8.3	16.7	12
Occupation	Working	21.8	32.7**	20.0	16.4	55
	Not working	20.0	13.3	13.3	17.8	45
Annual Income (in Rupees)	<1 lakh	22.0	20.3	15.3	18.6	59
	1- 4 lakhs	25.0	25.0	25.0	20.0	20
	Above 4 lakhs	14.3	33.3	14.3	9.5	21

Source: Primary survey; Note: 1. Diabetes mellitus was reported by 10, hence not reported in the analysis. 2. \*\*\*: Significant at 99 % confidence level. 3. \*\*: Significant at 95 % confidence level.

**Table 3: Place of visit for treatment by background characteristics Kotulpur block, Bankura, 2024**

Socio-economic characteristics	Category	Public	Private	Quack	Total
Sex	Female	25.0	50.0	25.0	28
	Male	20.3	53.1	26.6	64
Age	60 – 65	19.2	50.0	30.8	26
	66 – 80	23.6	50.9	25.5	55
	above 80	18.2	63.6	18.2	11
Caste	General	25.0	48.4	26.6	64
	OBC	11.1	66.7	22.2	9
	SC	15.8	57.9	26.3	19
Household type	Nuclear	22.0	51.2	26.8	82
	Joint	20.0	60.0	20.0	10
Marital status	Married	22.9	52.9	24.3	70
	Widow/widower	18.2	50.0	31.8	22
Education	Illiterate	20.0	50.0	30.0	10
	Primary	23.5	38.2	38.2	34
	Madhyamik	7.1	71.4	21.4	14
	H. S	34.8	47.8	17.4	23
	Graduate	9.1	81.8	9.1	11
Occupation	Working	24.5	49.0	26.5	49
	Not working	18.6	55.8	25.6	43
Annual Income (in Rupees)	<1 lakh	29.1	41.8	29.1	55
	1- 4 lakhs	15.8	52.6	31.6	19
	Above 4 lakhs	5.6	83.3	11.1	18

## 6. Conclusion

The study on morbidity pattern and treatment seeking behaviour among the aging population

in rural Bankura reflected that there was a high prevalence of chronic diseases among the elderly population and case of multi morbidity was high. However, there was low utilization of



healthcare services due to various factors such as lack of awareness, financial constraints, and cultural beliefs. Therefore, there is a need for targeted interventions to improve healthcare access and utilization among the elderly population in rural areas. Additionally, there should be an emphasis on preventive measures and health education to reduce the burden of chronic diseases in this population. This information can help policy makers and healthcare providers develop targeted interventions to improve healthcare access in rural areas. Ultimately this study can lead to improved quality of life for elderly population in the rural areas.

## Reference

1. Adhikari, D., & Rijal, D. P. (2014). Factors affecting health seeking behavior of senior citizens of Dharan. *Journal of Nobel Medical College*, 3(1), 50-57.
2. Biswas, P., Kabir, Z., Nilsson, J., & Zaman, S. (2006). Dynamics of Health Care Seeking Behaviour of Elderly People in Rural Bangladesh. *International Journal of Ageing and Later Life*, 1(1), 69-89  
DOI:10.3384/ijal.1652-8670.061169
3. Bhat, S. & Kumar, S. (2016). Study on health care seeking behaviour among elderly in rural area. *International Journal of Medical Science and Public Health*, 6(2), 350-352.
4. Chauhan, R. C. et al (2014). Determinants of health care seeking behaviour among rural population of a coastal area in South India. *International Journal of Scientific Reports*, 1(2), 118-122.
5. Das, U., & Kar, N. (2024). Socioeconomic status and morbidity pattern among the elderly population in Bankura district, West Bengal *BLDE University Journal of Health Sciences*, 9(2), 161-171, doi.10.4103/bjhs.bjhs\_48\_24.
6. Dasgupta A., Pan T., Paul B, Bandopadhyay L., & Mandal S. (2018). Quality of life of elderly people in a rural area of West Bengal: A community-based study. *Med J DY Patil Vidyapeeth*, 11, 527-31.
7. George, P.P., Heng, B. H., De Castro Molina, J. A., Wong, L.Y., Wei Lin, N. C., & Cheah, J. T. (2012). Self-reported chronic diseases and health status and health service utilization – Results from a community health survey in Singapore. *Int J Equity Health*, 11, 44.
8. Goel, P.K., Garg, S. K., Singh, J. V., Bhatnagar. M., Chopra, H., & Bajpai, S. K. (2003). Unmet needs of the elderly in a rural population of Meerut. *Indian J Community Med*, 28, 165-6.
9. Heydari, J., Khani, S., & Shahhosseini, Z. (2012). Health-related quality of life of elderly living in nursing home and homes in a district of Iran: Implications for policy makers. *Indian J Sci Technol*, 5, 2520-5.
10. Jacob, A., Bazroy, J., Vasudevan, K., Veliath, (2006) A., Panda, P. Morbidity pattern among the elderly population in the rural area of Tamil Nadu. *India. Turk J Med Sci*, 36, 45-50.
11. Lima, M. G., Barros, M. B., César, C. L., Goldbaum, M., Carandina, L., & Ciconelli, R. M. (2006). Health related quality of life among the elderly: A population-based study using SF-36 survey. *Cad Saude Publica*, 25, 2159-67.
12. Khan, M. H. (2000). Rural Poverty in Developing Countries: Issues and Policies. *IMF Working Papers*, 2000(078), A001. Retrieved Jul 27, 2025, from <https://doi.org/10.5089/9781451850093.001.A001>
13. Perez, F., Perez, C., & Chumbiauca, M. (2022) Insights into the Social Determinants of Health in Older Adults. *Journal of Biomedical Science and Engineering*, 15, 261-268. doi: 10.4236/jbise.2022.1511023.
14. Praveen, V. & Rani, A. M. (2016). Quality of life among elderly in a rural

- area. *Int J Community Med Public Health*, 3, 754-7.
15. Sharma, A. L. (2002). Geriatrics' a challenge for the twenty first century. *Indian Journal of Public Health*, 47(3), 16-20.
16. UNFPA. (2017). Caring for Our Elders: Early Responses India Ageing Report-2017. United
17. Nations Population Fund, 33(1), 531–540.

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संतोष कुमार गंगवार  
राज्यपाल, झारखण्ड



हेमन्त सोरेन  
मुख्यमंत्री, झारखण्ड

# समस्त झारखण्डवासियों को स्वतंत्रता दिवस की हार्दिक शुभकामनाएं एवं जोहार

स्वतंत्र भारत अपनी स्वतंत्रता के 79 वें वर्ष में प्रवेश कर रहा है।  
हमें यह सुखद अवसर प्रदान करने वाले समस्त स्वतंत्रता सेनानियों को  
हमारा शत-शत नमन।

स्वतंत्रता आंदोलन में झारखण्डवासियों के अतुलनीय संघर्ष व बलिदान की  
गौरवगाथा को भी भुलाया नहीं जा सकता। उन्हें भी हमारा नमन।

