



Deshbandhu College, University of Delhi



# **DESHBANDHU JOURNAL OF SOCIAL SCIENCES**

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**DECEMBER 2024**



# **Deshbandhu Journal of Social Sciences**

Volume II

December 2024

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# Principal's Note

Dear Esteemed Readers, Colleagues, and Students,

It is with a profound sense of bliss and contentment that I am writing this note for the Deshbandhu Journal of Social Sciences, as this ISSN-accredited publication, published under the aegis of Deshbandhu College, University of Delhi, enters its second year of publication. For the second consecutive year, this Journal, with its steadfast commitment to academic research and scholarly endeavours, is bringing out a diligently crafted and finely curated volume of research papers.

This year's volume of the DJSS carries a catalogue of finely tuned and well-researched articles drawn from various disciplines that fall under the Social Sciences. This volume is truly diverse not just in terms of its academic leanings, but also in terms of the geographic diversity it has presented, transcending the boundaries of Delhi University, and hence attracting submissions from several academic enthusiasts and scholars from about the length of our nation.

What makes this volume truly exclusive is the tradition of showcasing a new and freshly curated photo exhibition, which is not just a feast for the eyes, but also a thrilling expression of the society around us. It is my profound delight that this year's volume showcases the journey of Deshbandhu College across its 75 years of history.

I extend my heartfelt congratulations to all the contributors for their exceptional work. I am grateful for the opportunity to feature your research and insights in our journal. I would also like to express my appreciation to the DJSS team for their meticulous work in curating and refining the content for this edition. Your commitment to upholding academic standards has played a crucial role in the success of this publication. Thank you to all the external contributors for sharing your expertise and contributing to the intellectual vibrancy of our academic community. I look forward to future collaborations and the continued success of Deshbandhu Journal of Social Sciences.

Sincerely,

**Prof. Rajendra Kumar Pandey**

Principal, Deshbandhu College

University of Delhi

# Faculty's Note

Dear Esteemed Readers, Colleagues, and Students,

We are delighted to present the second volume of the *Deshbandhu Journal of Social Sciences*. This journal embodies the core values of academic rigor, critical inquiry, and resilience—principles that form the foundation of our college. As faculty members, it is a privilege to witness the meaningful collaboration between students and scholars, fostering holistic engagement in the pursuit of research excellence.

Social science is a field with ever-widening boundaries, encompassing a growing array of disciplines and perspectives. This breadth was evident in the diverse subjects and research questions submitted for this year's issue. The selection process was both rigorous and challenging, as we aimed to uphold the journal's academic standards. For this edition, we have curated works that resonate with the contemporary issues of our times, reflecting the dynamic nature of social sciences.

The journal draws inspiration from the profound words of Martin Luther King Jr.: *"The function of education is to teach one to think intensively and to think critically. Intelligence plus character—that is the goal of true education."* Guided by this vision, the journal was established with the aim of fostering critical thinking and intellectual growth. It continues to strive towards this purpose, advancing the art of research through learning, collaboration, and refinement.

We extend our heartfelt gratitude to the external advisory board and our reviewers for their invaluable insights and unwavering support. Their contributions have been instrumental in ensuring the success of this journal. Finally, we hope that this publication serves as a beacon of knowledge for students as they embark on their journeys, striving to carve their unique paths in the world.

Warm Regards,

**Faculty, Deshbandhu College**

University of Delhi

# Letter from the Chief Editors

Dear Visionaries of Research and Knowledge,

We are delighted to release the second volume of *Deshbandhu Journal of Social Sciences*, a noble pursuit of our times, that is aimed at facilitating those who have a zeal for academic research and gusto for providing fresh perspectives and interpretations of the world around us. This journal is published under the aegis of Deshbandhu College, University of Delhi. Deshbandhu College is an institution synonymous with academic excellence and has been ranked 16<sup>th</sup> nationally in NIRF Rankings 2024. This college was established in 1952, by the Ministry of Rehabilitation to ensure the higher education of the refugees who arrived in Delhi after the partition. Deshbandhu Gupta, a distinguished freedom fighter of his time, is not just an identity, but also a constant source of inspiration and motivation for us all. The artistic theme that we have adopted this year, reflects the journey Deshbandhu College has traversed in the last seventy-two years.

The previous volume of the journal manifested through two issues, presented works of research that were of academic and pragmatic calibre. This year, our second volume carries an even more diverse and vivid catalogue of research papers from various disciplines of Social Sciences, including History, Political Science, Public Administration, Sociology, Environmental Studies and more. This year we saw a remarkable increase in student participation, underscoring the journal's success in inspiring young minds to engage with the art of research.

Social Science, a field without boundaries, deeply influences our lives in ways that are indispensable to modern society. This limitless and integrative nature was reflected in the diverse range of submissions we received. For instance, the analyses of technology's role in shaping political structures or its use as a tool in elections serve as compelling evidence of the dynamic and evolving essence of social sciences.

We have not been alone in this journey and would like to extend our sincerest gratitude to respected Principal Rajendra Pandey and the entire college administration for their continued cooperation.

We express our gratitude to Professor Shailendra Singh Chauhan, our librarian and the supportive library staff for upholding the plagiarism standards of our journal and to all distinguished faculty members for their guidance. We also express our sincerest gratitude to the honourable members of the External Advisory Board for their constant mentorship. This volume represents not only the culmination of the DJSS team's collective efforts but also the dedication of our writers, who have worked diligently to meet the time frame for submission. We extend our heartfelt gratitude to our reviewers, whose discerning insights and critical comments have been instrumental in better articulation of our writers' ideas. Their support has reinforced the spirit of scholarly rigour that DJSS upholds.

This year marked a significant transition—from student executives to Chief Editors—a journey defined by challenges, missteps, and invaluable lessons. Among the most profound takeaways have been the insatiable quest for knowledge and the relentless pursuit of pushing boundaries, the very foundations upon which meaningful research is built. Finally, we acknowledge the unwavering support of Mr. Shivansh Nagpal and Mr. Raghu Bhatt, whose vision and leadership established this journal as a platform for students to engage in research and enhance their academic journeys.

The famous English playwright, William Shakespeare, wrote in *The Hamlet*: “My words fly up, my thoughts remain below. Words without thoughts never to heaven go.” As we present to you our second volume, we hope that all words and thoughts penned down by our distinguished authors may wriggle themselves in the heaven of your heart and the temple of your soul. We are committed to keeping this noble pursuit going and will keep bringing new volumes in the coming years.

Sincerely,



**Prof. Biswajit Mohanty**  
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## About the Journal

Deshbandhu Journal of Social Sciences is an academic research journal under the aegis of Deshbandhu College, the University of Delhi, pertaining to all disciplines under the purview of social sciences, established with the objective of promoting academic rigour and enhancing research & analytical output. It provides a forum for the exchange of ideas & seeks submissions from various scholars in the domain, and also integrates artistic exhibitions and themes relevant to contemporary societal issues of great importance.

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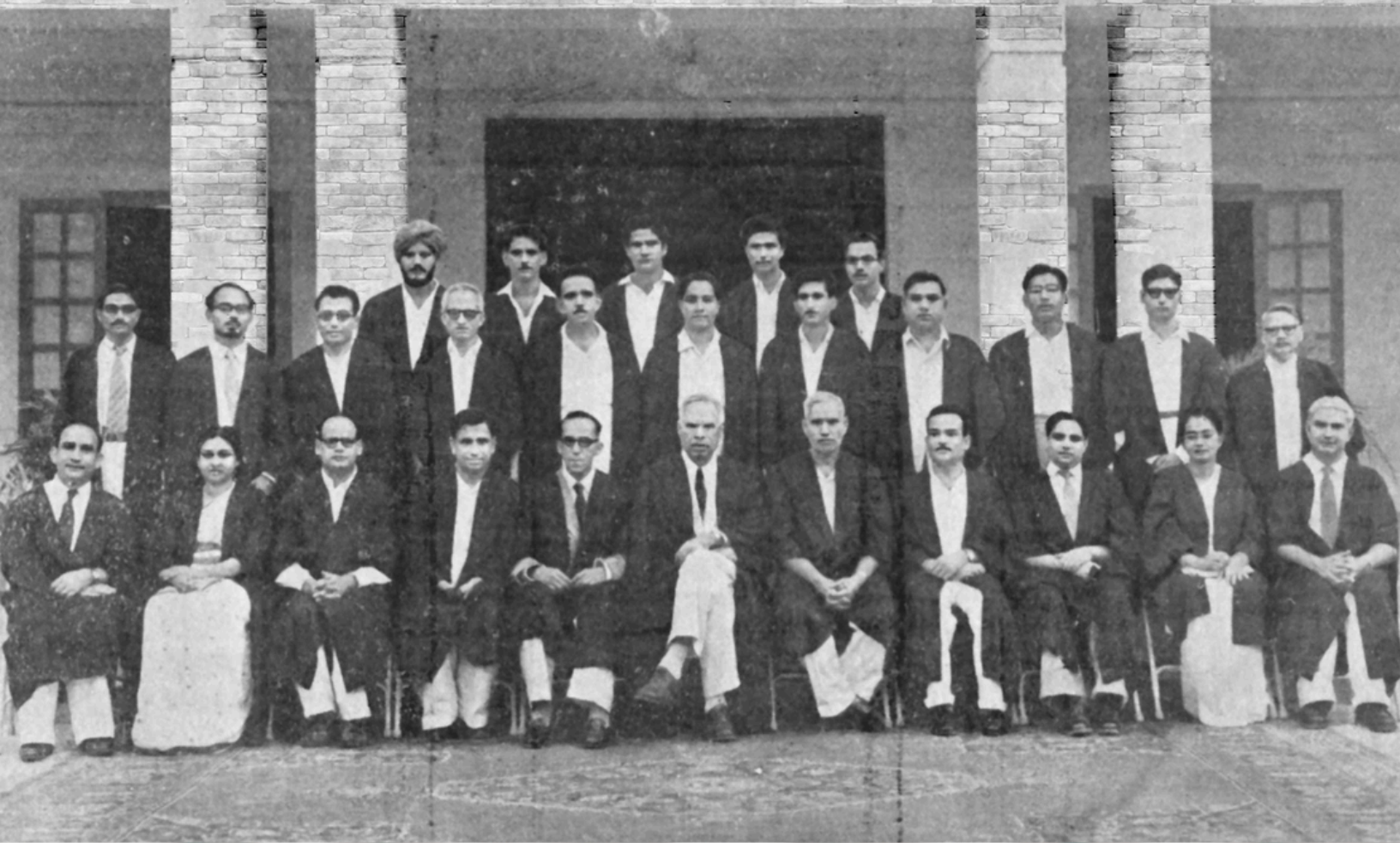
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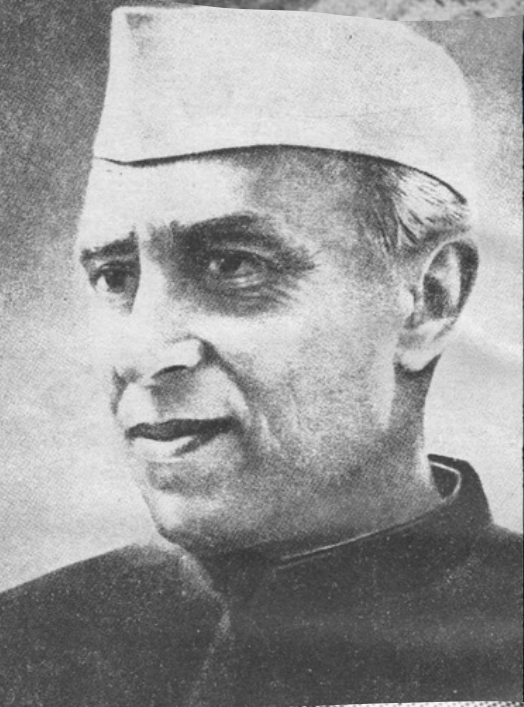
DESHBANDHU COLLEGE



A Tale of Refuge, Resilience, and Excellence



*Fostering synergy to shape the future, Taking a step towards inclusive education for all.*

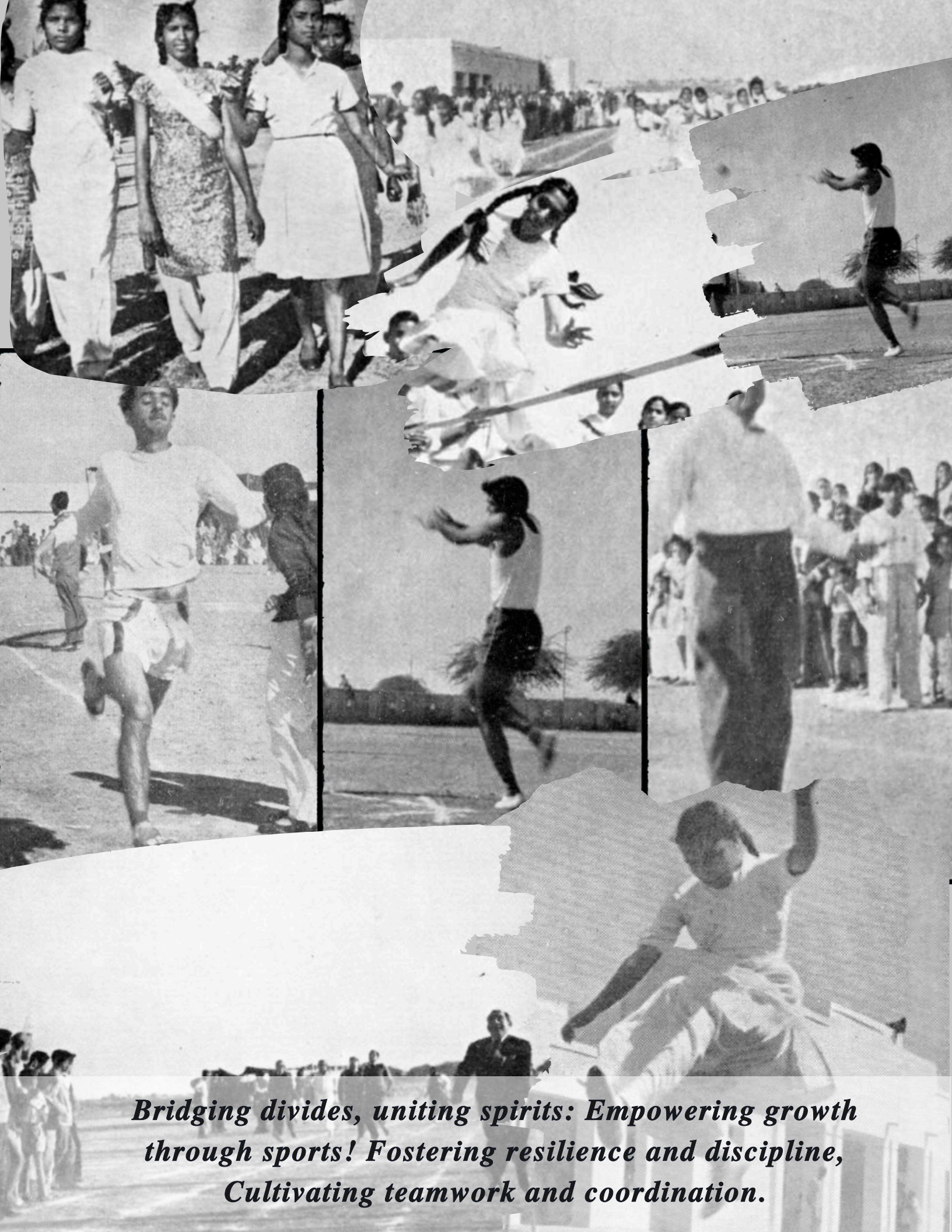


*Honoring the sacrifices and contributions, Echoing the vision of our leaders.*





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*Bridging divides, uniting spirits: Empowering growth through sports! Fostering resilience and discipline, Cultivating teamwork and coordination.*

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All photographs have been extracted from the different volumes of DESH Magazine of Deshbandhu College published between the years 1953-1980.

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*Deshbandhu Journal of Social Sciences*

# The Environmental Impacts of Wetland Tourism: A Study of Chilika Lake in Odisha

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## Abstract

Wetlands have emerged as major nature-based tourist destinations throughout the world. As tourist hotspots, wetlands help in boosting the local economy and positively contribute to the economic wellbeing of the local residents, particularly of those involved in various tourism-related activities. However, tourism, if not well managed, can lead to various adverse environmental impacts, thereby affecting the lives and livelihoods of the local people. The paper seeks to study the major environmental impacts of tourism in Chilika wetland and identify the key factors contributing to those impacts. The research is based on primary study and the results of the study are assessed through frequency, mean and factor analyses.

*Keywords- Wetland, Wetland tourism, Chilika lake, Environmental impacts, Pollution*

## 1. Introduction

Wetlands are one of the most productive ecosystems in the world and are one of the major tourist attractions. Wetlands provide a wide array of services to the local community, starting from supplying food, water, construction material, protecting the coastline to providing the facility for leisure and tourism activities (UNWTO, 2012). Though there are many definitions of wetland, provided by various authors, the Ramsar convention's definition is a universally accepted one. According to the Ramsar convention, wetlands are the "areas of marsh, fen, peatland or water, whether artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including the marine water, the depth of which at the low tide does not exceed six meters".

The unique features like rich biological diversity, natural environment, wilderness, coastal villages etc. make wetlands, nature-based tourism destinations, that offer leisure, recreation and tourism facilities (Chiu et al., 2014). Wetland tourism attracts a great number of tourists. Millions of tourists visit the wetland destinations in Asia annually (Cheung and Fok 2014). The 11th conference of the Ramsar Convention, held in Bucharest, Romania in 2012 had formally acknowledged the relationship between wetland and tourism, while highlighting several ecological challenges associated with wetland tourism. The conference suggested the adoption of sustainable tourism to address the adverse ecological impacts of wetland tourism.

Tourism in wetlands can bring both positive and adverse environmental impacts. It can generate employment opportunities for the local residents and enhance their income and living standards. Increased income from tourism in the form of entry fee, user fee and sale of local products etc. can in turn be used for long term conservation of nature in and around the wetlands. The earnings from tourism can be used to train the local guides and tour operators to explain and guide the tourists on simple conservation measures and also modifying their own operations so as to minimize the damage to natural resources. Tourism can empower local communities, provided the gains from tourism are fairly distributed in the community which can incentivize the local residents to conserve the natural habitat (Egresi et al., 2021).

However, tourism, if not well managed can have serious adverse impacts particularly on environmentally sensitive ecosystems such as wetlands. Excessive and rapid development of tourism infrastructure and increasing inflow of tourists around wetlands can put enormous pressure on local resources, lead to loss of natural habitats, deforestation, soil erosion, increased air, water and noise pollution, and adverse impacts on the endangered species.

Chilika is the largest brackish water lagoon of Asia situated in Odisha, on the East coast of India. The lake covers a huge area of 950 square kilometers in summers that increases to 1165 square kilometers during the rainy season (Siddiqui & Rama Rao 1995). It is spread across three districts of Odisha namely Puri, Khordha and Ganjam. The lake is a highly productive ecosystem and has a rich fishery resource. There are 323 types of fishes found in the lake, out of which 261 are finfish species, 28 belong to the category of prawns and 34 to the category of crabs (Chilika Development Authority,2008). Due to its rich fishery resources, more than two lakh people depend on the lake for their livelihood (Nayak and Baker,2010). The lake was designated as a Ramsar site in the year 1981 due its rich biodiversity and socio-economic importance. Irrawaddy Dolphin, which is one of the endangered species, is found in this wetland. It is considered to be the flagship species of the lake and hence a major attraction for tourists. Chilika wetland offers the largest wintering ground to the migratory birds on the Indian subcontinent. According to the bird census report, 2024, Chilika was visited by 1,137,759 feathered tourists, belonging to 184 species (Down to Earth). A number of beautiful islands spread across the lake. The wetland offers a wide array of tourism attractions, such as bird watching, dolphin cavorting, boating, visiting Goddess Kalijai, and a chance to savour the delicacies such as brackish water fish, crab and prawn (Khuntia, 2017).

## **2. Objectives**

- To study the environmental impact of tourism in Chilika lake.
- To identify the key factors contributing to various environmental effects of tourism in and around Chilika lake.

## **3. Review of Literature**

Tourism brings both positive and adverse impacts to the host community and nation which can be classified into environmental, economic and socio-cultural impacts (Simson,2008). Rampel (2009) who has conducted a study on causal link of coastal tourism on Vancouver Island has identified several key positive impacts such as wildlife conservation, increased employment opportunities for the youth, fostering environmental stewardship and enhancing beautification of the area.

According to Ko and Stewart (2008) tourism affects the host community in a number of ways, such as protection of natural resources, improvement of public amenities, increased traffic congestion and accidents, noise and air pollution etc. Ikiara and Okech (2002) have found that, though tourism protects the flora and fauna and their natural habitat, it also can lead to severe negative impacts on the environment if not properly controlled and managed. These include overcrowding, overdevelopment of tourist attractions, pollution of coastlines and destruction of coral reefs and mangroves etc. Chuang (2013) conducted a comparative study of Nanjuang and Tongsiao township in Taiwan and found that Nanjuang residents have faced increasing environmental impacts associated with tourism such as noise pollution, destruction of environment due to the construction of more hotels and tourist facilities, increased production of garbage, increased traffic congestion and accidents etc. Mbaiwa (2003) through his study on socio-economic and environmental impact of tourism in Okavango delta in north Botswana found that tourism is responsible for many ecological issues such as loss of habitats, flora and fauna, degradation of natural beauty, increased waste and noise pollution. Zhao and Li (2018) through their study in China, found that while tourism increases the environmental awareness and develops the infrastructure facilities, it is also responsible for increasing pollution and excessive energy consumption. Tourism growth in wetlands brings a number of negative impacts such as waste generation, water pollution and habitat destruction (Pan et.al.,2018). Khoshkam, Marzuki & Mulali (2016) based on their study on the Anzali wetland of Iran conclude that tourism brings many economic and socio-cultural developments to the destination while at the same time being responsible for environmental degradation in the wetland area.

#### **4. Materials and Methods**

The research involves primary study, based on survey methods. Data was collected from the local residents, directly involved in tourism activities in and around the lake through structured questionnaires. The stratified random sampling method was used for the collection of data and the total sample size for the survey was 106. The five-point Likert's scale is being used to measure the perceptions of residents on the environmental impacts of tourism in Chilika wetland. Data analysis was done with the help of SPSS software.



## 5. Results and Discussions

### 5.1 Demographic Profile and the Frequency Analysis

The demographic profile of the respondents is analysed with the help of Frequency analysis presented in table-1. The table shows that most of the respondents (83%) are male while only a small percentage (17%) are women. The age wise distribution reveals that the respondents belonging to the age group 31-40 years have the highest participation in tourism services followed by the age group of 21-30 years. It can therefore be inferred that tourism in Chilika overwhelmingly employs a younger population.

From the education profile, it can be concluded that the residents who are providing tourism services in Chilika wetland are educated. The occupational distribution of the respondents shows that 36.8% are engaged in guiding, 9.2% are engaged in selling souvenir products, 12.3% are engaged in restaurants/hotels/bars, 7.5% own shops for tourists, while 26.4% are providing boat services in the wetland area. So, it can be concluded that majority of the local people engaged in the tourism sector are providing guiding and boating services in Chilika wetland.

*Table 1. Demographic Profile of the Respondents*

<i>Variable</i>	<i>Category</i>	<i>Percent</i>
<b>Gender</b>	Male	83
	Female	17
<b>Age Group</b>	>20 years	3.8
	21-30 years	27.4
	31-40 years	35.8
	41-50 years	21.7
	Above 50 years	11.3
<b>Educational Qualification</b>	Up to High school	35.8
	Intermediary/Diploma	22.6
	Graduate	29.2
	Post-Graduate/Professionals	12.4

<b>Occupation</b>	Guiding	36.8
	Selling souvenirs	9.5
	Working in restaurants/hotels/bars	12.3
	Working as travel agents	7.5
	Owning shops for tourists	7.5
	Providing boat services	26.4

## 5.2 Mean analysis of Environmental impact

The simple mean analysis is used to evaluate the perception of local people on the environmental impacts of tourism in Chilika wetland. The respondents were asked to rate their perceptions using a five-point likert scale.

*Table 2. Mean Analysis of Environmental Impact*

	<i>Mean</i>	<i>Rank</i>
Chilika tourism cares for the environment and makes the area look better.	3.43	XI
Chilika tourism helps in protection and preservation of nature and natural resources.	3.55	VIII
Chilika tourism conserves natural resources.	3.48	IX
Chilika tourism creates environmental awareness.	3.83	II
Chilika tourism contributes to improving the environment for resident's living.	3.46	X
Tourism is an integral part of the locality.	4.31	I
Chilika tourism contributes to the excessive consumption of water.	3.00	XVI
Tourism in Chilika pollutes the water.	3.01	XV
Tourism in Chilika creates noise pollution.	3.20	XIII
There is an increase of untreated garbage due to tourism.	3.61	V

Local people have a lower quality of life in the Chilika area.	3.12	XIV
Chilika tourism pollutes the sanctuary environment.	3.59	VI
There is traffic congestion during peak tourism periods in Chilika lake	3.72	IV
Chilika Tourism creates more road accidents.	2.58	XVII
Chilika tourism increases littering.	3.79	III
The bird population is fluctuating due to increasing number of tourists	3.28	XII
The habitat of dolphins is greatly disturbed due to the increasing number of tourists	3.58	VII

The mean analysis from table-2 shows that the mean value is more than 3 in the 5-point Likert scale for all the above variables/perceptions except for one where residents disagree with the perception that tourism in Chilika creates more road accidents (mean value of 2.58). This implies that respondents perceive that tourism in Chilika has profound environmental impacts. Respondents believe that tourism is an integral part of the locality (4.31) while also perceiving that tourism in the lake increases littering (3.79), leads to traffic congestion (3.72), increases untreated garbage (3.61), pollutes sanctuaries (3.59) and disturbs the habitats of the dolphins (3.58). Thus, it can be concluded that tourism in the lake results in adverse environmental effects in and around the lake.

### 5.3 Factorization of Environmental impact

The factor analysis is used to study the environmental impacts of tourism in Chilika lake.

*Table 3. Perception of the Respondents towards Environmental Impacts: KMO and Bartlett's Test*

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		.765
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	1.089E3
	Df	136
	Sig.	.000

From table-3, the KMO value of 0.765 being greater than 0.60 indicates that data is acceptable for the factor analysis. The substantial value of Bartlett's test of Sphericity approves that there is a fundamental association between the original variables and are adequately fit for factor analysis.

**Table 4. Perception of the Respondents towards Environmental Impacts: Total Variance Explained**

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.190	36.411	36.411	4.160	24.472	24.472
2	2.603	15.314	51.724	2.710	15.939	40.411
3	1.694	9.966	61.691	2.434	14.315	54.726
4	1.178	6.929	68.620	2.362	13.894	68.620
5	.967	5.688	74.308			
6	.849	4.997	79.305			
7	.706	4.155	83.460			
8	.514	3.025	86.484			
9	.455	2.674	89.158			
10	.413	2.429	91.587			
11	.322	1.897	93.483			
12	.280	1.647	95.130			
13	.229	1.347	96.477			
14	.202	1.187	97.665			
15	.169	.994	98.658			
16	.137	.804	99.463			
17	.091	.537	100.000			

Extraction Method: Principal Component Analysis.

From table-4, four factors have been extorted whose Eigenvalues are greater than 1 and the total variance is 68.620 percent. The total variance explained by the 1st factor is 24.472% followed by 15.939%, 14.315% and 13.894% respectively. The remaining 13 statements are explained by 31.380% of the total variance. So, based on the Eigenvalues, four factors are sufficient to explain the 17 perceptions towards the environmental effects of tourism in Chilika and can be used for further analysis.

**Table 5. Perception of the Respondents towards Environmental Impacts: Rotated Component Matrix**

	<i>Factor Title</i>	<i>Component</i>			
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Chilika tourism helps in protection and preservation of nature and natural resources	Preservation	.888			
Chilika tourism cares for the environment and makes the area look better		.863			
Chilika tourism conserves natural resources		.841			
Chilika tourism contributes in improving the environment for resident's living		.812			
Chilika tourism creates environmental awareness		.730			
Tourism is an integral part of the locality		.700			
The habitat of dolphin is greatly disturbed due to increasing number of tourists	Habitat loss		.830		
There is a congestion during peak periods in Chilika lake			.770		
The bird population is fluctuating due to increasing number of tourists			.726		
Chilika tourism increases littering			.721		
There is an increase of untreated garbage due to tourism	Pollution and lower Quality of life			.811	
Local people have a lower quality of life in the environment in Chilika area				.782	
Chilika tourism pollutes the sanctuary environment				.606	
Chilika tourism adds to the traffic congestion and noise pollution				.442	
Tourism in Chilika pollutes the water	Water pollution and accident				.765
Chilika Tourism creates more traffic and accidents					.764
Chilika tourism contributes to excessive consumption of water					.604

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

The table-5 shows that five factors are extracted after Varimax rotation of 17 statements. The 1st factor comprises 6 perceptions, all related to conservation and preservation of the environment. Therefore, it is named as 'Preservation'. The second factor comprises 4 perceptions linked to the adverse impacts on habitats of species in and around the lake such as dolphins and birds and thus can be named as 'Habitat loss. The third factor comprises four statements related to pollution and its impact on the quality of life of the local people. So, it is named as 'Pollution and lower quality of life'. The fourth factor consists of perceptions associated with overuse and pollution of water, increasing traffic congestion and accidents and therefore is named as 'Water pollution and accident'.

## **6. Conclusions and Recommendations**

Wetlands are one of the most productive ecosystems of the world which is very fragile in nature. Due to its rich flora and fauna and its enchanting natural beauty, wetland tourism is considered to be one of the most popular forms of tourism in the world. Chilika lake boasts a unique mix of fresh, saline and brackish water ecosystems with estuarine characteristics. Fresh water runoff from the inland rivers mixed with the saline water from the Bay of Bengal creates a unique and highly productive ecosystem inside the lagoon, supporting a rich biodiversity including some rare and endangered species like Irrawaddy dolphins. Additionally, the lake serves as a haven for migratory birds for breeding and feeding in its fertile waters during the winters. The lake is a major hub of tourism in India and one of the choicest destinations for ornithologists, bird watchers and naturalists. The findings of this study reveal that the local people who are providing various services to the tourists for their livelihood are mostly men, whereas a very small percentage of the women are engaged in the tourism sector. In order to make tourism more sustainable, the participation of women in the tourism sector should be encouraged which will not only help in the reduction of poverty but will also promote gender equality, two of the major sustainable development goals of the UN. The educational qualification of the respondents suggests that the least educated group has the highest participation in tourism activities and the largest share of the population engaged in tourism are youth, engaged predominantly in guiding and boating services for the tourists. The mean analysis and factor analysis result show that tourism is an integral part of the local community. Though tourism contributes to the preservation and conservation of the environment, it also pollutes the water and air, creates traffic congestion, generates waste, creates noise pollution, disturbs the habitat of the animals especially dolphins and birds. The negative impacts of tourism outweigh the positive effects. In order to effectively address these adverse impacts and to make tourism more sustainable, the principles of sustainable tourism should be adopted. All the stakeholders including government, tourism department, local community, OTDC and various tourism service providers should come together and take appropriate steps to minimise the negative ecological impacts and make tourism in Chilika wetland more sustainable and rewarding for all. Sustainable tourism not only safeguards the ecosystem but also improves the economic health of the local community.

## References

1. Attfield, R. (2006). *Environmental ethics and global sustainability*. Environmental ethics and international policy, 69-87.
2. Bull, W. B. (1991). *Geomorphic responses to climatic change*.
3. Ceballos-Lascurain, H. (1996). *Tourism, ecotourism, and protected areas: The state of nature-based tourism around the world and guidelines for its development*. Iucn.
4. Cheung, L. T., & Fok, L. (2014). *The motivations and environmental attitudes of nature-based visitors to protected areas in Hong Kong*. International Journal of Sustainable Development & World Ecology, 21(1), 28-38.
5. Chiu, Y. T. H., Lee, W. I., & Chen, T. H. (2014). *Environmentally responsible behavior in ecotourism: Antecedents and implications*. Tourism management, 40, 321-329.
6. Chuang, S. T. (2013). *Residents' attitudes toward rural tourism in Taiwan: a comparative viewpoint*. International journal of tourism research, 15(2), 152-170.
7. Egresi, I., Prakash, S. L., Maduraperruma, B., Withanage, A., Weerasingha, A., Dezsi, Ş., & Răcăşan, B. S. (2021). *What affects support for wetland tourism? A case study from Sri Lanka*. Sustainability, 13(16), 8802.
8. Finlayson, C. M., & Van der Valk, A. G. (1995). *Wetland classification and inventory: a summary*. Vegetatio, 118, 185-192.
9. Ikiara, M., & Okech, C. (2002). *Discussion Paper No. 19 of 2002 on Impact of Tourism on Environment in Kenya: Status and Policy*.
10. Inskip, E. (1991). *Tourism planning: An integrated and sustainable development approach*. Van Nostrano Reinhold.
11. Kerstetter, D. L., Hou, J. S., & Lin, C. H. (2004). *Profiling Taiwanese ecotourists using a behavioral approach*. Tourism management, 25(4), 491-498.
12. Khoshkam, M., Marzuki, A., & Al-Mulali, U. (2016). *Socio-demographic effects on Anzali wetland tourism development*. Tourism Management, 54, 96-106.

13. Khuntia, N. (2017) “*Sustainable Tourism Developments in Wetlands: A Study with reference to Chilika Lake, Odisha*” (PhD Thesis), Pondicherry University.
14. Ko, D. W., & Stewart, W. P. (2002). *A structural equation model of residents’ attitudes for tourism development*. *Tourism management*, 23(5), 521-530.
15. Mbaiwa, J. E. (2003). *The socio-economic and environmental impacts of tourism development on the Okavango Delta, north-western Botswana*. *Journal of arid environments*, 54(2), 447-467.
16. National Birds Day 2024: Over a million birds belonging to 184 species visit Odisha’s Chilika lake. (2024, January 05). DownToEarth. <https://www.downtoearth.org.in/wildlife-biodiversity/national-birds-day-2024-over-a-million-birds-belonging-to-184-species-visit-odisha-s-chilika-lake-93727>
17. Nayak, P. K., & Berkes, F. (2010). Whose marginalisation? Politics around environmental injustices in India's Chilika lagoon. *Local environment*, 15(6), 553-567.
18. Pan, S. Y., Gao, M., Kim, H., Shah, K. J., Pei, S. L., & Chiang, P. C. (2018). *Advances and challenges in sustainable tourism toward a green economy*. *Science of the total environment*, 635, 452-469.
19. Ramsar, U. N. W. T. O. (2012). *Destination wetlands: supporting sustainable tourism*. In Secretariat of the Ramsar Convention on Wetlands, Gland, Switzerland, & World Tourism Organization (UNWTO), Madrid, Spain.
20. Rempel, J. M. (2009). *SUSTAINABILITY IN COASTAL TOURISM: PURSUING THE CAUSAL NEXUS*. *Bridges/Tiltai*, 47(3).
21. Siddiqui, S. Z. (1995). *Limnology of Chilika lake*. Fauna of Chilika lake.
22. Simpson, M. C. (2008). *Community benefit tourism initiatives—A conceptual oxymoron?*. *Tourism management*, 29(1), 1-18.
23. Zhao, J., & Li, S. M. (2018). *The impact of tourism development on the environment in China*. *Acta Scientifica Malaysia*, 2(1), 1-4.



# A Systematic Review of Hybrid Workers' Performance and Well-Being Outcomes: A VOSviewer- Based Bibliometrics Study

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## Abstract

Hybrid workplace is the new norm. This makes it relevant to explore the impact on well-being of employees affected by various factors and employee performance in remote or in a hybrid work settings post covid-19. Employee have to maintain performance standard and create work life balance which require organisation support. In this paper we aim to review the recent papers from 2019 to 2023 on employee performance, well-being in hybrid and remote workplaces and to observe if the policy implementation can enhance the employee performance. This paper is an endeavour to gain insights by applying bibliometric analysis and Systematic literature review. The application of bibliometric analysis represent a relatively nascent development that has garnered substantial attention within the domain of business research in recent years, as it elucidates the evolution and emergent trends in the field while demonstrating its capacity to administer substantial datasets obtained from repositories including Scopus and the web of science, thereby yielding significant research impact. The finding derived from the executed investigation unveiled an aggregate of 500 publication, of which 344 disseminated articles underwent rigorous bibliometric evaluation . From the perspective of Systematic reviews, highly cited papers from 2019 to 2023 in various domains were selected and analysed in this article. In the research results, increase in studies from 2 (2019) to 129 (2023) the initial phase involves quantitative analysis , which offers a comprehensive assessment of performance , well-being and hybrid work, utilizing tables, graphs and maps to emphasize the primary performance metrics related to article production and citation ,categorised into three clusters encompassing 53 keywords. The Subsequent phases entailed as systematic review of the most frequently cited articles organised in descending order to identify the predominant themes examined in the aftermath of the COVID-19 pandemic.

*Keywords: Performance, Well-being, Remote work, Hybrid work, Bibliometrics, SLR, Systematic literature review, Covid-19*

## 1. Introduction

Covid-19 pandemic has caused disruption in the economy and its impact can be seen in the way the organization work. The paradigm shifts in working culture can be seen across the world which has forced companies to re-conceptualize and restructure their workplaces and adapt to changing work model. Employee can work fully offsite, fully online, and split time with flexible work in hybrid work model. The hybrid work arrangements provide employees a greater level control and flexibility in location of work and timings of performing tasks, which provide potential of improvements in flexibility, autonomy, and work–life balance.

According to Gartner Survey conducted in November 2022, location-centric hybrid-work models struggle, and Human-centric, flexible work design is most successful. Same has been proven again by McKinsey survey in July 2023. According to a survey conducted by Economic Times, it has been indicated that over 90% of organization's in India have resumed office operations, either fully or partially, despite ongoing discussions regarding the effectiveness of various work arrangements – namely, remote work, hybrid models, or traditional office settings. By August 2022, a mere 9 % of India's corporate sector was involved in entirely remote work, making a substantial drop from the 38 % noted in January, as indicated by the HR solutions company Aon. This trend persists even considering a distinct inclination among employees towards remote work. The survey further revealed that an impending return to the office environment has precipitated a surge in employee turnover. The attrition rate for organization that have announced a return to the workplace in the forthcoming months reached 29 % in August, compared to 19 % for those persisting with virtual operation and those functioning under a hybrid model.

During the COVID-19 pandemic, substantial body of research focused on understanding the impact of the crisis on employees and their performance and well-being. The investigation of the impact on employee performance and well-being in a hybrid work model through a bibliometrics analysis approach and systematic review of highly cited research papers is very essential in exploring the dynamics, with implications of emerging work arrangement. For this research 500 documents found from 2013 to 2023 with Title, Abstract & Keyword "performance" OR "well-being" AND "remote work" OR "Hybrid work" on Scopus. For bibliometrics study further documents reduced to 344 numbers by adding criteria English documents, Journal only and timeline between 2019 and 2023 which is more significant to analyze research paper during and post COVID -19 pandemic. Further for Systematic review all open access documents 344 available to download and having high citation has been selected for literature review.

This research aims to systematically evaluate existing literature using bibliometric study to analyse and uncover the various predominant themes, prominent authors, reputable sources, and the highest frequently referenced influential publications within this domain. Furthermore, it aims to delineate the foundational knowledge and illuminate the various factors that enhance employee performance and well-being in a hybrid work environment.

The findings of the study reveal a growth in the number of publications from 2 in 2019 to 129 publications in 2023. Secondly, our objective is to emphasis on the areas of investigation on research and review papers from the onset of the Covid-19 pandemic. The aim is to utilize a bibliometric study and analysis as a methodology that gives change in trends, with a quantifiable evaluation present in the current corpus of literature and highlights significant research topics.

This study is organized in following sections where Section 1 elaborating the aims and study inquiries (RQ) as mentioned in Table 1. The Section 2 covers the comprehensive literature review using bibliometric analysis and tried to assess the methodologies employed with a focus on the research design and search procedure used to identify the literature and data collection. Section 3 explains the bibliometric analysis using science mapping and performance analysis and systematic literature review of highly cited paper Section 4 explains the findings related to keyword cluster analysis and present state of research standing out as most impactful studies published by authors in journals. In Section 5, where key research themes extracted, categorized and brief insights on themes for the time is provided to understand the existing need for research proposition for future research. This section aims to analyze and group publications based on future trends in work, employee performance and well-being. Finally, the research paper is followed by a future scope of study and conclusion.

## **Literature Review**

### **2. Methodology/Approach**

#### **2.1 Data Source**

Scopus covers 240 disciplines, more than 7000 publishers, 1.8+billion references cited dating back to 1970 (91+mn records , 17.6+mn profiles of authors and 94.8+ thousands affiliation profiles) shows numbers that power Scopus content and data. It evaluates the confidence in research with rich variety of metrics like SNIP, SJR, PlumX, h-index and CiteScore. (Source: Scopus Website). It provides more coverage of approximately 20% than WOS (Web of Science) and simultaneously references are extensively allowed (Falagas et al., 2008). Scopus database has been utilised to identify most impactful papers, authors based on high citations. Scopus databases were searched from 2013 to 2023. The timeline between 2019 and 2023 for review process became the basis to analyze research paper during and post COVID -19 pandemic. There were 500 articles in the field of study with 147 high citations.

#### **2.2 Research Method**

Pritchard in 1969 has coined the term called Bibliometric analysis which can be applied in studies in all areas to perform quantitative application of written communication (Gokhale et al., 2020). Bibliometrics, the study of bibliographic data which includes publications, citations and other related information. It uses mathematical and statistical methods to explore and analyse large volumes of scientific data to quantitatively analyse literature to identify patterns and future trends in articles and performance of journals, patterns in collaborations, constituents. To minimise possible subjectivity, this method follows a holistic approach than traditional method of literature review to provide better insights.

Bibliometric analysis is a useful tool for understanding evolution of specific field and uses different techniques and procedure, like analysis of citations, co-citations and bibliographical coupling. This analysis can further be extended and be used in relation to systematic literature review and meta-analysis of the study area to identify gaps in the research to investigate novel ideas.

This bibliometric analysis is novel in many aspects like First, it is the only study which applied the performance and science mapping technique to perform bibliometric analysis in the given area of research. Second, it is the only study to perform systematic literature review of top 10 highly cited systematic review papers and third, it is the only study to provide highlights of top most recent globally cited papers in the datasets.

**Table 1: Research Questions, Objective and Motivation of study**

	<b>Research Question</b>	<b>Objective</b>	<b>Motivation</b>
<b>RQ1</b>	Which are the leading journals and authors in the literature on Hybrid/remote work, well-being, and performance and which are articles are highly cited?	To identify the leading, impactful Journals, articles, and authors	To provide an improved understanding of the study area.
<b>RQ2</b>	What are the key areas that remain investigated and contribution of countries the most to the scientific production and mostly used words in the literature for further research on remote/hybrid work, well-being and performance?	To elucidate the subjects that are of paramount interest to research scholars	To ascertain the specific areas that scientific inquiry is concentrating upon.
<b>RQ3</b>	What are bibliographical charts, graphical and tabular representation of the Scopus papers data of theoretical, cognitive, societal framework and informational foundation for the remote/hybrid work, well-being, and performance in different fields of study?	To conduct a detailed investigation and present its review in summarized manner.	To expedite the understanding of the present condition of research areas in remote/hybrid work, well-being, and performance
<b>RQ4</b>	What is the essential scholarly research pertaining to Hybrid/Remote, well-being and performance from an inductive analytical perspective, along with their applications and the outcomes achieved?	To investigate leading themes, approaches used, their applications and outcomes achieved.	To assist intellectual community in enhancing their endeavors.

The first techniques of performance analysis is conducted examines the contribution and impact using publication and citation related metrics using Scopus Journal across various disciplines. The number of citation criteria used for identifying most influential authors and journals articles and its citations.

In second technique, Science mapping approach examine the relationship between research constituents in the emerging research field of hybrid work with the help of analysis of citation, co-citation, co-word, co-authorship and bibliographical coupling.

Enrichment techniques are also applied in bibliometric studies to understand the outcome of the studies which includes network metrics, clustering, visualisation techniques like Bibliometrix R, Bibexcel, Gephi, Pajek, UCINET and VOS viewer. The objective evaluation relies on performance analysis technique and subjective evaluation depends on Thematic analysis to interpretation the bibliometric analysis. (Donthu, Kumar, & Pattnaik, 2020)

This research mainly uses network visualisation software analysis tool VOS viewer to analyse papers highly cited in the research area of study and identifies the Main countries and regions , Top Institutions, Journals and articles in latest 10 years.

For this research, Scopus database was searched from 2013 to 2023. Articles were identified using the Title, Abstracts, and keywords: "performance" OR "well-being" AND "remote work" OR "Hybrid work". The initial search resulted in 500 articles. For bibliometrics study further documents were refined and numbers of studies were reduced to 344 articles by adding criteria English language documents, Journal only and timeline between 2019 and 2023 for review process. The result after applying filter shows that there are more than 100 studies done in business, management and accounting, social sciences followed by 73 studies medicines, psychology, computer science, environmental science, economics, engineering. These studies were found to be more significant and became the basis to analyses research paper during and post COVID -19 pandemic for the first performance analysis technique. The above database profile is presented in Table 3.

Co-word analysis was used to identify clusters of keywords used by the authors in the mentioned period of research. Content analysis has been performed using the objectives, methodology, results, future research course and implications of the research papers to identify the future scope of research. Hybrid work is an emerging area of research and effort has been made to minimize the subjectivity and research biasness. Extended research was conducted to identify research themes with in- depth analysis.

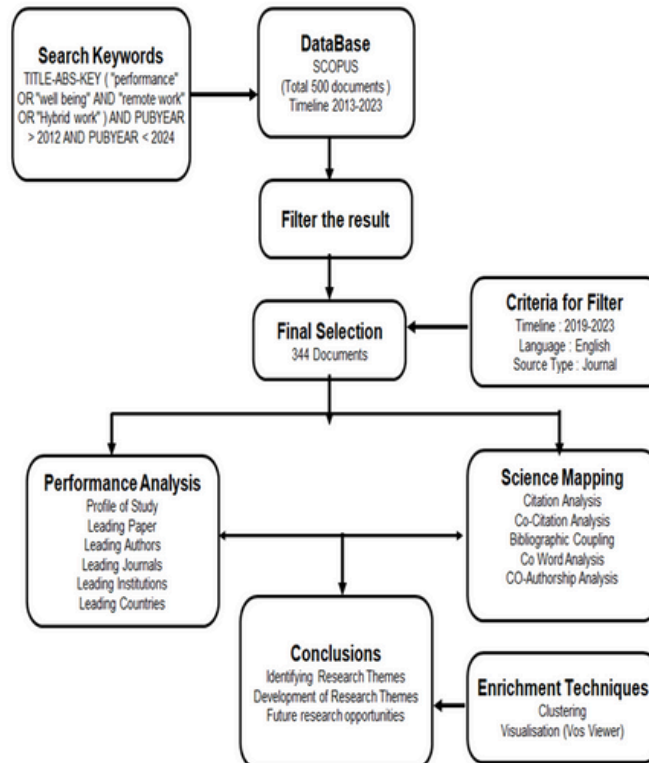
Research articles were analyzed to investigate the future scope of research and gaps in the research domain of employee performance, well-being, and hybrid work.

To address the research questions, several published research articles were identified. Figure-1 covers the research design. Data acquisition carried to determine the datasets of articles to draw relevant conclusion from the retrieved literature related to hybrid work/remote, well-being and performance.

A sample of 344 research articles published in various journals has been screened from 15 diverse countries and diverse institutions which includes research authors like Wang B., Liu Y, Qian J., Parker S.K. (2021) who had published Scopus articles in journals like Applied Psychology, European Journal of Work and Organizational Psychology. It has been observed that the researchers across the world are sensing, adapting and open to understand contemporary issues like the implication of remote/hybrid work model on performance and different types of Well-being of employee. Findings and results suggested the evolving nature of the field and is in its nascent stage and shows how research authors of diverse background have contributed to the field.

To conduct second analysis, research articles were arranged in according to number of citation criteria in descending order. Inclusion criteria was applied and data cleaning process was conducted and articles were selected based on relevance.

**Figure 1: Research Method for bibliometrics studies**



Source: Author's own creation

**Table 2:** *Keyword search in the Database -Documents retrieved*

Source of Data	Keyword Search Query	Documents
Scopus	TITLE-ABS-KEY ( "performance" OR "well being" AND "remote work" OR "Hybridwork" ) AND PUBYEAR > 2012 AND PUBYEAR < 2024 AND PUBYEAR > 2018 AND PUBYEAR < 2024 AND ( LIMIT-TO ( LANGUAGE , "English" ) ) AND ( LIMIT-TO ( SRCTYPE , "j" ) )	344

*Source: Author's own creation*

### 3. Bibliometrics Analysis

#### 3.1 Scholarly impact and publication timeline distribution

In the month of September 2023, 145 highly cited papers were present in the field of Business, Management & accounting with 116 documents, social science with 106 documents psychology, medicine, computer science etc. as per Scopus database shown in Figure 2. The aggregate citations produced by these scholarly articles in the Scopus reached 3581 (retrieved on September 25, 2023), and the average citations is 716.2 shown in Figure 3 Year wise Citation Overview. Within this context, the fraction of articles disseminated in the preceding two years (2022-2023) documented for 88%. It indicates that the research in Business, Management & accounting, social science etc. discipline as per Scopus database has experienced swift advancement. Recent investigative findings are increasingly inclined to draw attention.

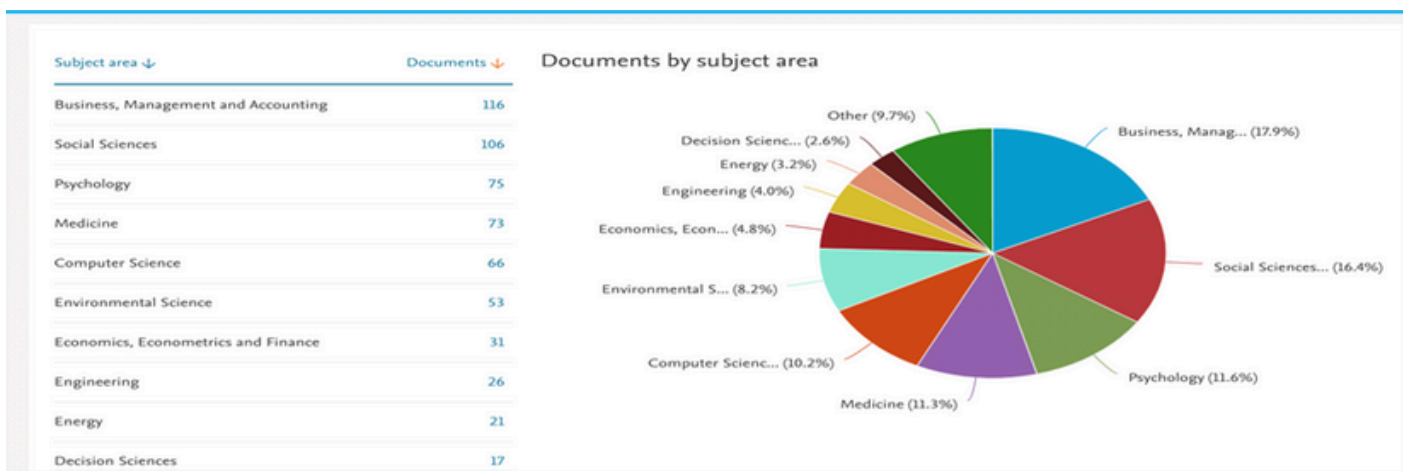


**Table 3:** Summary (Descriptive) statistics of Performance Metrics Database

Total number of articles published	<b>344</b>
Publications in 2020	1785
Publications in 2021	4807
Publications in 2022	155
Count of early access publications	1246
Total Journals involved	1134
Countries contributing	123
Total Authors contributing	17070
Mean citation count (Average)	<b>5.88</b>
Single-Author publication count	1515
Collaborative authors index	2.43

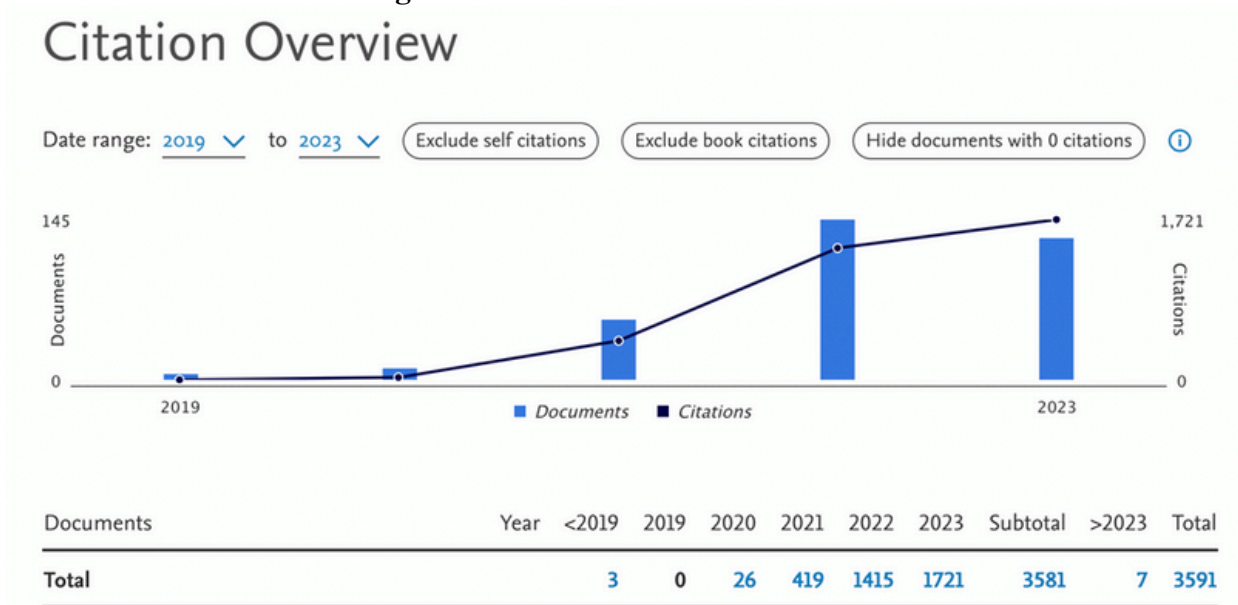
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**Figure 2:** Leading Field of research by documents by subject area studies



Source: Author's own creation

**Figure 3: Year wise Citation Overview**

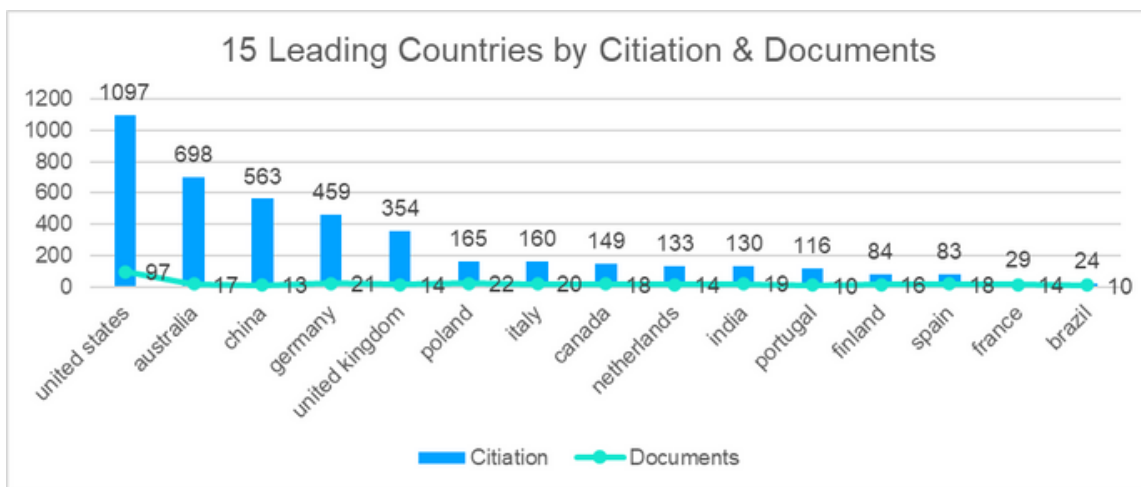


Source: Author's own creation

### 3.2 Leading Countries/ Regions by Citations

The above mentioned 344 papers belong to 70 countries/regions. In Figure 4 United States placed highest with 1097 frequently cited papers, representing 26% globally. Leading 15 countries are placed highest by frequently cited papers as represented in Table 4. Frequently cited papers are from United States (1097) is significantly surpassing other countries.

**Figure 4: Publications for each year of 15 Leading Countries by citation and documents**



Source: Author's own creation

**Table 4:** Leading 15 countries based on citation count of papers

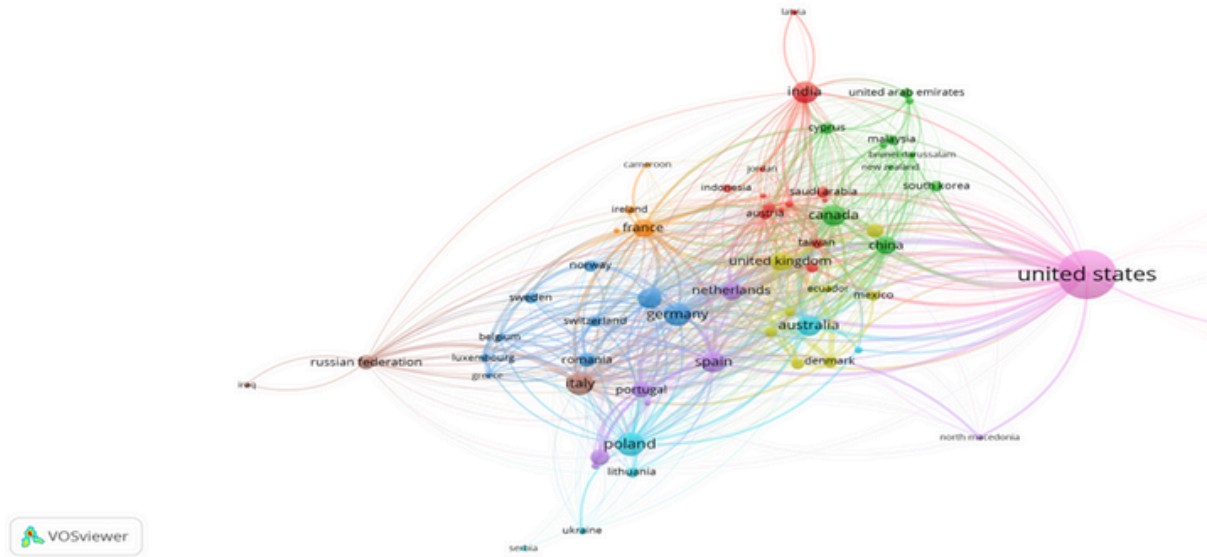
Countries	Citation	%	Documents	%
United States	1097	26%	97	28%
Australia	698	16%	17	5%
China	563	13%	13	4%
Germany	459	11%	21	6%
United Kingdom	354	8%	14	4%
Poland	165	4%	22	6%
Italy	160	4%	20	6%
Canada	149	4%	18	5%
Netherlands	133	3%	14	4%
India	130	3%	19	6%
Portugal	116	3%	10	3%
Finland	84	2%	16	5%
Spain	83	2%	18	5%
France	29	1%	14	4%
Brazil	24	1%	10	3%

*Source: Author's own creation*

### 3.3 International Co-operation

The International Cooperation of at least one paper in the area of Business, Management & accounting, social science etc. as per Scopus database presented in Figure 5. 71 countries including authors with research and publication participated as per Scopus database. The biggest nodes shows the no. of publications and thickness of lines shows the collaborations among authors highlighting the strength.

**Figure 5:** *International Co-operation network of cited papers*



*Source: Author's own creation*

### 3.4 Distribution of Institutions

Worldwide 1700 institutions published highly cited papers. The Top\_15 institutions and countries in terms of Total Citation is represented in Table 5. Top 15 institutions, 4 institutions are from United States, followed by 2 institutions from China, UK, Germany and one from Cyprus.

**Table 5: Top 15 Institution & Country (in terms of Total citations)**

Sl no.	Organization	Country	Citations
1	Beijing Normal University, Beijing, 100875, China	China	505
2	Curtin University, Perth, 6000, WA, Australia	Australia	505
3	Shanghai University, Shanghai, China	China	505
4	Department Of Psychology, University Of Georgia, Athens	United States	238
5	Centre For Advances In Behavioural Science (Cabs), Coventry University, Coventry	United Kingdom	233
6	Cyprus Institute Of Marketing, Nicosia, Cyprus	Cyprus	233
7	School Of Psychological, Social And Behavioural Science, Coventry University	United Kingdom	233
8	Healthier Workforce Center, University Of Iowa	United States	169
9	Human Resources, Washington University, St. Louis	United States	169
10	Washington University, School of Medicine St. Louis	United States	169
11	Collaborative Research Center Sfb 884 University Of Mannheim	Germany	156
12	School of Social Sciences SFB 884 University Of Mannheim	Germany	156
13	Department of Business Studies Kinnaird College, Lahore	Pakistan	150
14	School of Business And Management Sciences, Istanbul Medipol University	Turkey	150
15	School of Management And Business, Universidad Del Rosario, Bogotá	Colombia	150

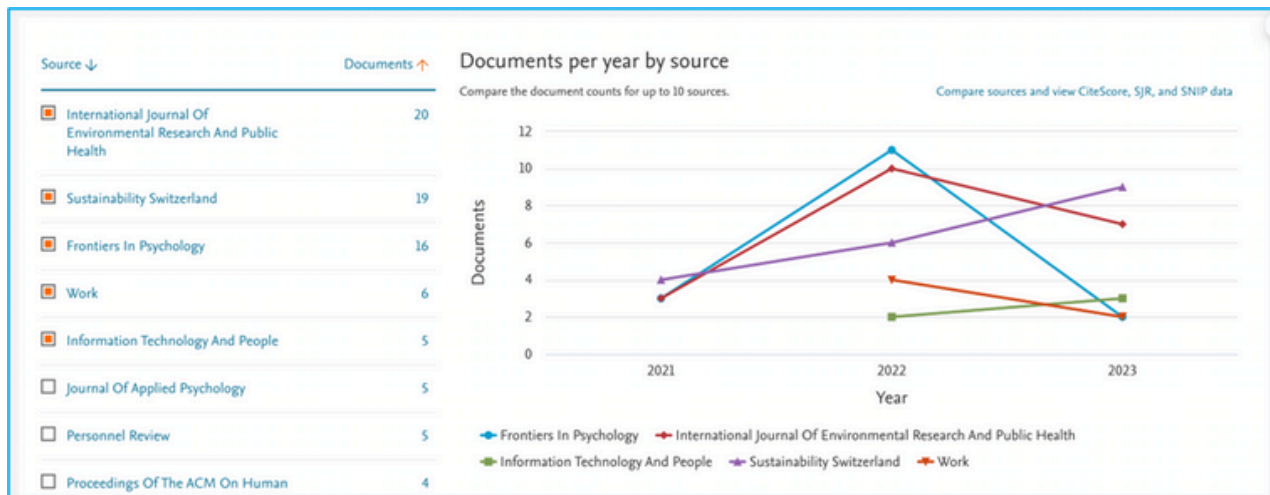
*Source: Author's own creation*

### 3.5 Distribution of Journals

#### Top Journals with the most papers

Figure 6 shows the leading Journal with most documents/Papers published in International journal of environmental Research and Public Health (20) followed by sustainability Switzerland (19), Frontiers in Psychology (16), Work (6) and Information technology and People (5). The leading journal is Frontiers in Psychology in year wise comparison followed by Information technology and People, Sustainability and Work. Frontiers of psychology has been leading in year 2022 but now stands on 3rd position. Publications have raised in 2022 in Work Journal and declined in 2023, also , publication have increased in IT and people Journal post Covid-19

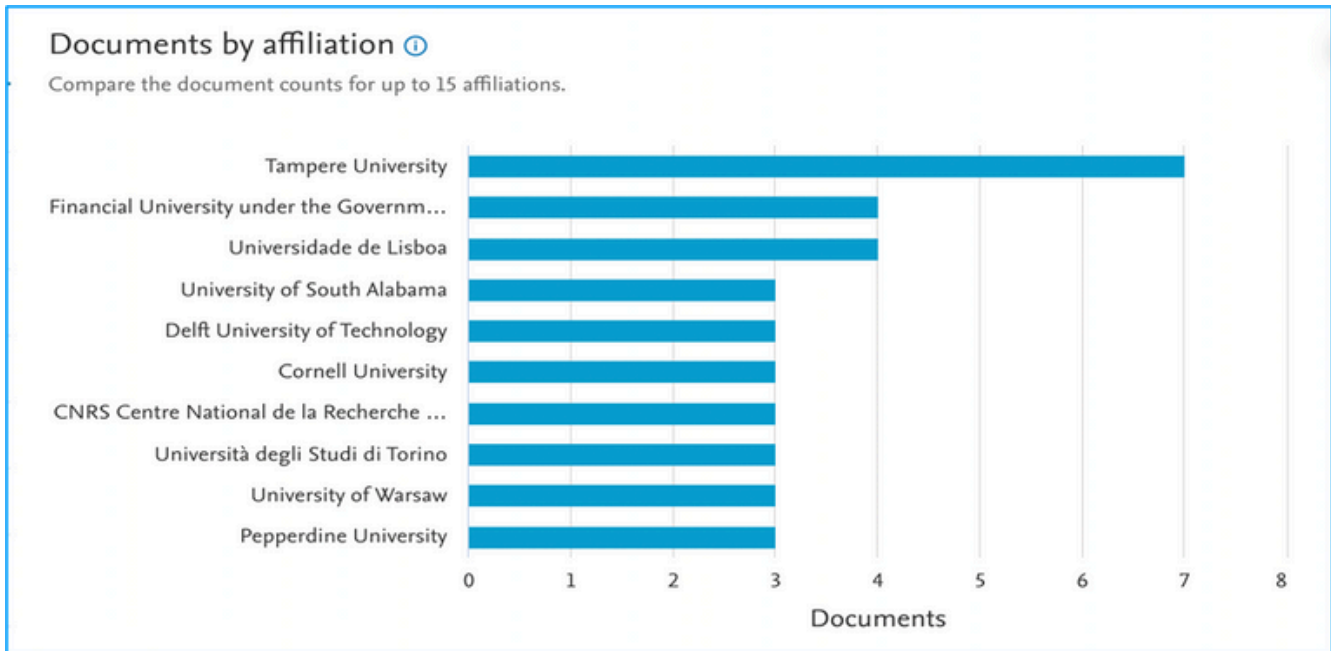
**Figure 6:** Top Journals with the most papers



Source: Author's own creation

**Figure 7** shows top 10 Institute by Documents by affiliations the leading institute with most documents by affiliations is Tampere University (7 documents), followed by Financial University (4 documents), University of Lisboa (4 documents). Top 15 institutions were selected for purpose of study.

**Figure 7: Top 10 Institute by Documents by affiliations**



Source: Author's own creation

## 4. Scientific Mapping

### 4.1 Citation Analysis- Top 10 highly cited documents

Table 6: Top 10 highly cited documents shows highly cited documents with citations 505 by total link strength of 45.

**Table 6: Top 10 highly cited documents**

<b>Id</b>	<b>Document</b>	<b>Citations</b>	<b>Total Link Strength</b>
71	Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021)	505	45
13	Charalampous, M., Grant, C. A., Tramontano, C., & Michailidis, E. (2019)	233	19
57	Evanoff, B. A., Strickland, J. R., Dale, A. M., Hayibor, L., Page, E., Duncan, J. G., Kannampallil, T., & Gray, D. L. (2020)	169	0
15	Möhring, K., Naumann, E., Reifenscheid, M., Wenz, A., Rettig, T., Krieger, U., Friedel, S., Finkel, M., Cornesse, C., & Blom, A. G. (2021)	156	3

82	Contreras, F., Baykal, E., & Abid, G. (2020)	150	10
38	Bartsch, S., Weber, E., Büttgen, M., & Huber, A. (2021)	146	3
35	Shockley, K. M., Clark, M. A., Dodd, H., & King, E. B. (2021)	142	1
56	Shockley, K. M., Gabriel, A. S., Robertson, D., Rosen, C. C., Chawla, N., Ganster, M. L., & Ezerins, M. E. (2021)	96	3
66	Tavares, F., Santos, E., Diogo, A., & Ratten, V. (2020)	77	9
46	Russo, D., Hanel, P. H. P., Altnickel, S., & Van Berkel, N. (2021)	67	1

*Source: Author's own creation*

**Table 7:** Top Authors shows the leading authors in the field of research. Wang b paper is highly cited paper as per citations of 505.

**Table 7:Top Authors**

<b>Id</b>	<b>Author</b>	<b>Documents</b>	<b>Citations</b>
319	Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021)	1	505
65	Charalampous, M., Grant, C. A., Tramontano, C., & Michailidis, E. (2019)	1	233
97	Evanoff, B. A., Strickland, J. R., Dale, A. M., Hayibor, L., Page, E., Duncan, J. G., Kannampallil, T., & Gray, D. L. (2020)	1	169
214	Möhring, K., Naumann, E., Reifenscheid, M., Wenz, A., Rettig, T., Krieger, U., Friedel, S., Finkel, M., Cornesse, C., & Blom, A. G. (2021)	1	156
75	Contreras, F., Baykal, E., & Abid, G. (2020)	1	150
31	Bartsch, S., Weber, E., Büttgen, M., & Huber, A. (2021)	1	146
277	Shockley, K. M., Clark, M. A., Dodd, H., & King, E. B. (2021)	1	142
278	Shockley, K. M., Gabriel, A. S., Robertson, D., Rosen, C. C., Chawla, N., Ganster, M. L., & Ezerins, M. E. (2021)	1	96
298	Tavares, F., Santos, E., Diogo, A., & Ratten, V. (2020)	1	77
46	Russo, D., Hanel, P. H. P., Altnickel, S., & Van Berkel, N. (2021)	67	1

*Source: Author's own creation*



### 4.2 Bibliographic/Citation Coupling Analysis

Bibliographic coupling refers to a situation when two research study articles share one or more references and cite the same third study document. It shows how two research is related.

**Figure 8: Bibliographic Coupling Analysis**



*Source: Author's own creation*

### 4.3 Co-Author Analysis

Co-citation happens when two research studies receive same citation from the third document and shows association. Author co-citation analysis (ACA) shows how authors and experts connects ideas between published research studies. In Co-authorship is the most effective method out of various methods available among the various bibliographic methods. The co-author has many applications, and many researchers have used them in their research studies. (Porter et al.) Co-Authors make a significant contribution to the work reported.

**Figure 9: Co-Author Analysis**



*Source: Author's own creation*

#### 4.4 Findings & Keyword clustering analysis

##### Keyword clustering analysis

The research focuses and paid attention on the issues in a specified time frame from 2019 to 2023 during and post covid-19 situation. Figure 10 shows Keyword clustering of cited papers. VOS viewer software was used to prevent overlapping of key nodes and labels in the charts during cluster analysis. 344 papers were analyzed and loaded into VOS viewer software for keyword calculation, and with the keywords showing the highest total link strength being chosen. Minimum threshold for keyword occurrences was set to 20 and 53 keywords were obtained with 3 clusters represented in Table 8 Clustering of Keywords in Cited Papers.

The first clusters cover the items that appear most frequently in the datasets are related to performance, well-being, hybrid work and remote work and keywords that appear multiple times in the publications. The second group covers the covid-19 pandemic and surveys, and third group covers the impact of covid-19 and working environment like burnout, anxiety, stress and on mental and occupational health.

The thematic evaluation is visualized in the field of hybrid work, performance, and well-being. This clarifies quantitative information such as thematic flows.

**Figure 10: Keyword Clustering of cited papers**



Source: Author's own creation

**Table 8:** *Clustering of Keywords in cited publications*

Cluster Numbers	Keywords
<b>Cluster 1</b> (27 Items)	Covid-19, employee, engagement, epidemic, human resource management, hybrid work, job performance, job satisfaction, leadership, organisation, performance, personnel, productivity, remote work, remote working, telecommuting, telework, teleworking, well-being, wellbeing, work-engagement, work from home, work-life balance, worker, working conditions, working from home, workplace
<b>Cluster 2</b> (15 Items)	adult, article, controlled study, coronavirus disease 2019, epidemiology, female, gender, human, humans, male, pandemic, pandemics, questionnaire, Sars cov-2, surveys and questionnaire
<b>Cluster 3</b> (11 Items)	anxiety, burnout, covid-19 pandemic, human experiment, job stress, mental health, occupational health, perception, psychology, stress, work environment

## 5. Results

### 5.1 Main documents in the data sets

**Table 9** displays the most globally cited documents that have the highest citation counts in research. The individuals recognised as authors of the records with highest citation count were Wang et al. (2021), with 505 citations published article “Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective” in Applied Psychology journal and, in second place, A systematic review paper “Systematically reviewing remote e-workers’ well-being at work: a multidimensional approach” by Charalampous et al. (2019), with 233 citations published in the Journal “European Journal of Work and Organizational Psychology”. In third place was Evanoff et al. (2020), with 169 citations published paper on “Work-related and personal factors associated with mental well-being during the COVID-19 response: Survey of health care and other workers” in Journal of Medical Internet Research. A manuscript rich in citation significantly impacts the scholars who advances in the field of study been investigated.

This paper explores hybrid work's impact on performance, well-being, and work-life balance, offering a comprehensive review through systematic literature review (SLR) and bibliometric analysis. It maps academic contributions, highlighting research gaps, emerging themes, and theoretical frameworks. Distinguishing itself from recent empirical studies, it provides a meta-perspective on the broader implications of hybrid work.

Complementary studies, such as Wang et al. (2021) highlight virtual characteristics for effective remote working and the challenge of individual differences affect remote work, Charalampous et al. (2019) focus on the effects of remote work on employee well-being, while Evanoff et al. (2020) survey gives policy solution to balance the pandemic impact on health care and other workers, P Lunde L.K. et al. (2022) examines telework and health-related outcomes into six outcome categories. Additional research by Ferrara et al. (2022) investigates how remote work shapes the self-perception of well-being and performance pre covid and Gualano et al. (2023) investigates TERRA, Telework related stress effect on well-being and work-life balance during the pandemic.

**Table 9:** *The Most Cited documents Globally in the Datasets*

Sl no.	Authors(s) and year	Title	Source	Total Citations	Highlight	Year
1	Wang, B., et al., 2021	“Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective”	<i>Applied Psychology</i>	505	This paper highlights the virtual characteristics and individual differences affect remote work challenges.	2021
2	Charalampous, M., et al., 2019	“Systematically reviewing remote e-workers’ well-being at work: multidimensional approach”	<i>European Journal of Work and Organizational Psychology</i>	233	The review identified relationship between remote work and five dimension of well-being and highlights the positive and negative effects like social, professional isolation and perceived threats in professional ladder in remote work.	2019
3	Evanoff, B. A., et al., 2020	“Work-related and personal factors associated with mental well-being during the COVID-19 response: Survey of health care and other workers”	<i>Journal of Medical Internet Research</i>	169	This survey report gives policy solution to address mental health and addiction needs to balance the impact of covid-19 in all sectors.	2020
4	Möhring, K., et al., 2021	“E-Leadership and Teleworking in Times of COVID-19 and Beyond: What We Know and Where Do We Go”	<i>Frontiers in Psychology</i>	150	This panel data study concludes effect on the satisfaction with work and family of individuals and change in labour market situation in Germany during lockdown period differences.	2021

Sl no.	Authors(s) and year	Title	Source	Total Citations	Highlight	Year
5	Contreras, F., et al., 2020	“E-Leadership and Teleworking in Times of COVID-19 and Beyond: What We Know and Where Do We Go”	<i>Frontiers in Psychology</i>	150	This study investigates the challenges of teleworking and opportunities through effective leadership in virtual environment to increase organizational performance by improving employee well-being in healthy work environment.	2020
6	Bartsch, S., et al., 2021	“Leadership matters in crisis-induced digital transformation: how to lead service employees effectively during the COVID-19 pandemic”	<i>Journal of Service Management</i>	146	The first empirical study focus on how task and relation oriented leadership moderates at individual and team level, behavioural and affective work tensions that affects service employees' work performance in virtual work environment during pandemic crises.	2021
7	Shockley, K. M., et al., 2021	“Work-family strategies during COVID-19: Examining gender dynamics among dual-earner couples with young children”	<i>Journal of Applied Psychology</i>	142	The author focus on Alternating days egalitarian framework is emerging prevalent strategy that safeguards the well-being of the dual earner spouses while enabling each to sustain adequate job performance.	2021

Source: Author's own creation

**Table 10: Summary of Systematic literature reviews of Highly cited systematic reviews papers**

Sl. No.	Authors	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
1	Charalampous, M., et al., 2019	“Systematically reviewing remote e-workers’ well-being at work: a multidimensional approach”	Journal Article Reviewed	1975-2017	The study aims to systematically review literature on how remote e-working within knowledge workers is associated with the five dimensions of well-being at work: affective, cognitive, social, professional and psychosomatic.	Findings shows that after analysing different aspects of 63 studies, it has been established that emotional condition of remote employees significantly influences their social interactions and professional engagements. And author also highlights isolation on social and professional level and employee perceive threats career advancement opportunities in remote work negatively effects employee.	SLR Quantitative , qualitative, Mixed - Methodology in 63 studies	It has been found that there is a need to study about the cognitive a functioning and psychosomatic conditions of the employees. This paper provides a theoretical ground of research for practitioners to manage attitudes of workers and implement policies.
2	Lunde, L.-K., et al., 2022	“The relationship between telework from home and employee health: A systematic review”	Peer-reviewed articles	January 2010 to February 2021	To objective is to assess the evidence on the association between the telework from home (TWFH) and employee health related outcomes	Findings shows that 28- outcomes into 6 outcome categories comprising general health pain, stress, well-being, exhaustion & burnout, and overall life satisfaction, leisure and evidence categorised as low or very low quality.	SLR PRISMA Quantitative study to Check risk of bias evaluated by Newcastle-Ottawa Scale and evidence collected by GRADE approach to evaluate 14 studies based on relevance with 22,919 participants reported 28 outcomes.	The study points out that there is a lack of studies on important health outcomes and TWFH and highlights the need to determine relationship and implement TWFH in future.

Sl. No.	Author s	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
3	Ferrara, B., et al., 2022	“Investigating The Role of Remote Working On Employees’ Performance And Well-Being: An Evidence-Based Systematic Review”	Review	2010 to 2021	The aim is to describe the how remote work shaped employee perception of self, workplace and its impact on well-being and performance before Covid.	The study reported organisational characteristics to be the factor for mixed consequences and heterogeneous picture of working remotely and its effect on employee well-being and productivity .	SLR using PRISMA 20 peer-reviewed papers	There is a need to identify change in employee perception about workplace and its impact on physical and mental health in Work life balance & on managers during and post Covid. Longitudinal studies to monitor long-term effects of training.
4	Gualan o, M.R., et al., 2023	“TElewoRk-RelAted Stress (TERRA), Psychological and Physical Strain of Working From Home During the COVID-19 Pandemic: A Systematic Review”	Review	Decemb er 2019- August 2021	This study aims to investigate how Telework-Related Stress (TERRA) defined as physical and mental stress caused by ICT/telework affect daily life, their well-being and work life balance during Covid-19 pandemic of workers.	Findings shows high techno stress level of remote workers in 78.9% of studies comprising of female and older workers and 63.2% studies investigated psychological and 10.5% focus on physical well-being and three studies investigated both well-being.	Systematic Reviews and Meta-Analysis using PRISMA statement Qualitative study 19 articles (10,012 Participants) out of 518 articles	There is a need to prevent techno - stress and to provide right equipment to ensure physical health and need to address focus on total health of workers through prevention strategies from occupational health point of view. Meta-analysis is not possible due to high heterogeneity of the studies



Sl. No.	Authors	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
5	Sivaret Hinamoto, R., et al., 2021	“Reimagining Future by redesigning Talent Strategy In the Age Of Distraction and Disruption”	Article				not a systematic review study	
6	De Araújo Vitória, B., et al., 2022	“The work-family interface and The COVID-19 pandemic: A systematic review”	Article				not relevant	
7	Urien, B., 2023	“Teleworkability, Preferences for Telework, and Well-Being: A Systematic Review”	Review	2012-2022	To study the impact of telework ability and employees' preference for telework on well-being through telework intensity and to study the relationship between these variables.	Findings shows telework exerts both positive and negative effects and some studies shows no significant relationship between place and emotional disorders. Well-being indicators e.g. work life balance, job satisfaction, productivity or organisation commitment has a positive effect on telework and well-being. Negative effects of telework include social isolation, company identity loss, loss of work meaning or lack of market oriented activities.	Systematic review 48 studies	Paper highlights in future meta-analysis can be performed to create quantitative links between preferences for telework, hybrid work, and different forms of well-being. There is a need to define general hybrid work framework model.

Sl. No.	Author s	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
8	Leo-Ramírez, A., et al., 2023	“Learning Activities with Plants and Technology: A Systematic Literature Review”	Review	January 2000 to October 2021	To study the role of plants in moderating designing of workspaces and providing well-being and use of technology, in plant-related learning activities.	Findings shows learning of kind of plants used and technologies supported can naturalise the indoor learning space and promote environmental awareness.	Systematic Literature review 14 studies	The studies reviewed are not well connected studies to the environment education or the SDGs.
9	Bahamondes-Rosado, M.E., et al., 2023	“Technostress at work during the COVID-19 lockdown phase (2020–2021): A systematic review of the literature”	Review	2020-2021	The main aim of the research is to find how technostress affect people’s work during Covid-19 and evidence of impact at global level, to determine the main technostressors and to provide a framework to guide actions by organisation.	The results found techno -fatigue to be the main factor and technostress has a direct effect on remote work. Techno invasion and techno overload were also identified as the main technostressors. The result shows negative effect on occupational health and reduced productivity levels.	SLR (PRISMA), Qualitative study 24 studies	Impacts of technostress have been neglected in the previous systematic studies. So there is a need to determine measures to address the psychosocial impacts of technostress at work and to manage technostress in organisations where remote work has been more prominent.

Sl. No.	Author s	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
10	Villadiego L.K.H., et al., 2022	“Systematic literature review: Mental health promotion in organizations during the pandemic by COVID-19”	Review	2020-2022	To conduct a systematic literature review to identify the strategies and programmes implemented by different organisations to reduce the repercussions of covid-19 pandemic on mental health and to promote mental health of collaborators in health and education sector. Few studies showed psychological, psychosocial impact, and burnout.	Organisations restructured, reorganised and managed organisational change by implementing positive and resilient organisation model with early psychological intervention teams, adaptive leadership and implemented a corporate policy that encouraged independent work. Implementation of therapeutic resources. Employee feels sense of belongingness and well-being resulting in higher level of performance and engaged employees.	SLR of 17 research and review articles in different continents with only two SLR articles on healthcare workers and professionals. Qualitative and Quantitative studies.	Need for further research and dissemination of strategies in different organisation sectors, size and type of organisations, functions to evaluate the impact on mental health for post pandemic period.

Source: Author's own creation

**Table 10** shows some summarised systematic literature reviews (SLR) of highly cited systematic reviews on Hybrid Work, Well-being and Performance. The analysis depicts that recently there has been a rapid growth in the number of documents due to circumstances like the Covid-19 pandemic and teleworking/remote working, which implies that technological innovation in organisations has greater prominence. The evolution articles from 2013 to 2023 been analysed which clearly shows growth in articles post covid-19. After applying research criteria, papers are analysed from 2019 to 2023. The reason of growth is due to the development of research in specific content in Hybrid Work, Well-being and Performance and more sectors involved. There were only 2 highly cited SLR by authors Charalampous et al. (2019) with 233 citations and second by Lunde et al. (2022), with 38 citations. Therefore, an effort has been made to review all systematic literatures done but not highly cited and excluded as was not relevant. It was found that out of 344 documents selected for study, 2 were literature reviews and 5 were only reviews of papers. Of all the reviews it was found that not a single systematic literature review covers the study post-covid on Hybrid Work, Well-being and Performance. This study covers 6 systematic reviews from 344 papers which are synthesized to identify the themes which were not highly cited. Other 2 Literature reviews and 5 reviews were not considered for study. 2 studies were excluded as were not relevant. Top 10 highly cited Paper were synthesized to identify the trends, issues, challenges and opportunities. There is only one paper highlights the organization strategies to provide solution.

## **5.2 Research propositions for future studies**

**Table 10** includes all Systematic literature reviews for the given period highlighting the gaps and future scope of studies. No systematic review paper existed in Scopus database for covid period on the research area. The papers on systematic literature reviews and review papers for the given period are pre- covid which can be synthesized, and comparative analysis can be conducted with during and post-covid years. Systematic reviews will help to highlight the gaps and further future scope of studies. New research articles which are cited less are more relevant to the area of research which can be critically studied to identify more variables in relation to Hybrid work model with the help of the clusters provided in the study and themes can be created for more detailed study on above themes to identify more gaps and variables of study. In future, research can be conducted on a sample population to study the impact in Hybrid work model on employee's well-being and performance. And also, researchers can strengthen, share research results and pay more attention around the works to produce high quality academic results and promote further developments in Hybrid work model and well-being and its impact on performance. Charalampous et al. (2019) emphasize the need to study cognitive functioning and psychosomatic conditions of employees. Lund et al. (2022) highlight the lack of studies on important health outcomes and call for determining relationships and implementing telework-from-home strategies. Ferrara et al. (2022) advocate for longitudinal studies to assess and monitor the long-term effects of training in the post-pandemic era. Gualano et al. (2023) underlines the importance of prevention strategies in occupational health. Urien (2023) examines existing studies and suggests the development of a hybrid framework model. Leo-Ramírez et al. (2023) note the absence of studies addressing sustainable goals (SDGs). Bahamondes-Rosado et al. (2023) identify the need to address the psychosocial impact of technostress in remote work.

Lastly, Hernández Villadiego et al. (2022) identify strategies and stress the importance of disseminating approaches to evaluate the post-pandemic effect of psychological, and psychosocial issues and burnout.

## **6. Implications**

The paper has organizational, academic, and individual and government policy implication and aims to explore emerging trends regarding impact of hybrid work environment. Managers require new strategies and re planning on several fronts. Reforms to be carried out at economic, social, and technological levels. This paper highlights that the above area of research is of great relevance and have implication on organizations, an area of study in relation to its dimensions by academicians having impact on individuals and for formulating policies for government and aims to explore emerging trends regarding impact of hybrid work environment. Organizations need to identify coping strategies and re-planning for employees dealing with stress, anxiety, burnout, mental health, and isolation etc. There is a need for empirical study to explore the perception of employees to identify their perceptions of well-being and perceived performance.

## **7. Conclusion**

The article explores the high level of output in field of Business, management and accounting, social sciences with more than 100 papers. The leading countries are United States, Australia, China, Germany, and UK. US have the highest number of total citations in Applied Psychology journal. Most of the highly cited papers are dominated by international cooperation, and the proportion of international cooperation exceeds 50%. The paper uses bibliometric and systematic literature review (SLR) techniques to evaluate the impact of hybrid and remote work on employee performance and well-being post-COVID-19. Analyzing 344 publications (2019–2023) uncovers key trends and influential works, focusing on themes like flexibility, mental health, and organizational strategies. Its findings highlight the evolving nature of hybrid work research and identify gaps for future exploration, such as the long-term effects on health and performance. This literature contributes to understanding network capacity enhancement by providing a framework for managing hybrid work environments, emphasizing productivity, collaboration, and well-being within organizational networks. This paper contributes uniquely by consolidating trends, identifying influential studies, and analyzing hybrid work from a high-level theoretical standpoint. It provides a distinct academic contribution, emphasizing the interplay of organizational strategy and individual well-being in hybrid work environments. Unlike specific empirical studies that analyze granular data or propose practical solutions, this work lays the groundwork for future research by bridging theoretical and practical insights into hybrid work dynamics.

## References

1. Abdullah, & Naved Khan, M. (2021). *Determining mobile payment adoption: A systematic literature search and bibliometric analysis*. Cogent Business & Management, 8(1), 1893245.
2. Bahamondes-Rosado, M. E., Cerdá-Suárez, L. M., Dodero Ortiz De Zevallos, G. F., & Espinosa-Cristia, J. F. (2023). *Technostress at work during the COVID-19 lockdown phase (2020–2021): A systematic review of the literature*. Frontiers in Psychology, 14, 1173425
3. Bartsch, S., Weber, E., Büttgen, M., & Huber, A. (2020). *Leadership matters in crisis-induced digital transformation: How to lead service employees effectively during the COVID-19 pandemic*. Journal of Service Management, 32(1), 71–85.
4. Bhattacharyya, S. S., & Verma, S. (2020). The intellectual contours of corporate social responsibility literature. International Journal of Sociology and Social Policy, 40(11/12), 1551–1583.
5. Bhattacharya, P. V. a. S. (2022, October 19). *Hybrid Model emerges winner in India Inc survey*. The Economic Times.
6. Charalampous, M., Grant, C. A., Tramontano, C., & Michailidis, E. (2019). *Systematically reviewing remote e-workers' well-being at work: multidimensional approach*. European Journal of Work and Organizational Psychology, 28(1), 51–73.
7. Contreras, F., Baykal, E., & Abid, G. (2020). *E-Leadership and Teleworking in Times of COVID-19 and Beyond: What We Know and Where Do We Go*. Frontiers in Psychology, 11, 590271.
8. Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). *How to conduct a bibliometric analysis: An overview and guidelines*. Journal of Business Research, 133, 285–296.
9. De Araújo Vitória, B., Ribeiro, M. T., & Carvalho, V. S. (2022). *The work-family interface and the COVID-19 pandemic: A systematic review*. Frontiers in Psychology, 13.

10. Evanoff, B. A., Strickland, J. R., Dale, A. M., Hayibor, L., Page, E., Duncan, J. G., Kannampallil, T., & Gray, D. L. (2020). *Work-Related and Personal factors associated with Mental Well-Being during the COVID-19 Response: Survey of Health Care and other workers*. Journal of Medical Internet Research, 22(8), e21366.
11. Falagas, M. E., Pitsouni, E. I., Malietzis, G. A., & Pappas, G. (2007). *Comparison of PubMed, Scopus, Web of Science, and Google Scholar: strengths and weaknesses*. The FASEB Journal, 22(2), 338–342.
12. Ferrara, B., Pansini, M., De Vincenzi, C., Buonomo, I., & Benevene, P. (2022). *Investigating the Role of Remote Working on Employees' Performance and Well-Being: An Evidence-Based Systematic Review*. International Journal of Environmental Research and Public Health, 19(19), 12373.
13. Gokhale, A., Mulay, P., Pramod, D., & Kulkarni, R. (2020). *A Bibliometric Analysis of Digital Image Forensics*. Science & Technology Libraries, 39(1), 96–113.
14. Gualano, M. R., Santoro, P. E., Borrelli, I., Rossi, M. F., Amantea, C., Daniele, A., & Moscato, U. (2023). *TElework-RelAted Stress (TERRA), Psychological and Physical Strain of Working From Home During the COVID-19 Pandemic: A Systematic Review*. Workplace Health & Safety, 71(2), 58–67.
15. Hashemi, H., Rajabi, R., & Brashear-Alejandro, T. G. (2022). *COVID-19 research in management: An updated bibliometric analysis*. Journal of Business Research, 149, 795–810.
16. Jiao, F., Fang, J., Ci, Y., & Tu, W. (2021). *Bibliometric Analysis based on Highly Cited Papers in Computer Science*. Journal of Physics: Conference Series, 1883(1), 012053.
17. Khiste, G. P., & Paithankar, D. R. R. (2017). *ANALYSIS OF BIBLIOMETRIC TERM IN SCOPUS*. Leo-Ramírez, A., Alvarez, J., Pérez, M., Greller, W., & Tabuenca, B. (2023). *Learning Activities with Plants and Technology: A Systematic Literature Review*. Applied Sciences, 13(6), 3377.

18. Lunde, L.-K., Fløvik, L., Christensen, J. O., Johannessen, H. A., Finne, L. B., Jørgensen, I. L., Mohr, B., & Vleeshouwers, J. (2022). *The relationship between telework from home and employee health: A systematic review*. BMC Public Health, 22(1), 47.
19. Möhring, K., Naumann, E., Reifenscheid, M., Wenz, A., Rettig, T., Krieger, U., Friedel, S., Finkel, M., Cornesse, C., & Blom, A. G. (2020). *The COVID-19 pandemic and subjective well-being: longitudinal evidence on satisfaction with work and family*. European Societies, 23(sup1), S601–S617.
20. Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). *The PRISMA 2020 statement: An updated guideline for reporting systematic reviews*. Systematic Reviews, 10(1), 89.
21. Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., & Britten, N. (n.d.). *Guidance on the Conduct of Narrative Synthesis in Systematic Reviews*.
22. R. Sivarethinamohan, Kavitha Desai, Elizabeth Renju Koshy, & Biju Toms. (2021). *Reimagining Future of Future by redesigning Talent Strategy in the Age of Distraction and Disruption*. International Journal of Systematic Innovation, 6(4).
23. Rojas-Lamoren, Á. J., Del Barrio-García, S., & Alcántara-Pilar, J. M. (2022a). *A review of three decades of academic research on brand equity: A bibliometric approach using co-word analysis and bibliographic coupling*. Journal of Business Research, 139, 1067–1083.
24. Rojas-Lamoren, Á. J., Del Barrio-García, S., & Alcántara-Pilar, J. M. (2022b). *A review of three decades of academic research on brand equity: A bibliometric approach using co-word analysis and bibliographic coupling*. Journal of Business Research, 139, 1067–1083.
25. Shockley, K. M., Clark, M. A., Dodd, H., & King, E. B. (2021). *Work-family strategies during COVID-19: Examining gender dynamics among dual-earner couples with young children*. Journal of Applied Psychology, 106(1), 15–28.



26. Urien, B. (2023). *Teleworkability, Preferences for Telework, and Well-Being: A Systematic Review*. Sustainability, 15(13), 10631.
27. Verma, S., & Gustafsson, A. (2020). *Investigating the emerging COVID-19 research trends in the field of business and management: A bibliometric analysis approach*. Journal of Business Research, 118, 253–261.
28. Villadiego, L. K. H., Pérez, M. L. M., Acosta, A. C., & Paternina, I. L. P. (2022). *Systematic literature review: Mental health promotion in organizations during the pandemic by COVID-19*. Gac Méd Caracas, 130.
29. Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). *Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective*. Applied Psychology, 70(1), 16–59.

# Revisiting Hegel's Concept of Recognition: Implication for Contemporary Debates on Identity Politics

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## Abstract

This paper examines the concept of recognition in Hegel's political philosophy and its implications for contemporary debates on identity politics. Hegel argues that recognition plays a fundamental role in shaping individual identities, as it requires acknowledgement from others who differ from us without coercion. Drawing on Hegelian philosophy, the paper explores the role of recognition in shaping contemporary identity politics and offers a framework for rethinking the relationship between identity and politics. By analyzing Hegel's theory, the paper argues that recognition is a critical element in contemporary political discourse and that a deeper understanding of recognition can help us better understand the complexities of identity politics in the present day. The paper concludes by summarizing the key arguments and findings of the study, including an evaluation of the strengths and limitations of Hegel's theory of recognition and its relevance to contemporary political thought.

## Objectives:

1. To explore Hegel's concept of recognition in civil society and its relevance to contemporary debates on identity politics.
2. To evaluate both the merits and shortcomings of Hegel's recognition theory and explore its potential for enhancing comprehension of the interplay between identity and politics.
3. To analyze the implications of Hegel's concept of recognition for rethinking identity politics and the role of recognition in shaping contemporary political discourse.

## Goals:

To provide a valuable frame work for understanding the importance of recognition in contemporary identity politics.

## **1. Introduction**

From campus protests to Twitter debates, identity politics dominates our cultural discourse. But what role does recognition play in shaping these debates?

Identity politics has become a contentious issue in contemporary society, with debates centered on the relationship between identity, recognition, and politics. Although the concept of identity politics has been around for decades, the rise of social media and political polarization has brought these debates to the forefront.

This paper seeks to explore Hegel's concept of recognition and its implications for contemporary identity politics. The research question addressed is: How can Hegel's recognition concept contribute to contemporary discussions on identity politics and lead to a rethinking of the relationship between identity and politics?

The paper proceeds with a concise overview of Hegel's concept of recognition, followed by an examination of its implications for contemporary debates on identity and politics. A critical evaluation of the strengths and limitations of Hegel's theory follows, highlighting the key contributions and potential shortcomings of his approach.

The paper concludes with a discussion of the implications of this analysis for rethinking the relationship between identity and politics. Overall, the paper offers a valuable framework for understanding the importance of recognition in contemporary identity politics. By contributing to ongoing discussions on the role of recognition in shaping political discourse, this paper aims to contribute meaningfully to the existing literature on this topic.

## **2. Theory of Recognition**

Hegel's theory of recognition is a crucial concept for understanding the development of civil society. According to Hegel, mutual recognition between individuals and groups is necessary to establish a shared sense of identity and belonging (Hegel, 1977, p. 112). This shared sense of identity forms the basis for social bonds and a collective sense of purpose. Hegel's philosophy is heavily influenced by his ideas about dialectics, which involve the interplay of opposing forces or ideas. The dialectical process is central to his theory of recognition, as it involves the recognition and reconciliation of conflicting perspectives (Hegel, 1977, p. 112). This process allows individuals and groups to negotiate their differences and find common ground.

Mutual recognition is essential for the development of a free and just civil society. It involves the recognition of oneself and others as independent individuals. Through this process, we realize ourselves as independent beings and also recognize other's freedom and autonomy. For instance, in a democratic society, mutual recognition is essential because it allows individuals to respect each other's rights and participate in the political process on an equal footing. Without mutual recognition, democracy and individual rights cannot fully develop. As Smith notes, recognition is a two-way process (Smith, 2008, p. 27). Individuals can only achieve self-consciousness when they are recognized by others, but they must also recognize others in return.

The market is an example of how recognition operates in practice. In a capitalist economy, individuals engage in economic transactions based on mutual recognition of the value of goods and services. However, the market also has the potential to create inequality and exploitation if it is not regulated by a system of laws and institutions that reflect the values of recognition and equality. The dynamics of power and recognition play a crucial role in shaping social inequality. Those in positions of power have a significant impact on who is recognized and how, often perpetuating existing social hierarchies. Hegel's theory of recognition highlights the tension between universalism and particularism. While recognition is necessary for an individual's freedom and autonomy, it can also lead to the suppression of particular identities and interests.

This tension underscores the need for a nuanced understanding of recognition, one that balances the need for unity with the importance of respecting and celebrating individual differences. To achieve this balance, it is essential to acknowledge the complexity and diversity of identities. Identities are indeed multiple, fluid, and intersectional, shaped by a rich array of social, historical, and cultural factors. By embracing this complexity, we can foster a more inclusive sense of identity and belonging.

Building on this understanding, Hegel's theory of recognition offers valuable insights into the importance of intersubjective relationships in shaping our understanding of ourselves and others. Through mutual recognition, individuals can develop a deeper sense of self-awareness and self-respect, essential for achieving freedom and autonomy. Ultimately, Hegel's theory provides a nuanced framework for understanding the significance of recognition in human relationships. By recognizing the inherent worth and dignity of all individuals, we can create a more just and equitable society.

### **3. Recognition and Social Bonds: A Reciprocal Relationship**

The relation between 'recognition' and 'social bonds' is complex and multifaceted. On one hand, recognition is necessary for the formation of social bonds, as it allows individuals to develop a sense of trust and cooperation. On the other hand, social bonds are necessary for the maintenance of recognition, as they provide a framework for individuals to interact and recognize each other. This reciprocal relationship highlights the importance of recognition in shaping social bonds and promoting social cohesion.

#### **3.1 Maintenance of Social Bonds: An Ongoing Process**

Hegel believes that social bonds are maintained through ongoing processes of recognition and reconciliation (Hegel, 1991, p. 114). Social bonds are dynamic and evolve as individuals and groups interact. This process allows individuals and groups to address conflicts and misunderstandings.

For instance, in a multicultural society, recognizing different cultural practices and traditions can foster social cohesion and promote a sense of shared citizenship. This recognition helps to break down barriers and promote understanding between different groups. Contemporary identity politics also emphasizes recognizing differences and acknowledging the unique experiences and perspectives of marginalized groups. This approach differs from earlier forms of identity politics, which focused on essentialist and static notions of identity.

Recognizing and valuing differences is crucial for advancing social justice and tackling systemic inequalities. This involves acknowledging the historical injustices and ongoing struggles faced by marginalized communities, including Indigenous peoples, racialized communities, and LGBTQ+ individuals. By acknowledging and respecting these differences, we can foster a deeper understanding of the complexities of social inequality.

Recognition has the power to drive profound social change. When individuals and institutions acknowledge the experiences and perspectives of marginalized groups, they can begin to address the systemic inequalities that perpetuate social injustice. Through recognition, we can cultivate empathy, understanding, and a sense of shared humanity, ultimately bridging the gaps between diverse communities.

Contemporary social movements, such as Black Lives Matter, exemplify the power of recognition in driving social change. This movement centers on acknowledging the distinct experiences of Black individuals and challenging systemic racism. Similarly, the #MeToo movement highlights the importance of acknowledging

women's experiences and addressing gender-based violence and harassment. Similarly, the #MeToo movement highlights the importance of acknowledging women's experiences and addressing gender-based violence and harassment. Other social movements, such as the disability rights movement and the LGBTQ+ rights movement, also emphasize recognition in promoting social justice and equality.

### **3.2 The Role of the State in Promoting Recognition**

The state plays a crucial role in promoting recognition and addressing systemic inequalities. By recognizing individuals' rights and dignity, the state can provide a framework for promoting social justice. The state can also provide resources and support for marginalized groups, promoting empowerment and recognition.

One of the primary ways the state can promote recognition is by providing a framework for addressing systemic inequalities. For instance:

-The Indian government's initiative to provide Aadhaar cards to all citizens, including marginalized communities, is a step towards recognizing their rights and dignity. The Aadhaar card serves as a proof of identity, allowing individuals to access various government schemes and services.

-The state of Kerala's initiative to provide free sanitary pads to school-going girls from low-income families is another example of promoting recognition and addressing systemic inequalities. This initiative recognizes the dignity and hygiene needs of marginalized girls, promoting their empowerment and inclusion.

The state can also provide resources and support for marginalized groups, promoting empowerment and recognition. This can include funding for community organizations, education and job training programs, and social services such as healthcare and housing support. By providing these resources and support, the state can help to empower marginalized groups and promote greater recognition and inclusion.

### **3.3 Limitation of Recognition**

Recognition alone has its limitations. While it is important, it can be limited to symbolic gestures and cannot address underlying structural inequalities. For instance, the #MeToo movement has brought attention to the experiences of sexual harassment and assault, but it has been criticized for not adequately addressing the underlying power structures that perpetuate these issues. To create lasting change, social justice movements must combine recognition with material changes and structural transformation. Social justice movements often

rely on recognition-based approaches to challenge systemic inequalities and promote social transformation. But as mentioned, they have several limitations. Therefore, alternative strategies that focus on structural change and material transformation have emerged as crucial components of social justice movements. Examples of these strategies include redistributive policies, affirmative action, and efforts to address economic and social inequalities. By combining recognition with material changes and structural transformation, social justice movements can create more effective and sustainable solutions that address the root causes of systemic inequalities.

#### **4. Hegel's Influence on Contemporary Political Philosophy**

Hegel's emphasis on recognition, freedom, and social bonds has profoundly impacted contemporary political philosophy, particularly in debates related to identity politics and social justice. This influence can be seen in various contemporary political theories, including Charles Taylor's multiculturalism theory, Nancy Fraser's social justice theory, and Michael Sandel's communitarian approach.

Charles Taylor's multiculturalism theory, for instance, draws heavily on Hegel's concept of recognition, arguing that cultural groups must be recognized and valued for their unique identities (Taylor, 1994, p. 25). This approach is particularly relevant in today's context, where the COVID-19 pandemic has highlighted the need for recognition and inclusion of marginalized communities. By recognizing the unique identities of cultural groups, we can promote greater understanding, tolerance, and inclusion.

Nancy Fraser's social justice theory, which draws on Hegelian principles of recognition and redistribution, provides a nuanced understanding of the relationship between recognition and social justice (Fraser, 1997, p. 22). Fraser argues that recognition and redistribution are necessary for achieving social justice, particularly in addressing economic inequality and access to healthcare. This argument is particularly relevant in the context of contemporary social justice movements, such as Black Lives Matter and #MeToo.

Michael Sandel's communitarian approach, which draws on Hegel's emphasis on social bonds in political life, has influenced debates on national identity, civic education, and community in political life (Sandel, 1998, p. 67). Sandel argues that political life is rooted in shared traditions and values, and that this shared sense of identity is essential for a just and democratic society. Axel Honneth's theory of social recognition builds upon Hegel's concept, highlighting recognition's crucial role in fostering social cooperation and mutual respect. However, Honneth's focus on individual self-realization may overlook institutional and economic factors

shaping recognition. Judith Butler's exploration of recognition in identity politics and gender construction challenges dominant norms and highlights recognition's need in asserting individual identities. However, Butler's emphasis on the social construction of gender may be limited by neglecting biological and physiological dimensions of sex and gender.

## **5. Critiques of Hegel's Theory of Recognition**

Hegel's theory of recognition has faced numerous critiques from various scholars. One of the primary concerns is that Hegel's theory assumes a universal human subject can achieve self-consciousness through recognition, overlooking social structures and power relations that shape our understanding of ourselves and others.

Nancy Fraser's critique argues that Hegel's assumption of a universal human subject neglects institutional and economic factors that shape recognition (Fraser, 2000). Fraser contends that recognition is not solely a matter of individual agency, but is also influenced by broader structural factors, such as capitalism and patriarchy. By neglecting these factors, Hegel's theory fails to provide a nuanced understanding of recognition and its relationship to social justice.

Another critique of Hegel's theory comes from Judith Butler, who argues that Hegel's conception of recognition is based on a simplistic and binary understanding of identity (Butler, 1997). Butler contends that identity is not a fixed or essential category, but rather a complex and fluid construct that is shaped by multiple factors, including power relations, social norms, and cultural practices. By neglecting the complexity of identity, Hegel's theory fails to provide a nuanced understanding of recognition and its relationship to identity politics.

Axel Honneth's critique of Hegel's theory argues that Hegel's emphasis on individual self-realization overlooks the importance of social solidarity and collective recognition (Honneth, 1995). Honneth contends that recognition is not solely a matter of individual achievement, but is also dependent on the existence of social solidarity and collective recognition. By neglecting the importance of social solidarity, Hegel's theory fails to provide a nuanced understanding of recognition and its relationship to social justice.



## **6. Revising Hegel's Theory**

It is essential to revise Hegel's theory to acknowledge the role of power relations, social structures, and institutional factors in shaping recognition. This revised theory could develop a more robust account of how recognition can be fostered in contexts of social inequality and oppression, incorporate intersectional perspectives, and consider the importance of emotions in the recognition process.

Moreover, a revised understanding of recognition should also take into account the complex relationships between individual and collective identities, as well as the role of institutional and economic factors in shaping recognition. By acknowledging these complexities, we can develop a more nuanced understanding of recognition that can inform contemporary debates on identity politics, social justice, and multiculturalism.

To conclude, Hegel's influence on contemporary political philosophy is profound and far-reaching. His emphasis on recognition, freedom, and social bonds has shaped debates on identity politics, social justice, and multiculturalism. While critics have raised important concerns about the limitations of Hegel's theory, a revised understanding of recognition that takes into account the complex interplay between individual agency, social structures, and power relations can provide a more nuanced understanding of the role of recognition in achieving social justice and promoting human freedom. Ultimately, Hegel's legacy continues to inspire and inform contemporary debates on recognition, identity, and social justice, offering a rich and complex framework for thinking about the complexities of human sociality and the pursuit of freedom and equality.

## **7. Contemporary Debates on Identity Politics and the Relevance of Critiques of Hegel's Theory**

The critiques of Hegel's theory of recognition have significantly impacted contemporary debates on identity politics, particularly in the context of the Black Lives Matter movement and the #MeToo movement. These critiques have highlighted the limitations of Hegel's theory in addressing the experiences of marginalized groups and have led to the development of alternative approaches to recognition and identity politics. For instance, Hegel's theory has been criticized for its failure to account for the complexities of power relations and intersectionality (Butler, 1990; Young, 1990). As Judith Butler notes, Hegel's theory relies on a simplistic understanding of recognition, one that neglects the ways in which power dynamics shape our interactions with others (Butler, 1990, p. 11). Contemporary discussions on identity politics have been heavily influenced by critiques of Hegelian theory and its role in perpetuating systems of oppression against marginalized groups.

Scholars and activists alike have scrutinized how the negation of the other, central to Hegelian philosophy, can be violent and oppressive when applied to historically marginalized groups. The struggle for transgender rights, for example, highlights the complexities of contemporary identity politics debates. The demand for recognition is not merely about asserting one's identity but also about seeking recognition as a valued member of society.

Non-Western scholars and activists have made significant contributions to the discussion on identity politics, offering unique perspectives on the issue. Feminist scholars from the Global South, such as Chandra Mohanty, have challenged Western feminism for its failure to address the specific experiences of women in non-Western cultures (Mohanty, 1991, p. 73). Similarly, activists from Indigenous communities have emphasized the importance of recognizing and valuing Indigenous perspectives and knowledge systems.

The COVID-19 pandemic has further underscored the need for a more inclusive approach to identity politics that values diversity and difference over homogeneity and universality.

Alternative approaches to recognition and identity politics have been suggested, such as a relational approach that emphasizes recognizing the interdependence and interconnectedness of individuals and communities. This approach prioritizes mutual understanding, empathy, and respect, recognizing that recognition is not a one-way process but rather a reciprocal one. For instance, the pandemic has highlighted the need for mutual recognition and understanding between healthcare workers and marginalized communities.

In this context, Hegel's theory of recognition remains relevant, highlighting the importance of mutual recognition for individuals and groups. However, the potential dangers of identity politics should not be overlooked. Hegel argued that cohesiveness and inclusivity can only be achieved through mutual recognition, requiring individuals to view each other as equals and engage in dialogue and compromise. The Black Lives Matter movement, for example, has highlighted the need for mutual recognition and understanding between law enforcement and communities of color.

In conclusion, the critiques of Hegel's theory of recognition underscore the need for a more nuanced and inclusive approach to identity politics. By acknowledging the limitations of Hegel's theory and incorporating alternative perspectives, we can work towards a more just and equitable society that values and recognizes the diversity of human experiences. Ultimately, this requires a fundamental shift in how we think about identity, recognition, and community, one that prioritizes mutual understanding, empathy, and respect. As we move forward, it is essential that we continue to engage in critical discussions about identity politics and recognition,

recognizing the complexities and nuances of these issues. By doing so, we can create a more inclusive and equitable society for all.

## **8. Rethinking the Relationship Between Identity and Politics**

Hegelian theory offers a valuable framework for rethinking the relationship between identity and politics. Hegel conceptualizes identity as a dynamic process of self-discovery and self-creation, intimately tied to recognition. This process entails the mutual recognition of individuals and groups as self-conscious and free agents. Our political affiliations are shaped by our interactions with others, and the relationship between identity and politics involves creating a shared sense of belonging and identity through mutual recognition.

Notably, Hegel's concept of recognition challenges the idea of a fixed and essentialist identity separate from politics. Instead, it suggests that our identities are deeply intertwined with the social and political structures surrounding us. The Black Lives Matter movement illustrates this inseparable relationship between politics and identity. By highlighting the struggles faced by Black communities, the movement demonstrates how identity is shaped by and shapes our political affiliations.

Furthermore, Hegelian theory emphasizes the importance of civil society in shaping our identities and political affiliations. Civil society provides a space for individuals to engage in social activities and associations, giving rise to a sense of identity and community. However, the implementation of this idea in practice is complex and challenging. For instance, civil society can also perpetuate existing power dynamics and social inequalities. Therefore, it is essential to critically examine the role of civil society in shaping our identities and political affiliations.

In this context, Hegel's theory of recognition remains relevant, highlighting the importance of mutual recognition for individuals and groups. However, the potential dangers of identity politics should not be overlooked. Hegel argued that cohesiveness and inclusivity can only be achieved through mutual recognition, requiring individuals to view each other as equals and engage in dialogue and compromise.

## 9. Conclusion

In conclusion, Hegel's theory of recognition provides a valuable framework for understanding the complexities of identity politics in contemporary society. By highlighting the importance of mutual recognition, agency, and intersectionality, Hegel's theory offers a nuanced and context-dependent understanding of the relationship between identity and politics. This framework can inform policies and practices that promote diversity, equity, and inclusion, ultimately contributing to a more just and equitable society. Moving forward, embracing Hegel's theory can empower us to create a world where every individual is seen, heard, and valued.

### 9.1 Future Research Directions

Future research should explore the practical implications of Hegelian recognition theory for contemporary political discourse. Specifically, studies could examine how recognition can be used as a tool for building more inclusive and just societies that respect the diversity of identities and experiences. Additionally, research could investigate how Hegelian recognition theory can inform policies addressing systemic racism, sexism, and homophobia, and explore the intersectionality of these issues.

### 9.2 Policy Implications

The insights from Hegelian recognition theory can inform policies promoting diversity, equity, and inclusion. For example, education policies can prioritize mutual recognition and respect for diverse identities and experiences. Workplace policies can promote inclusive environments by recognizing and valuing diverse identities and experiences. Furthermore, policies addressing systemic oppression can be designed to promote mutual recognition and respect among different groups, ultimately contributing to a more just and equitable society.

## References

1. Butler, Judith. 1990. *Gender Trouble: Feminism and the Subversion of Identity*. Routledge.
2. Crenshaw, Kimberle. 1991. "Mapping the margins: Intersectionality, identity politics, and violence against women of color." *Stanford Law Review* 43 (6): 1241-1299.
3. Delgado, Richard, and Jean Stefancic. 2001. *Critical Race Theory: An Introduction*. NYU Press.
4. Fanon, Frantz. 1963. *The Wretched of the Earth*. New York: Grove Press.
5. Fraser, Nancy. 1997. *Justice Interruptus: Critical Reflections on the "Postsocialist" Condition*. Routledge.

6. Fraser, Nancy. 2000. "*Rethinking Recognition.*" *New Left Review*3: 107-120.
7. Hegel, G. W. F. 1977. *Phenomenology of Spirit*. Translated by A. V. Miller. Oxford University Press.
8. Hegel, G. W. F. 1991. *Elements of the Philosophy of Right*. Edited by Allen W. Wood. Translated by H. B. Nisbet. Cambridge University Press.
9. Hill Collins, Patricia. 2017. "*Intersectionality as Critical Social Theory.*" In *Intersectionality*, edited by Patricia Hill Collins and Sirma Bilge, 1-20. John Wiley & Sons.
10. Honneth, Axel. 1992. *The Struggle for Recognition: The Moral Grammar of Social Conflicts*. Translated by Joel Anderson. Cambridge, UK: Polity Press.
11. Honneth, Axel. 1995. *The Struggle For Recognition: The Moral Grammar of Social Conflicts*. MIT Press.
12. Hynson, Melissa. 2019. "*Feminism and Intersectionality.*" In *The Oxford Handbook of Feminist Theory*, edited by Lisa Disch and Mary Hawkes worth, 37-50. Oxford University Press.
13. Kymlicka, Will. 2012. *Multiculturalism: Success, Failure, and the Future*. Washington, D.C.: Migration Policy Institute.
14. Lloyd, Margaret. 2011. "*The Problem of Difference: Intersectionality and the Politics of Privilege.*" In *The Palgrave Handbook of Gender and Healthcare*, edited by J.L. Brady and J.L. Burton, 127-142. Palgrave Macmillan.
15. Mohanty, Chandra Talpade. 1984. "*Under Western Eyes: Feminist Scholarship and Colonial Discourses.*" *boundary 2* 12 (3): 333-358.
16. Modood, Tariq. 2013. *Multiculturalism: A Civic Idea*. Cambridge, UK: Polity Press.
17. Sandel, M. J. 1998. *Liberalism and The Limits of Justice*. Cambridge University Press.
18. Smith, Charles. 2008. *Hegel's Theory of Recognition: From Oppression to Ethical Liberal Modernity*. Northwestern University Press.
19. Taylor, Charles. 1992. *Multiculturalism and "The Politics of Recognition."* Princeton: Princeton University Press.
20. Young, Iris Marion. 1990. *Justice and The Politics of Difference*. Princeton University Press.

# ‘This Is Not A Doll’: A Foucauldian Reading Of Bikash Bhattacharjee’s Doll Series

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## Abstract

The Bengali painter Bikash Bhattacharjee depicted the everyday lives of middle-class Bengali people. Known for bringing realism in Indian paintings, he was also heavily inspired by the surrealist movement and cited Spanish surrealist artist Salvador Dali as one of his inspirations. The Surrealist movement and artworks focused on engaging the unconscious mind. It balanced the rational life of simple everyday objects with the uncanny and fantastical. The artworks transgressed boundaries. They liberated thought and language through unpredictable and unsettling imagery. Michel Foucault was interested in similar ideas, as he sought to reveal the instability of language and the relation of language with reality.

Centuries before the Surrealist movement, Bhartrihari presented similar ideas in his sphota theory. Bhartrihari’s sphota theory is the unifying principle that connects the word and the grammatical form with the meaning. Further development in Indian poetics was by Anandavardhana through the theory of Dhvani that indicated the role of suggestion or indirectness. The aim of this paper is to develop a theoretical and historical framework that contextualises parallels between Indian poetics and contemporary western criticism to develop a fresh understanding of the Doll series by Indian surrealist painter Bikash Bhattacharjee.

*Keywords: Surrealism, Indian poetics, Meaning, Painting, Dhvani*

## 1. Introduction

The meaning of visual arts is often relegated to visual rhetoric. Visuals are considered inherently referential, and the artist's perspective takes priority. This vein of interpretation has been questioned thoroughly for both written language as well as paintings particularly during the reign of the post-structuralists in the latter half of the 20th century. Paintings provide coherent meaning to the subjective mind through certain recognisable patterns that come together to create meaning using present and past contexts. Similarly (as established by grammarians ranging from Bhartrihari to Rousseau) words themselves carry no meaning unless placed in a certain context. For instance, Saussure thoroughly argues against words having inherent meaning. He uses two examples to highlight his point. The first involves the routine of a train. He mentions:

*The 8.25 train is not a substance but a form, defined by its relations to other trains. Although we may be unable to conceive of the train except in its physical manifestations, its identity as a social and psychological fact is independent of those manifestations. Similarly, to take a case from the system of writing, one may write the letter t in numerous ways so long as one preserves its differential value. There is no positive substance which defines it; the principal requirement is that it be kept distinct from the other letters with which it might be confused, such as l, f, b, i, k. (Saussure, 1916). In both examples, the position of the signs in a larger linguistic context is what gives them relevance and meaning. Language plays a major role in imposing order and shaping our perception of reality (Storey, 2015, p.118).*

Bhartrihari's *Sphota* theory interestingly refers to the sentence as latent unity. He talks about how linguistic convention does not lead to interpretation. Two people who share a language would not always end up with a similar comprehension. The reason they do not is due to the *sphota* that is already present in the hearer's awareness. For centuries, linguists have analyzed the interaction between senses and our minds in relation to meaning-making. In the earlier 20th century, several artists focused on this exploration of the mind and how the conscious mind interacts with the unconscious. They believed in the power of imagination and what can be found beyond literal understanding. They delved deeper into the world of dreams and unconscious visions. They were inspired by a post-Freudian desire to set the mind free. Karl Marx is said to have inspired the surrealists as they wished to reveal the contradictions ingrained in the rational world and bring about revolution. These ideas led to the Surrealist movement whose principal theorist was Andre Breton. Breton published his *First Manifesto of Surrealism* in 1924. The expressions of the movement transgress conventions and unsettle the mind, without leaving the realm of rational explanation. The focus is on establishing aberrations and indulge with uncanny and subtle elements. Such an idea is valuable to understand visual arts and its ability to create discomfort.

The individual can analyze that discomfort to look beyond the literal. The tenets of the Surrealist movement are particularly interesting when viewed in light of what Anandavarshana and Abhinavgupta talked about in the *Dhvanyaloka* theory. The focus on reaction and the power of suggestion can be seen here. Abhinava Gupta developed the theory of Rasa in semantic ways, which is called Dhvani theory. Anandavardhana explored the Dhvani theory through structures, and is considered the main exponent of the theory. The poetics of rasa and dhvani can be applied to almost all kinds of fine arts including painting. There are nine rasas which are considered the chief components of any produced artwork. An accomplished artwork has such emotional relish or rasa which can move the mind of its spectators. All of these theorists focused on the mind of the person experiencing art. The artwork usually produces a desire or different moods in the mind of its onlookers (Sharma, 2021, p. 1612). The dhvani theory is based on the power of suggestion by the artist. Like surrealism, it focuses on what the unseen implications of the artwork are. This research views Bikash Bhattacharjee's Doll series from a Eurocentric (Foucauldian) and an Indocentric lens. It discusses the arbitrary nature of meaning. It focuses on Indian surrealism and Western poststructuralism and how they come together in the work of Bikash Bhattacharjee's Doll series (through their parallels and differences). The argument is how different views affect perceptions and realities. It dwells further into the historical landscape of the work and the series' revolutionary subtleties. These subtleties are viewed in relation to Anandavardhana's Dhvani theory as subtlety is procured as suggestive.

This paper discusses how meaning is generated in surrealist paintings. For that purpose, it employs Michel Foucault's *This is Not A Pipe*. This work is one of the first to highlight the value of paintings in representing ideas. The book builds up on the then ongoing discourse regarding the infinitude of interpretations and instability of language. *Foucault on Painting* by Catherine M. Soussloff plays an important role in explaining Foucault's understanding regarding paintings. This paper also focuses on Indian surrealism and how ideas regarding meaning-making are connected through space and time. The work of ancient linguists Bhatrihari and Anandavardhana has been cited to not only highlight the richness of ancient Indian texts and India's contribution in the field of linguistics, but to also signify the key difference between Indian and Western surrealism. The former is grounded in cultural history and spirituality. This utilizes "Dancing with Nine Colours: The Nine Emotional States of Indian Rasa Theory" by Dyutiman Mukhopadhyay, as well as "A Comparative Analysis of Rasa and Dhavani Theory in the Artworks of Male and Female Artists" by Mandakini Sharma and Richa Thapliyal to develop the understanding of concepts like dhvani and *sphota*. The aim of this research is to develop a theoretical and historical framework that could be utilised to further analyse Indian surrealism, an area in which little academic work has been conducted. Lastly, the paper discusses the Doll series by Bikash Bhattacharjee to highlight how such a theoretical framework can be utilized.



## 2. Surrealism and India

Indian history is enriched with its own kind of surrealism as artist Suraj Kumar Kashi said in an interview, “As Indians, we have grown with surrealism around us. We see the elephant-headed Lord Ganesha, Lord Hanuman in monkey form, gods and goddesses with multiple faces and arms. Surrealism also shines through in the stories we listen to, with animals that talk and humans who fly. It is everywhere—in our homes, folklore, and even in our dreams”. Several Indian artists have drawn inspiration from the surrealist movement, while having access to fascinating and often eccentric tales from scriptures and mythologies. It could be said that it was the natural progression for them due to the cultural and historical influence that surrounded them. Indian art tends to inhabit realms of the ‘unconscious’. Our rich mythical and spiritual heritage has left its mark on Indian literature and artistry. Prahlad Bubbar discusses a brush drawing of a composite elephant dating to around 1625 labelled “A Fantastical Elephant Driven by Demons Past a Waq-Waq Tree” from the 17th century. The painting has mythical and virtuous undertones as it displays a divine belief in the unity of all living beings. He commends the vibrant “A Composite Ram” from Kota, Rajasthan, (circa 1750), that highlights this tradition in a Hindu context. The painting “Lovers in Union”, a painting on cloth from 18th century Orissa displays a metaphorical coupling that invokes union with the divine (*Prahlad Bubbar — the Surreal in Indian Painting*, 2013). Another instance of surrealist tendencies can be seen through the rich history of the Tantric tradition in Indian scriptures and storytelling that finds a place in artworks through the centuries. ‘Tantras’ exhibit rituals and the importance of the teacher (guru) in the pursuit of spiritual gain. “The Chakras of the Subtle Body” is a manifestation of the seven ‘chakras’ (the internal centres of energy) within the ‘spiritual’ body. The painting is over three metres long and illustrates a Hindu text that outlines specific mantras. The impact of art is often measured by its ability to move and effect viewers, a principle that aligns with the Indian aesthetic concept of *kavyadosa*, or “fault,” as described by Bhamaha in his *Kavyalankara*. These faults—such as contradictory meanings, redundancy, doubt, lack of coherent sequence, and counter-factual elements—are considered deviations in art’s aesthetic quality. Surrealist art frequently embodies these faults, challenging conventional expectations of coherence and realism (Kapoor, 1998, p.93). Bhattacharjee’s work represents real people whose significance lies in their simplicity. The photo-realist style combined with the farce and the sub-human elements challenge perceptions. His work is not merely a defiance in the technical artistic sense but also in its invitation to interrogation. Bhattacharjee shows boldness by representing people or things that are neither famous nor actively suffering[1].

[1] Bhattacharjee makes many references to historical figures, characters from Bengali literature, and has made portraits of Rabindranath Tagore, M.F. Husain, Shambhu Mitra and Indira Gandhi. Yet, he stayed loyal to representing the inner lives of the people from Kolkata.

A lack of spectacle is the fantasy. The fantasy becomes deeper through the 'surrealist twists' as Bhattacharjee played with anatomy, gender, age and other visual categories which culturally become concretised subjectivities. Nevertheless, Surrealism shares a parallel with the Indian view of *kavya* (literary composition), which values not just the form or content but the manner of expression itself. *Kavya* is revered almost as the fifth Veda in the *Natyasastra*, providing moral and philosophical guidance akin to the role of art in life. Similarly, Surrealism, born out of the aftermath of World War I and advances in science and technology, seeks to reveal deeper truths through the symbolic language of dreams. Surrealist cinema, much like dreams, interweaves contradictory aspects of reality, allowing for a unified tension between opposites without the constraints of logic. This pursuit can also lead to the experience of *santa* (tranquility), a *rasa* achieved through cognitive and emotional processes, which Surrealism can effectively evoke (Kapoor, 1998, p. 84).

Anandavardhana's *dhvani* theory in the *Dhvanyaloka* explores verbal symbolism and the layered meanings that extend beyond the literal. According to this theory, three levels of meaning exist: *abidha* (literal), *laksana* (socio-cultural), and *vyanjana* (suggestive, shaped by context and form). This approach underscores how literary works can surpass rational discourse by offering deeper layers of meaning. Surrealism similarly rejects conventional logic and employs complex symbolism, aligning with the idea of *dhvani* in its ability to provide profound insights and knowledge through its intricate and evocative forms.

### 3. Theoretical Context For Surrealism

Foucault is widely recognised for *What is the Author?* (1969) in which he discusses the role of the author. It is important to understand that interpretations comes from the reader<sup>[2]</sup> even if they are inspired or influenced by what the author may have intended. Thus, Foucault coined the term 'author-function'. The author-function replaces the author as an entity and refers to the discourse that surrounds the author and the body of the work. This idea of interpretation is called anti-intentionalism as it goes beyond the intentions of the author. In *The Personal Heresy* (1939) C.S. Lewis condemns the growing notion that poetry is an expression of personality. Lewis writes how this tendency can even be found in reputable criticism (Lewis, 1939, p. 2). He states how 'personality' exists within poetry but by annihilating the poet's subjectivity and drawing from common people (pp. 3-4). If analyzed broadly, certain parallels can be found between the previously these ideas and ancient Indian poetics. These ideas focus on how meaning is generated and the role of the unconscious mind in this creation. According to Bhartihari, language by itself does not have a sequence even though it is expressed in a sequentially graded body.

[2] When we talk about works of art, a reader can be understood as any one with the ability to establish a coherent interpretation of any artwork.

The relation between the uttered word and meaning or sphota is like the relation between an object and its reflection in flowing water; like the uttered word reflects the meaning alongside the essence of the giver of that meaning (Chandran). Meaning is not a fixed entity, but is entirely contextual. As we have seen with Derrida's concept of language, this frees the translator from the concern of attaining the meaning of the original. Similarly, Anandavardhana highlighted the levels of meaning through Dhvani. Dhvani is a function of language and highlights the conditions, and the context in which a word or sentence may give rise to a specific meaning. This interrelatedness forms the ideal backdrop for the Indian artist Bikash Bhattacharjee to be inspired by, one of the co-founders of the Surrealist movement, Spanish artist Salvador Dali. Around the same time as Bhattacharjee was creating his famous Doll series and Durga series, the core content of the poststructuralist theories were being presented to the world. In 1968, Foucault published his book *This is Not A Pipe*, which was written after Foucault exchanged a few letters with the famous surrealist painter Rene Magritte. The playful tone of the book sways away from his other famous works. The book is a contemplation of Magritte's painting "The Treachery of Images" which shows the drawing of a simple pipe with the, as Foucault flippantly calls "a childish scrawl", 'This is Not A Pipe' (Foucault, 1973, p.16). Magritte provides a visual critique of language by bluntly writing this sentence below a conventional drawing of a pipe. Foucault highlights:

*Yet perhaps the sentence refers precisely to the disproportionate, floating, ideal pipe-simple notion or fantasy of a pipe. Then we should have to read, "Do not look overhead for a true pipe. That is a pipe dream. It is the drawing within the painting, firmly and rigorously outlined, that must be accepted as a manifest truth " (Foucault, 1973, pp.16-17).[3]*

The painting through its simplicity led to a spiritual questioning about the structures we surround ourselves with. This painting did so by making the viewer question the structures found within language, while other surrealist painters attempted to break down social conditioning through similar artistic metaphors. The contrast between visual rhetoric and the sentence (understood through established linguistic convention) is what leads to the enquiry. An important feature of surrealist paintings is to present everyday objects in locations that they would conventionally not be found in. Our established contexts associate certain ideas with others and this break in patterns leads to deeper inquiries. Such examinations are often socio-political in nature as was the case with the Doll series by Bikash Bhattacharjee. The Doll series can be analyzed through the lens of contemporary theoretical work from the Western literary tradition as well as ancient Indian poetics. Additionally, several parallels can be highlighted between the different analyses to signify the universality of linguistic mechanics.

[3] Foucault points out that the label 'pipe' (as a word) is not directly connected to the physical object but rather is a symbol. His reflection shows that this disconnect between the image, the word and the object itself reveals the complexity of how humans perceive and categorise the world around us. Language is man-made and unstable, yet it endlessly shapes perceptions and comprehensions of realities.

#### 4. The Surreal and the Social

In a world where globalisation had grasped cultural conversations and political chaos had become normal, Bhattacharjee saw something human in a toy. The inspiration comes from a personal experience and his life plays a crucial role in providing depth to the paintings. The era of post structuralism brought the role of the artist into question, and Foucault, to an extent, 'solved' the intellectual and ethical misgivings of rejecting the role of the author by establishing 'author-function'. However, with growing output of literary ideas it is important to explore more cross sections in art and literature. Bhattacharjee's Indian content did not lack Western inspiration but remains Indian art at its core. Art belongs to the artist while becoming part of the community's history and culture. The nuances surrounding the belongingness of art are never ending. The discussion around the justification of certain interpretations are important and the value of such an interpretation lies in the discussion itself. Foucault highlighted the importance of questioning reality and Dhvani showcased the essence which is found beyond the literal. The emphasis is on intangibility, however, this often leads to a misguided neglect of the literal.

An aversion to theories of interpretation that rely on entities made poststructuralism far too ambitious for interpreters. The entity is tangible and accessible, and while post structuralism emphasizes contextualism, the author-function is intangible. Perhaps one can "easily imagine a culture where discourse would circulate without any need for an author" but this hypothesis is idealistic and convolutes how entity-based (communal) interpretation provides knowledge to subjective cognitions (Foucault, 1969, p. 314). This is evident in Noël Carroll's 2016 survey article on interpretation in *The Routledge Companion to Philosophy of Literature* as actual intentionalism remains the most popular position among all. It has achieved the status as the philosophy of interpretation has evolved within the dichotomy of intentionalism and anti-intentionalism, and therefore within their respective constraints.

The process of removing constraints in interpretation as endorsed by poststructuralism is hindered by its association with anti-intentionalism, which is also known as conventionalism. Moreover, within any capitalist economy that reduces art to commodity and ownership, further entrapped under the rules of copyright and legal issues associated with artworks, the author or the artist as an entity has naturally gained unmet prominence within any discourse regarding their own work (Walker). The statement is not being presented to question the moral nature (or even the pros or cons) of this reality but rather to highlight how ubiquitous structuralities, when go unacknowledged, skew the anti-structuralist processes of interpretation. Subjectivity finds itself regulated by certain structured practices due to their ubiquity. Interpretation can gain larger focus in the meaning-making process and should subsume authorial intent. Robert Young points out –'post-structuralism' suggests that

*structuralism itself can only exist as always already inhabited by post-structuralism, which comes both behind and after. . . post-structuralism becomes structuralism's primal scene. . . we haven't gone beyond structuralism. We're still within it insofar as structuralism and post-structuralism inhabit each other. The reason is that if we want to go beyond structuralism because of its metaphysical assumptions, we find that it is precisely metaphysics beyond which we cannot go* (Young, 1982, pp. 4-5).

Post-structuralism's "chaos concepts", as Lene Hansen claims, "do very little to offer solutions", and focus on unearthing 'truths' (p. 1056). Interpretation, when understood broadly as knowledge, is found within an amalgamation; this amalgamation, that is to be seen as acknowledged chaos, is to be the basis of this conception towards interpretation (van Woudenberg ch. 8 183-207). The importance of novelty in this 'chaos' is remarkably undeniable.

Bikash Bhattacharjee was known for social realism in his art, however the label 'social surrealist' would be more ideal for him. Social Surrealists felt that change was required in their artwork that would reflect the political turmoil they witnessed. They were inspired by surrealist techniques that condensed time and space, and juxtaposing objects in an illogical manner. For Bikash Bhattacharjee's artwork to be seen through this lens, and for interpretation to expand, learning about the author's context is inevitable. Poststructuralism is "not an epistemological theory; it is a political stance. It does not offer a "god's eye" or a "we know better" (Stengers, 2008) view. It commits to change, while vigorously redefining what 'change' entails in every discussion. Bhattacharjee's doll was an emotionally charged political statement and a sombre personal reflection. The surreal contrast in the painting is real, the significations of the doll to the political turmoil are abstract, and lastly the experiences and the context that inspire the painting were personal, interpersonal and concrete. The doll series is somewhat unique as it is able to represent these levels of understanding as separately as possible. A 'doll', as a symbol, lacks obvious comparisons. Compare the 'doll' to the Durga series by Bhattacharjee, which depicted the Hindu Goddess Durga as an ordinary, struggling Bengali woman, and we may realise that the name of the latter series conveys something direct. The name and the word 'Durga' has deep religious and cultural ties that evoke strong emotions, while 'doll' leaves an empty ominous space. This space craves context that leads to the 'birth of the painter' for someone simply viewing the artworks.

## 5. Naxal Movement and Bhattacharjee's Doll

Bikash Bhattacharjee believed in individualism unlike several political ideologies and messaging present in West Bengal of the 1960s and 1970s. His movement towards abstraction in his painting was in part a technique to give each individual dignity by highlighting every person's pain and suffering. Bhattacharjee (born in 1940 in Kolkata) led an incredibly challenging life after losing his father at a very young age. His experiences left him with a deep sense of empathy for the underprivileged. The Doll series was conceived in 1970 and reflected Bhattacharjee's emotional response to the violence that erupted across Kolkata as a result of the Naxal movement. As per an article written by Biplab Dasgupta in 1973 –

*The fifth period began in July/August 1971, a few months after the 1971 election in West Bengal, when the government decided to destroy the Naxalite movement. Their task was made easier by the fact that by then the ruffians and teenage dropouts had replaced the college students as the main activist elements inside the movement, and through them the police and the informers had penetrated the organisation. The decentralised and loose nature of the organisation also worked against the Naxalites. In a matter of two or three weeks, through a series of swift armed operations, the serious elements in the movement were either killed or imprisoned, while the anti-social elements defected to the youth organisation of the Congress party. Overnight the "liberated areas" of the Naxalites became Congress strongholds. (Dasgupta, 1973, p. 173).*

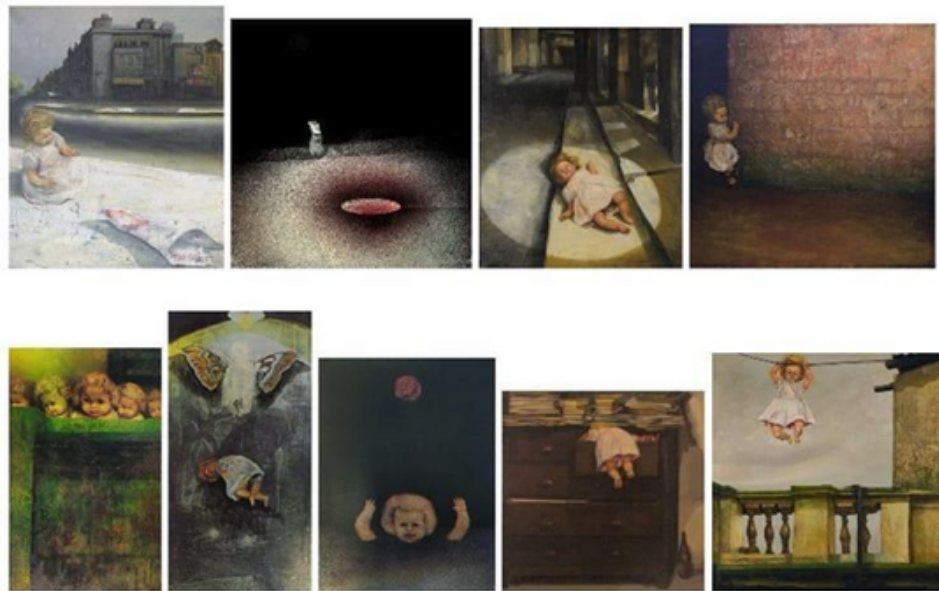
This was the state of Bengal whose people served as an inspiration for Bhattacharjee. The flaws recognised in some Naxalites' practices were their tactic of annihilation of individualism and their fervent faith in politically motivated violence. It is interesting to note that Bhattacharjee's work represented the individual foremost, and the 'individual' symbolised the struggling, middle-class Bengali people. Bikash Bhattacharjee's artistic journey is deeply rooted in his experiences in Kolkata, a city that can be called his muse. Kolkata underwent dramatic changes before and after India's independence. Kolkata was a hub of affluence and colonial grandeur, however, after independence, Bhattacharjee observed the contrast as the city struggled with poverty, industrialization and the loss of its colonial sheen. Something similar happens to Bhattacharjee's paintings as his palette in his later work have a lot more muted hues. The loss of a colourful 'sheen' evolved into the representation of colloquial Kolkata. The doll, in its inanimate, helpless state, heightened the atmosphere of his work. Kolkata was experiencing a 'renaissance', and with that came an eerie innocence. The lifeless figure of the doll, in Bhattacharjee's hands, represented the innocence of a socio-economic rebirth while remaining haunted by the death which any rebirth requires. Bhattacharjee was six when he lost his father. He ended up at his maternal uncle's home, and witnessed his mother struggle to raise two children. His experiences left him with a deep

sense of empathy for the underprivileged, especially women. He spent his childhood and teenage years roaming every corner of the city, every place he could access, and the images of individuals were etched into his creative spirit. The doll, often portrayed as abandoned and helpless, symbolises a childhood filled with loss and turmoil. It is a vulnerable and empty figure. It is meant to be controlled and remain a play-thing, like an inner child which is unable to heal. The doll is a figure caught between life and death, showing the aberrations of mortality. In this sense, the Doll series became a means of searching for connection and understanding in a world that seemed increasingly alien and fractured.

The surreal dolls seemed to be misplaced and lost, and had their eyes erased. Through this Bhattacharjee mourned the erasure of individuality in the charged political climate of his time. His work led to the resurgence of realism in Indian paintings as is visible in the photo-realistic images of the dolls; however the surrealist tendencies are apparent through the power of Dhvani (suggestion). Bikash cooked up the idea of this series as a small girl wanted him to repair a discoloured baby doll. It was a time when Kolkata was going through immense political violence (due to the Naxal movement). Bikash witnessed some of the most gruesome killings in the police brutality and the clashes during protests. One night Bhattacharjee had an epiphany as he was walking the empty streets to his North Kolkata home with a doll. Thus, the idea for the Doll series was conceived.

**Figure 1**

*The following figure shows most of the artwork from the Doll series.*



**Note. By Bikash Bhattacharjee, 1970-1974,**

## 6. This is Not A Doll

In *This is Not a Pipe*, Foucault talks about the implications of photorealistic images with a simple message associated with it. Though not exactly the same as Magritte's pipe, Doll series is known for its simplicity. Most of them have straightforward titles while many are just called 'Doll'. As Foucault mentions for Magritte's painting, the dolls too tend to be "a figure and the text that names it" (Foucault, 1973, p. 28). Foucault highlights the convention of language, and the societal need to ask and define things. Just like Magritte's pipe is not literally a pipe, Bhattacharjee's doll is not a literal doll. The difference in the paintings lies in the idea of contradiction. Magritte's painting is effective as it creates a conundrum of contradiction. The image and the text present contradictory ideas based on general context, then refuse to be contradictory as text and illustration belong to different realms, and lastly the statement rings true, as a material pipe, in fact, is not the same as a drawing of a pipe. This idea when applied to Bhattacharjee's dolls leads to a complex weaving of interpretations which are relevant to both the history and the present. The doll was just a doll, a toy or a puppet, for an artist to represent. However, it is also not a doll, it is a false representation. The paintings resemble a doll but are not just dolls, they are symbols. They unsettle by design, through the deliberate effort of the artist. The word 'doll' is the introduction to many of the paintings in the series, and this title misleads by being truthful. The 'doll' is the state of the people of Kolkata. The title is true, the language is true (or the closest thing to the truth) but the visuals remind the viewer that the word is not completely true, as the visuals present something not seen in real life. Thus, they mislead into the path of recognition, into the direction of symbolism. This symbolism is uncomfortable and leads the ignorant (someone unfamiliar with the history of Kolkata) towards knowledge.

*Figure 2*

*The Treachery of Images*



*Note. Rene Magritte, 1929.*



Thus, the mere physical existence of the art keeps not only the memory alive but finds relevance, in any era, through its powerful resonance.

In the doll paintings, the contradiction lies between the details and the object in focus. The aim of the series is social realism. The object (the doll) elicits recognition and then the state it is present in disconcerts the viewer. The surrealist interpretation comes from this uncanny identification. The doll is an effective allegory that symbolises the lost innocence of young men and women. It depicts a meta understanding of its viewer, as the people of Kolkata at the time would not find it jarring to see the image of a human in a dark, ominous state. It was the reality that they lived in. Most people, including children, were used to violent and grim situations. Thus, it was important to use a feminine, toy figure that revealed a sense of innocence and individuality.

Foucault rejected the hierarchy in art that placed words over paintings. In his work, he emphasised the potential of paintings to reveal and exhibit. In Bhattacharjee's work, we see this hierarchy flip. The word 'doll' in itself reveals very little to the reader, but the image of this doll carries years of political and social turmoil from pre-independent times to the violent protests in the 1970s. Foucault toyed with the concept of representations in images and paintings and what they invoke (together and separately). In Foucault on Painting Catherine M. Soussloff contends—

*According to Foucault in The Archaeology of Knowledge, the archaeology of painting would not be centered on the artist and the 'murmur of his intentions ... transcribed ...into lines, surfaces, and colors'. Thus, the archaeology of painting rejects the long-standing centrality in the history of art of the artist's personality and style, as a primary means of understanding the significance of painting. To reject the artist's personality and style, however, does not mean that Foucault negated the importance of what any individual artist had contributed to the understanding of painting through his or her paintings (Soussloff, 2011, pp. 114-115).*

She highlighted that Foucault understood paintings not through the painter but with the painter. Bhattacharjee's doll series can definitely be looked at as ominous paintings of humanoid dolls, as Foucault highlights "resemblance and affirmation cannot be dissociated" (p.34). Even without context, the painting can be and should be analyzed in various ways as its power lies in how 'little' it contains and how empty the canvas can feel. Yet, understanding the painter's life and intention enriches interpretation in general. Through gestures, the painting invokes discomfort and begs to be fully understood.

## 7. Dhvani and the Doll

'Natyasastra' mentions 'sentiments' or 'Rasas' which are produced when certain 'dominant states' (sthayi Bhava), 'transitory states' (vyabhicari Bhava) and 'temperamental states' (sattvika Bhava) of emotions come together (Mukhopadhyay, 2022, p. 2). When Bhattacharjee thought of placing a baby doll as the central motif of the desolate city, brimming with the terror of political violence, he deliberately located the toy in a setting where it would look abnormal and invoke sentiments. He accompanied the doll with vivid or implicit gestures that invoked an uncanny response from the viewer. When we analyze the painting through the Rasa theory, both the Karuna (pathetic) and Bhayanaka (terrible) rasas are evoked. In the Foucauldian reading, though far differently, we saw how these sentiments were generated. It is important to note that both the rasas are gestured through the visuals, without a historical background the Bhayanaka rasa becomes central. The paintings are meant to represent a combination of innocence and menace. The doll comes to life during the night and is seen rummaging through chests of drawers. A little red book[4] is placed in the frame that reflects the situation in a lot of Bengali households during that time. The lifeless object is on the quiet streets of Bengal, menacingly peering through street corners, hanging on clothing lines, or even in a pile of other dolls. The paintings invoke disquieting horror and a sense of unease through dreary and murky backgrounds. The concept of Karuna (the highest form of compassion) comes from the generic associations of a doll. Doll represents innocence, fragility, femininity, etc. The compassion formed from these associations are meant to extend to the people of Bengal that the doll in focus is meant to represent. Bhattacharjee had a deep sense of reverence for women and female figures tended to be his subjects in his paintings. His pity and compassion for all women, from everyday women and young girls to the impoverished prostitutes can be seen in his work, where the central motif in eighty percent of the paintings were women. Some women belonged to the red light districts[5], and some were fighting for their liberation, and many even accepted their fates. Regardless, Bhattacharjee's insightful and empathetic probe into women's oppression extended to everyone in the doll series through an allegorical vision of the subverted feminine. Anandvardhan attained fame in the 9th century A.D. The Dhvani Theory obtained expression in Anandvardhan's 'Dhvanyaloka'. The Dhvani theory allows the sensible categorisation of a painting's analysis, particularly for a surrealist painting. Anandavardhana's theory recognises suggestive poetry as the highest form of poetry. This idea can also be applied to suggestive paintings. Dhvani is highlighted through three major aspects. First, *abhidha* or denotation (the literal meaning of the expression).

[4] Referring to Mao's red book whose quotes were treated like gospel. Every comrade was expected to carry this book at all times. The book declined in popularity after the death of Charu Majumdar and the end of the first phase of the Naxalite movement in 1972.

[5] A red-light district refers to an area in a city in which many brothels and commercial sex-based activities are located.

**Figure 3**  
*Doll*



**Note. Bikash Bhattacharjee, 1972**

In the doll series, the word doll and the object illustrated are meant to represent the literal doll a viewer can easily understand. As mentioned in the Foucauldian analysis, the literal meaning i.e., the abhidha is important to establish the impactful contradiction. The second aspect, *laksana* or indication, refers to the external quality of the expression. This aspect can be seen in the paintings through the artistic features and the style of the painting. The grim and haunting background, the scratched eyes, the contrast between the lightly coloured doll with the darkly painted backgrounds, the erased empty eyes, the artistic quality, photo-realism, etc. are features that express something separately and together. These external qualities are techniques used by artists to indicate separate or similar concepts in different works of art. In each artwork they come together to reflect specific ideas or the third aspect of dhvani, *vyanjana* or the suggested sense. Vyanjana refers to the expression that suggests something beyond itself. The power of suggestion is immense. As discussed, the author suggests a lot more than what is literally present in the painting. The series suggests the suffering of the individual and the loss of innocence. Within a single glance, they carry centuries of theoretical, historical and artistic precedent.

In the grand frame of history, Bhattacharjee's artwork can be said to be more textually connected to the Eurocentric view than the Indocentric view (in relation to this discussion). After all, Bhattacharjee found artistic inspiration from the West and trained in a post-Independence academic arena deeply influenced by Europe. This Eurocentrism is a result of Western hegemony particularly since the beginnings of globalisation. A Foucauldian view is also assisted by Foucault's close association with surrealism, the art style in which Bhattacharjee founded his innovation. However, the Indocentric view serves a dual purpose here. Firstly, it hinges the discussion on aesthetic connectedness. It is a deliberate analytic technique that acknowledges the influence of Indian poetics and prevents the discussion from being an unbroken chain of Foucauldian musings. Secondly, it serves an intrinsic purpose linked with the central theoretical essence of this discussion. Bhattacharjee's work uses aesthetic aberration for invocation. Simultaneously, the aesthetics bleed culture and stories through its social realism. There are many elements to interpret and as many reasons to question interpretation itself. The paintings' visual instability serve as poetry. When looked at as language and as defiance against established power dynamics, the Foucauldian lens provides great insight. The oppression that the middle-class Bengali people dealt with has been aesthetically represented. The power dynamics have been challenged in his work. However, this insight is limited by socio-political and academic boundaries. Unlike several Western surrealist works, Bhattacharjee's work went beyond 'commentary on language'. The elements are a lot more haunting and fantastical. When we view the poetry in these paintings, the surreal mythologies in its representations, the ability to invoke *bhavas* and when we recognise the context of the creator, the Indocentric lens allows us to glimpse at the paintings as something to be experienced, as someone's legacy and not just as something to be analysed as 'text'.

Both the lenses are connected by their inability to truly define. They engage with the elements and interpret in their own ways. They even fixate on the instability of meaning in different ways. Thus, it feels imperative to weave the Indocentric view with the Eurocentric view to ironically emphasise that no such dichotomy (trichotomy or multi-chotomy) can exist when mapping the potentiality of meaning.

## 8. Conclusion

Studying something as seemingly 'simple' as Bhattacharjee's Doll series requires extensive care. Several nuances and contexts can co-exist to produce a medley of interpretations, while recognising that these discussions are endless. Though paintings are a visual medium, the process of interpretation is rather textual. The relationship between words, and visuals should be scrutinised as it reveals a closer look at the threads in the fabric of reality. Very few scholarly articles exist that discuss Indian surrealism or the movement's place in the Indian context. It is important to understand and contextualise Indian poetics that Indian artists grow up learning, alongside the international art they get inspired by. Bikash Bhattacharjee's Doll series has this fascinating quality of being Indian and surreal in a post-structuralist world. When we look at the ideas of free play, author-function, reader-response, we can find similar concepts being discussed in ancient Indian poetics in theories of Sphota, Rasa and Dhvani and several others. The ideas feel universal as they empower individuality, sentiments, imagination and consciousness. Though similar in many ways, Indian poetics has a spiritual approach to art and language while contemporary criticism attempts to create a scientific understanding. Western Surrealism departed from these scientific tendencies by highlighting dreams, magic and the potential of the unconscious. It is believed that a spiritual commune to India is the only way to truly understand the soul of surrealism as the key to unlocking the unconscious mind is spirituality (Torsch). Surrealist tendencies and inspirations from the West blended in easily with the rich cultural precedent already found in the zeitgeist of Bhattacharjee's India. Thus, the movement and the surrealist style has found a place amongst Indian artists.

## References

1. *Bhartrihari* | Internet Encyclopedia of Philosophy. [iep.utm.edu/bhartrihari](http://iep.utm.edu/bhartrihari).
2. *Bikash Bhattacharjee* | Artnet. [www.artnet.com/artists/bikash-bhattacharjee/?period=1970to1979](http://www.artnet.com/artists/bikash-bhattacharjee/?period=1970to1979).
3. *Bikash Bhattacharjee* | DAG. [dagworld.com/bikashbhattacharjee](http://dagworld.com/bikashbhattacharjee)
4. Breton, A. (2016). *Manifesto of surrealism*.
5. Carroll, Noël. "Art And Interaction." the Journal of Aesthetics and Art Criticism/the Journal of Aesthetics and Art Criticism, vol. 45, no. 1, Jan. 1986, p. 57. <https://doi.org/10.2307/430466>.
6. Chandran, Mini. "The Practice of Translation in India | Sahapedia." Sahapedia, [www.sahapedia.org/the-practice-of-translation-india](http://www.sahapedia.org/the-practice-of-translation-india).

7. Dasgupta, B., Dasgupta, & Economic and Political Weekly. (1973, February). *Naxalite Armed Struggles and the Annihilation Campaign in Rural Areas*. web.archive.org. [https://web.archive.org/web/20111127164644/http://www.cscsarchive.org:8081/MediaArchive/audience.nsf/b1bc9409c64d85a06525698d0025dc3c/5813146ae3eeee2e652572870041e297/\\$FILE/A0260027.pdf](https://web.archive.org/web/20111127164644/http://www.cscsarchive.org:8081/MediaArchive/audience.nsf/b1bc9409c64d85a06525698d0025dc3c/5813146ae3eeee2e652572870041e297/$FILE/A0260027.pdf)
8. De Saussure, Ferdinand. *Course in General Linguistics*. Translated by Wade Baskin, Columbia University Press, New York, 2011.
9. “Famous Doll Series of Bikash Bhattacharjee Is a Silent Witness to Bengal’s Naxal Movement.” Get Bengal, [www.getbengal.com/details/famous-doll-series-of-bikash-bhattacharjee-is-a-silent-witness-to-bengals-naxal-movement](http://www.getbengal.com/details/famous-doll-series-of-bikash-bhattacharjee-is-a-silent-witness-to-bengals-naxal-movement).
10. Foucault, Michel. *This Is Not a Pipe*. Univ of California Press, 1983.
11. Foucault, Michel. “What Is an Author?” *Aesthetics, Method, and Epistemology*, The New York Press, 1998, pp. 205–22.
12. *Historical Origins of Surrealistic Art and Its Impacts on Indian Paintings* | IndianArtIdeas. [indianartideas.in/blog/indian-art/historical-origins-of-surrealistic-art-and-its-impacts-on-indian-paintings](http://indianartideas.in/blog/indian-art/historical-origins-of-surrealistic-art-and-its-impacts-on-indian-paintings).
13. Kapoor, Kapil. *Literary Theory: Indian Conceptual Framework*. New Delhi: Affiliated East-West Press Private Limited, 1998.
14. Mukhopadhyay, Dyutiman. *Dancing With Nine Colours: The Nine Emotional States of Indian Rasa Theory*. [philpapers.org/rec/MUKDWN](http://philpapers.org/rec/MUKDWN), 2022.
15. Noor Anand Chawla, and Noor Anand Chawla. “A Surrealist Spectacle: Folklore and Dreams Woven Into Magic on Canvas.” *The New Indian Express*, 8 Jan. 2022, [www.newindianexpress.com/magazine/2022/Jan/08/a-surrealist-spectaclefolklore-and-dreams-woven-into-magic-on-canvas-2403885.html#:~:text=It%20is%20the%20abstract%20art,grown%20with%20surrealism%20around%20us](http://www.newindianexpress.com/magazine/2022/Jan/08/a-surrealist-spectaclefolklore-and-dreams-woven-into-magic-on-canvas-2403885.html#:~:text=It%20is%20the%20abstract%20art,grown%20with%20surrealism%20around%20us).
16. Hirsh, Fiona. “Why The Soul of Surrealism Is in India.” Parkstone International Publishing, Parkstone Art, 22 May 2020, [parkstone.international/2013/07/23/why-the-soul-of-surrealism-is-in-india-2](http://parkstone.international/2013/07/23/why-the-soul-of-surrealism-is-in-india-2).
17. Prahlad Bubbar — *The Surreal in Indian Painting*. (2013, November 15). Prahlad Bubbar. <https://www.prahladbubbar.com/exhibition/the-surreal-in-indian-painting/>

18. Sharma, Mandakini, et al. "A Comparative Analysis of Rasa and Dhavani Theory in the Artworks of Male and Female Artists." *International Journal of Engineering Sciences & Management Research*, Jan. 2021, <https://doi.org/10.29121/web/v18i1/46>.
19. Soussloff, Catherine M. "Foucault on Painting." *History of the Human Sciences*, vol. 24, no. 4, Oct. 2011, pp. 113–23. <https://doi.org/10.1177/0952695111412864>.
20. Stenson, K. (2008). *Governing the Local: Sovereignty, Social Governance and Community Safety*. *Social Work & Society*6(1): 1-14.
21. Storey, John. *Cultural theory and popular culture: An Introduction*. Seventh ed., Routledge, Oxon, 2015.
22. Tillotson, Geoffrey, et al. "The Personal Heresy. A Controversy." *Modern Language Review/the Modern Language Review*, vol. 35, no. 2, Apr. 1940, p. 250. <https://doi.org/10.2307/3717354>.
23. Varade, Arunesh. "The Unforgettable & Unsettling Art of Bikash Bhattacharjee." *The Heritage Lab*, 30 Mar. 2024, [www.theheritagelab.in/art-bikash-bhattacharjee](http://www.theheritagelab.in/art-bikash-bhattacharjee).
24. Wimsatt, William Kurtz, and Monroe C. Beardsley. *The Intentional Fallacy*. 1946.  
van Woudenberg, René. "Knowledge through Interpretation (1): Allegory, Difficulty, and Disambiguation." *The Epistemology of Reading and Interpretation*. Cambridge: Cambridge University Press, 2021. 183–207. Print.
25. Young, Robert. "Post-Structuralism: The End of Theory." *Oxford Literary Review*, vol. 5, no. 1/2, 1982, pp. 3–20. JSTOR, <http://www.jstor.org/stable/43973639>. Accessed 1 August. 2024.

# On Labour Organising: A Comment

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## Abstract

How a case for labour unions can be made is highlighted in this paper to counter the implicit or explicit bias of economists and managers against labour organising. Unions and labour internationalism matter for the working people to improve their own welfare. And there is no reason to assert that they cannot facilitate social and economic welfare at large as well. Social democratic ideas and practices confirm these viewpoints and possibilities.

*Keywords: Model choice in economics, Typical managerialism, Unions, Labour internationalism, Social democracy*



## 1. Introduction

In going about doing research, we are told, didactically, to be objective and to avoid bias as also conflicts of interest. However, in practice, this is a tall order to accomplish, especially when we take up exploratory inquiry, for example, about what employer and labour associations do. The dark side of labour unions is usually emphasized by pro-establishment people with an implicit or explicit bias in favour of employers and their associations. In doing so, more often than not, either a pet theory is purported to be proved or evidence to the contrary is ignored.

Anti-union judgements are easily formed via economic education which extols the pet theory of perfect competition. Management education and managerialism also serve the same purpose but differently. The theoretical subject of Soft Human Resource Management (HRM)—concerned about total employee commitment and wellbeing—pontificates about industrial peace to be achieved by mutual trust, information sharing and grievance redressal mechanism in the backdrop of a history of “Hard HRM” (treating workers as disposable alongside expecting high work performance from them), frequent hostilities and bitter labour-management battles.

Management practitioners, obsessed with the belief that their strategies alone can change the world for the better, are typically anti-union and indulge in rabid union-busting on the grounds that unions cause wage increases unwarranted by productivity increases and consequently high inflation, and that unions do not permit, by industrial militancy, tough commercial decisions on their part, including the introduction of new organisational practices and technologies. The irony is that neither the theory nor the practice of managerialism on these lines has brought about eternal give-and-take industrial peace. While many non-Marxist industrial relations scholars, inspired by the soft-HRM-theorist Guest (1987; 1990), continue to endorse union-free workplaces, Marxists, inspired by workers’ struggles, continue to think that unions do matter for the dignity of workers despite there being grave external and internal difficulties faced by the unions leading to low and declining union density (Yates, 1998). The external difficulties are anti-labour bias of the laws, the exceptionally close alliance between business and the government, and the deep animosity of the media toward organized labour. The internal difficulties are failure to aggressively organize new members, internalizing the employer strategy of divide and rule, corruption in the labour movement, lack of consistent union democracy, internecine inter-union rivalries and the lack of an independent labour politics.

One need not be a Marxist to defend labour organising. It may be noted that like the Marxists, there were, in the distant past, “conservative radicals” or social democrats such as the institutional economist John Commons who had presented enlightening perspectives about industrial democracy which have relevance for today (Chasse, 2003).

Interestingly, how trade unions--right wing, left wing, and independent--ought to reinvent themselves by addressing the “profound alienation faced by workers on the one hand and the need for shifting from collective bargaining to a participative or quality of work life programmes on the other in conjunction with the need for integrating with a larger social and political movement, has now become a hot frontier research topic” for scholars of labour relations imbued with a variety of ideological influences—liberal as also radical (Ramaswamy, 1994; Moody, 1997; Venkata Ratnam, 2001).

The review in this paper is posited in this context in order to highlight how certain definitive viewpoints have recently emerged in favour of unions contrary to the overwhelming bias against labour organising, and decimation of unions in the world over the past four decades of neoliberalism.

## **2. Model Choice**

Conclusions differ by model choice in economic education. Introductory economics students reading Mankiw (2012) about the power and glory of the theoretical world of perfectly competitive markets organising economic activities, are given the conclusion that minimum wages and labour unions lead to outcomes worse than the ideal free market efficient outcomes. However, if they read Komlos (2023) or Myatt (2023) and Hill and Myatt (2010) about the real-world existing economy dominated by multinational oligopolies, they can appreciate the conclusion that unions and minimum wages do redress the imbalance of power between capital and labour. Once we are not in the price-taking model, but in the model about the world of market power setting wages and prices (by monopsony and monopoly power), we understand that minimum wages and labour unions “do not cause unemployment; instead, they increase the living standards of workers at the expense of corporate profits”, thereby resulting in an agreeable egalitarian income distribution. In so far as perfect competition involving uncountable mom-and-pop enterprises is there only on the blackboards of economics classrooms, no wonder it breeds bias against empirically justifiable labour welfare promoting interventions required to convert the real-world economy of imperfect competition into a just or ethically agreeable economy. It may be noted that Angus Deaton, a Nobel-laureate in economics, has lately and ferociously rebuked economists for failing to understand that capitalism is all about power (Keane, 2024). There is a never- ending tug of war between capital and labour.

A historical examination of this war anywhere in the world reveals that unlike many who see labour unions as “unnecessary overreaches into the workplace”, labour unions are key to protect employees from employer abuse. As Stubbs (2023) has pointed out, for example, in the American context of capital-labour conflicts, “Our history seems to suggest that the place of the union is to help strike the balance between a capitalist system and a republican government. From balancing a company’s offers of housing and medicine with workers’ ability to make independent choices to compromising over how many hours should be dedicated to work vs. personal pursuits, the American experience with unions centres around creating balance. Since the 1800s, unions have remained an important part of our system. Their prominence has fluctuated over time but as the same problems with market power and corporate concentration of the 1800s are rearing their heads again, unions are also resurging. Additionally, the uniquely American cultural view of unions seems to be alive and well, with most labour proponents still intuitively endorsing the American Dream that has inspired generations prior.”

### **3. Reality Check**

In general, neither the real-world managements nor the business schools imparting management education and media have taken seriously research in favour of unions (Dinardo and Lee, 2003; Kucera and Sarna, 2004; Bivens, 2009; Lazes and Cook, 2015) that they do not cause business failures or impede international competitiveness by upholding the “core labour standards of the International Labour Organisation. Freedom of association and effective recognition of the right to collective bargaining, elimination of all forms of forced or compulsory labour, effective abolition of child labour, and elimination of discrimination in respect of employment” and a safe and healthy working environment constitute the core labour standards.

Recently, Banerjee et al. (2021) have reported that unions are not only good for workers but also good for communities and democracy: “The benefits of unionization extend far beyond the workplace. High union density is consistently associated with a much broader set of positive spillover effects across multiple dimensions. Not only do unions directly benefit the workers they represent, but their political advocacy helps to drive an array of strongly positive outcomes more broadly, especially in states where unions represent a sizeable share of the workforce. These positive outcomes include wage increases, better health benefits, easier access to unemployment insurance, access to paid sick leave, access to paid family and medical leave, and unrestricted voting opportunities.

It is therefore critical that policymakers enact reforms that restore a meaningful right to organize and collectively bargain. Building union density is not just a worker or workplace issue, but it is also a mechanism to uplift families and communities. The relationship demonstrated between high union density and higher household incomes, access to health care and paid leave, and fewer voting restrictions highlights the importance of protecting the right of workers to organize. This right could be a fundamental component in strengthening economic security, quality of life, civil and voting rights, and racial justice in our communities.”

Greenhouse (2022) has pointed out that unions induce economic growth by reducing income inequality. In fact, according to him, “the decline of unions over the past few decades may have contributed to slower economic growth” in terms of “secular stagnation”. And unions actually lead to “higher productivity in some sectors, such as education and construction, while making no overall difference on productivity in sectors like manufacturing”. Finally, unions ensure that workers are treated with respect.

The industrial relations research unit of the Warwick Business School is an exception. It has justified the increasing industrial action in recent times in the UK and the consequent successes involving improved pay settlements due to the unbearable cost of living crisis (WBS, 2003). What it says is worth noting: “People talk about strike threats, militancy, and union barons.

This frames industrial action in a very specific way, presenting it as an external threat that has no place in the way society should operate. That extends to the contentious idea that strike action is measured in working days lost. There are less loaded ways of describing those days. The absence of unions doesn’t mean the absence of discontent among the workforce. What unions do is represent the workforce in a de-personalised way. They can channel inevitable, occasional conflict in manageable ways so it can be resolved. In fact unions have been called managers of discontent. There are always legitimately differing interests in the workplace. And if that’s not recognised then conflict can find an outlet in other ways, such as increased turnover and absenteeism, reduced motivation, as well as difficulties in recruitment – so, other costs. In some conditions, strike action can actually be beneficial for employers. It can save on labour costs, which may be helpful if a company is facing financial pressure. There may also be a productivity bounce after a strike action, which is fascinating. Taking strike action can have a profound and positive psychological impact for workers who spend their working lives being told what to do. This can be about feeling some reassertion of control over life and may help to explain why employers sometimes see an increase in worker productivity after industrial action.”

The incipient ecological unionism also points to the emerging commitment of some unions to sustainable/regenerative development. “There are no jobs on a dead planet”, as the International Trade Union Confederation (ITUC) says. Such unions talk about an inclusive and sustainable, low-carbon economy with decent and green jobs. The Just Transition Centre, established in 2016 by the ITUC and partners, “brings together workers and their unions, businesses and governments in social dialogue and stakeholder engagement with communities and civil society to ensure that labour has a seat at the table when planning for a Just Transition to a low-carbon world”. These efforts reflect ideas of social movement unionism or social unionism, and national as also global governance by social dialogue for social and environmental sustainability (TUDCN, 2017).

In the Indian context, an exemplary case of red and green politics merging by way of labour unionism cum ecological unionism is the evolution of Chattisgarh Mukti Morcha (CMM). There is well-researched documentation about how it had “represented the concerns and interests of the working class, especially the contract workers, by shaping the industrial wage labourer and the farmer as a defender of the environment; and by factoring in how this clashed with overwhelming cultural notions around the Adivasi feted as a green warrior and a bulwark against modernity.

The CMM addressed the inter-connected discontents of peasants, workers, farmers and Adivasis. Its critique of India’s forest policy and Green Revolution; its choice to echo the voice of those affected by water pollution as well as over-extraction by large-scale industries; its respect for tribal cultural spaces and histories; its opposition to large dams and canals and support for small-scale stop dams and lift irrigation systems; its attempts to reclaim lost knowledge about local eco-systems, and to restate enduring connections between communities and the forest eco-systems; its defence of biodiversity; its opposition to the ruination of local economies; its commitment to alternative technological/developmental regimes, and its struggles for fair wages, enhanced bonuses, provision of provident funds, gratuities, leave, better working conditions, and more facilities for the workers and their families like housing benefits, and so on are all perfectly exemplary” (see Bose, 2023).

#### **4. Good Unionism**

All the same, which kind of unionism matters most for worker welfare as also union revitalization continues to remain a controversial topic. In this connection business unionism and political unionism are clearly disapproved. And service-based unionism, social unionism (Dodd, 2018) and revolutionary unionism (Burns, 2022) are upheld as good for the future of workers.

Business unionism is narrowly bothered about “improvement in the price of labour for unionized employees within a largely accepted capitalist economy” and has a tendency to downgrade itself to yellow or company unionism sold out to the employers. By contrast, the welfare or social movement unionism is considered a better option because it adopts “broad goals oriented towards the achievement of social justice”; extends the “terrain of union action outwards beyond the workplace to the community via labour-community alliances”; and recreates “unions themselves as social movements mobilizing members against workplace and wider social injustice”.

Political unionism, which has been rampant in India since long (Ahn, 2010), refers to a trade union aligned with a political party. It “does not best serve the interests of union members and workers, not only in India but elsewhere in the world. As the popularity of the political party in the government goes down, the popularity of the trade union also goes down. Furthermore, this linkage with the political party can drive away potential union members who may not share the political agenda of the party. Too many such unions with too little unity, political dependency, low unionization rates, non-representation of massive informal workers, non-compliance of labour rights, weakened bargaining power and insufficient investment for training and education define India’s contemporary labour movement” and consequently its impotence.

Hence, it is rightly suggested that “service-based unionism would be a more optimal recourse to regain collective bargaining power and offer a more useful vision to workers and society”. This alternative is “focused on providing labour market services related to job information, replacement, training and retraining, benefits, and so on, so that it can help improve the economic conditions of workers who are deprived, marginalized and contingent”. It also adopts innovative and aggressive organizing strategies in relation to the voiceless informal workers, young people, migrant workers and women.

Radical or revolutionary or class struggle unionism does not exist now. The revolutionary union has “become a historical relic -- the last active revolutionary union is the IWW -- the Industrial Workers of the World -- which, founded in 1905, was sacked in 1919 by the US government and has not recovered since then...Revolutionary unionism remains the great untried experiment - its vision of the world - a world without Capital and capitalist exploitation of workers -- hasn't yet come about...Will it come about again? Who knows?... the State has created a variety of secret police organizations, namely the FBI (created in 1919) and the CIA (created in 1948), who actively work to prevent large-scale social organizing for change. The lesson learned by authorities in response to the great labour upheavals of times past was to infiltrate and destroy popular movements before they get too powerful” (Neal, 2011).

This kind of union “focuses on an unending battle between Labor and Capital (not an endless battle -- rather, one where either Capital wins, reducing us to the level of serfs, or Labour wins, in which case capitalism ends), and recognizes that Labor produces all that is of value in society. The revolutionary union is centred around direct action, as opposed to the strike. The strike is seen as the last weapon of the worker, and not even the most effective one. Workers are most effective in pushing their agendas while still on the job, using a variety of direct action tactics. In revolutionary unions, there is no status hierarchy between workers -- no distinction between senior and junior workers. Moreover, there is no union bureaucracy or leadership to decide for workers what does or does not get done. All initiative comes from below -- from the rank-and-file, who, by their own efforts, make their wishes felt and known. This approach produces a considerably more democratic union, with an active, informed membership. Revolutionary unions practice industrial unionism; that is, the idea that instead of workers dividing themselves into manifold trades, and defending their interests to the exclusion of others, there are, instead, only two classifications in working society -- workers and capitalists. That is, those who work for a living, and those who live on others' work. Those who take orders, and those who give them. The revolutionary unionist seeks One Big Union, instead of many little ones. The logic behind this is that capitalists tend to close ranks and defend their common class interest...against so unified a foe, can a divided workforce possibly prevail?

The history of business unionism reveals that it cannot...Solidarity is the glue that holds the revolutionary union together, which is both an asset and a liability. It is a liability because it depends on workers closing ranks and working together as a whole, which doesn't always occur. Scabs, or workers who cross the picket line during a strike, are always a threat to organized labour solidarity. Because unions represent large numbers of people, organizing solidarity is a daunting task, and is often unsuccessful. When it works, it works well” (Neal, 2011).

Left radicals emphasize that history clearly tells workers that they will never willingly get from the corporates the living wages, skill development opportunities, and the security necessary to plan for the future without their unions strongly fighting for them. Unions thinking of becoming social unions are advised by them to learn a lot from how the World Social Forum with its “Another World is Possible” agenda is now in a shambles, sabotaged by corporate infiltration and neo-fascist political forces in the world. And the ultimate dream of having one big radical union uniting all the workers of the world for establishing a credible alternative economy and society should not be given up even as the exploitation of much of labour such as gig and platform labour (Heiland, 2020) with unlikely representation and workers’ silence is a complex problem to solve. Left radicals emphasize that history clearly tells workers that they will never willingly get from the corporates the living wages, skill development opportunities, and the security necessary to plan for the future without their unions strongly fighting for them. Unions thinking of becoming social unions are advised by them to learn a lot from how the World Social Forum with its “Another World is Possible” agenda is now in a shambles, sabotaged by corporate infiltration and neo-fascist political forces in the world. And the ultimate dream of having one big radical union uniting all the workers of the world for establishing a credible alternative economy and society should not be given up even as the exploitation of much of labour such as gig and platform labour (Heiland, 2020) with unlikely representation and workers’ silence is a complex problem to solve.

## **5. Labour Internationalism and Historical Reckoning**

Labour transnationalism or internationalism also matters for labour welfare. Otherwise known as global labour solidarity, it is the modern paraphrasing of “Workers of the World, Unite!” call owed to the hoary communist signalling of Marx and Engels.

The famous pro-labour sociology professor Scipes (2016) had given a sound introductory grounding of this topic as follows: “Global labour solidarity is an act, or an on-going set of actions, by workers and/or their organizations, and/or their allied organizations, as well as by writers, artists and other activists to support workers and/or their organizations across political community borders in their efforts to enhance workers’ lives, wages, working conditions, and/or their very existence as determined by those affected. It is desirable that to strengthen the power and well-being of workers globally, workers must develop solidarity across political community borders in addition to developing solidarity with workers of their own country; global labour solidarity does not undercut solidarity by workers in the same country, but enhances the power, well-being and knowledge of workers globally.”



“This solidarity must be on the basis of mutual respect and support, which precludes concepts of “clientelism”; a unidirectional flow of ideas, money and other resources; and domination by one labour movement over another (i.e., labour imperialism). This solidarity can emerge from either southern or northern workers or their organizations, can include multiple labour organizations, and can be directed toward either southern or northern workers and their organizations.”

“This solidarity may be between workers/organizations on the same level of political organization, or between workers/organizations at different levels of political organization. This solidarity may be motivated by self-interest, mutuality or altruism.”

There are many types of global labour solidarity with research and documentation done on them, according to Scipes, “ to help workers, their organizations and their allies, in their struggles: (a) to establish and maintain unions, to improve wages, working conditions, security and other workplace-related issues; (b) against common multinational or transnational corporations; (c) to improve the lives of workers and their families outside of the workplace, such as in their communities; (d) to support workers’ efforts through innovative legal strategies and tactics, and utilization of treaty “side agreements,” and to try to protect workers from victimization through the legal and political institutions; (d) against global and/or regional political-economic plans [e.g., NAFTA (the North American Free Trade Agreement), FTAA (Free Trade Agreement of the Americas)], or the “commodity consensus” and other projects that are deemed detrimental to their self-interests (as defined by them)]; (e) against militarism and/or invasion; (f) against imperial activities; (g) to support oppressed peoples; and (h) to liberate themselves”.

It was observed in the late 1990s and early 2000s, according to Scipes, that through these ways of labour internationalism, “working people and some unions, along with progressive allies, have been reaching across political community boundaries for a number of years to try to develop global labour solidarity with other workers, their organizations and their allies.

Some of these projects have been established by labour confederations, international unions, and Global Union Federations (GUFs); some have been by national unions and labour centres; and a growing number are by union members and staffers as well as by those outside of the labour movement—what can be called “grassroots labour internationalism”—each who want to build support for workers, their organizations, and their allies. The increasing willingness to do so is hopeful.”

However, there is a caution to be added to the above positive developments, according to Scipes: “Global labour solidarity is a process, and a strategy, for improving working people’s lives around the planet; it is aimed at increasing workers’ power to determine their lives, both inside and outside the workplace. But it does not provide the goal to which workers’ collectively aspire. That discussion, which started in the 1840s in Europe, continues...this discussion must be done from a global perspective, and it must be developed democratically from the grassroots: it cannot be imposed from above... it must be done in conjunction with other global movements, such as women’s, students, peasants, the urban poor, the indigenous, etc. It must, in short, seek liberation for all—but what that means remains to be determined. Whatever goal is chosen, however, it must be done in conjunction with the planet, not separately.”

Scipes is, thus, suggesting that unions must dedicate themselves not just to social sustainability goals but also environmental sustainability goals.

Bieler and Lindberg (2011) too are great scholars on global labour solidarity. They have grounded the discussion of how “globalisation has put national labour movements under severe pressure, due to the increasing transnationalization of production, with the production of many goods being organised across borders, and the informalisation of the economy”. Through a range of case studies, they examine “the possibilities and obstacles to transnational solidarity of labour in a period of global restructuring and changing global political economy”. In the process, we come to know “successful and failed transnational solidarity covering inter-trade union co-operation as well as co-operation between trade unions and social movements within the formal and informal economy, and the public and private sector”.

Munck (2022) is not pessimistic about the emergence of labour internationalism now against the very powerful big capital internationalism as embodied in the World Economic Forum (WEF). He makes the historically-rooted case for it as follows despite the business schools funded by corporations supporting the WEF and not labour transnationalism as represented, for example, by the Global Labour Justice-International Labour Rights Forum.

“Workers were born in blood in the original industrializing countries and in the colonial world, violence being at the very heart of this process. This was followed by the Industrial Revolution in the mid-18th century and early 19th century as the new capitalist mode of production took shape with the capital/wage labour relation at its core. The period from the end of the Second World War up to the early 1970s was the “golden era” when Western capitalism secured a considerable degree of stability with strong trade unions, labour regulation and social welfare provision. From the mid-1970s, this golden era started disappearing alongside the rise of globalisation and the internet with neoliberalism as the dominant economic policy. This had a cataclysmic effect on labour and its organisation. During this time the old imperialist divide of an industrial North and an agricultural South broke down with the development of “world factories” and free trade zones in the South, where the outsourcing of Northern production lines reached a peak and saw a vast layer of workers, mostly women, in the South incorporated into the exploitative capitalist machine. During the last four decades of neoliberalism, work became increasingly precarious both in the North and in the South so much so that now workers everywhere have the option of either accepting increased vulnerability and precarity or striving for the creation of solidarities and collective action that might protect them and form part of a new democratic and sustainable future for work.”

In this scenario, for a global labour movement to develop and represent the emerging global working class, “it would have to do two things: first, it would need to forge more egalitarian alliances and articulate its programme with other social movements, such those around global justice, sustainable development and gender equity; second, its international strategy would need to break with the traditional corporatist trade union strategies and seek more imaginative and creative ways of working” (Munck, 2022).

There are, thus, well-grounded pro-labour critical reflections on how the labour movement can rejuvenate itself from its past drawbacks.

## **6. Conclusion**

It is clear from the above review that there is anti-labour-organising bias by clever design as also ahistorical blindness in the typical economic way of thinking and managerialism. Little wonder that the capital-labour conflict is ignored and, when considered, not resolved amicably with mutual gains and so it never withers away.

It is high time that economic education dropped perfect competition and began discussing matters of economy and society with the model choice of imperfect competition so that unwarranted implicit bias against unions is dropped. Unions provide countervailing power to powerless workers against oligopolies and monopolies.

It is also high time that management got into the business of changing the world by reinventing themselves with a clear public value purpose to bring “humanity, sustainability, generosity and innovation to the business sector”, as the exceptional Cardiff Business School avows. This would imply, for labour uplift, that they seriously examine the distributional conflicts between capital and labour in the real-world and that they do not ignore evidence in favour of labour organising. This would also imply that they need to become positive about the “initiatives designed to enhance the quality of working life through extending the democratic control of workers over the workplace and the economy” as the social democratic journal *Economic and Industrial Democracy* from the Uppsala University does.

Unions matter now for labouring people more than ever because the corporate pursuit of profit continues to transform the economies in ways that increase worker hardship and insecurity. There are pressing service-based and social (including ecological) concerns to attend to. Unions will, therefore, have to transform themselves suitably to be at least an effective countervailing power against the attacks on them from the corporate cowboys and the governments subservient to them. This is a takeaway which is all the more relevant in India where the annual affair of general strike shows the “astonishing mobilising power of trade unions” on the one hand, and on the other, there is declining political power to win progressive labour reforms on their part in the face of neoliberal onslaughts from governments and employers (Pratap, 2022).

Unions are integral to social democracy as a middle path pragmatist ideology “which prescribes the use of democratic collective action to extend the principles of freedom and equality valued by democrats in the political sphere to the organization of the economy and society, chiefly by opposing the inequality and oppression created by laissez-faire capitalism” (Jackson, 2016). Labour organising, negotiated change (Venkata Ratnam, 2003) and good labour relations are part and parcel of social democratic theory and practice.

Social democracy is not a defunct political idea at all so as to devalue and not pursue in the contemporary worldwide context of increasing power imbalances and income and wealth inequalities. The pro-labour distributional policies of social democracy strengthen collective bargaining and the right to form labour unions alongside short-run as also long-run full employment policies of the government, which modify income distribution so as to make effective demand buoyant. They also bring about good labour relations which will also improve the propensity of workers to contribute to the production process. Thus, broad-based economic growth (inclusive development) is taken care to be stable from both the demand and supply sides (Lavoie and Stockhammer, 2013; Tcherneva, 2014).

This is a compelling insight of munificent beneficence from the Post-Keynesian economics upholding social contract between citizens and governments by social democracy. Its appeal never dies because of the unquestionable Keynesian insight that “capitalism is inherently unstable and needs to be wisely managed”; and the undisputable evidence in European countries that “higher wages and progressive income redistribution do indeed improve macro-economic performance and benefit both workers and firms, especially when supported by aggregate demand management” (Storm, 2020).

Social democracy has been observed, documented and debated as the Nordic model of governance, equality, and social and economic policy for welfare, innovation and prosperity (Brezis et al., 2018). The question is whether this social liberal model can be replicated all over the world. It should be replicated because it has proved that there is no classic equity-efficiency trade-off that the typical economic way of thinking has concocted (Komlos, 2023) and thereby created implicit and explicit biases against labour politics of egalitarianism, and state regulation of free market capitalism.

Despite the fact that the welfare state ideology of social democracy has been on the wane in the neoliberal world over the last four or five decades, the case for feasible social democratic reimagination of mixing markets with state continues to be made (e.g. Hodgson, 2021). And if its appeal is discussed over a semester of interdisciplinary social science education, students as future citizens and policy makers can uphold enlightened ideas and practices that really matter for establishing an inclusive economy and society, which is widely perceived as a final legitimate goal. Similarly, the environmental sustainability goal is perceived as another final legitimate goal. The case for progressive capitalism which also factors in the unions joining the fight against environmental abuse and is associated with social or republican democracy as made by Stiglitz (2019) is part and parcel of the burgeoning sanity project of building a fairer and sustainable society. Political change in terms of moving away from elitist liberal democracy to public opinion democracy as social democracy and finally to participative republican democracy or deliberative democracy is the need of the hour (Bresser-Pereira, 2004) to factor in people’s voices from below. In the absence of this change, and the presence of democratic recession and depression, unions will not be positively taken by the powers that be.

The achievement of social and environmental sustainability goals that social or republican democracy can address better, can be tracked through Multidimensional Inclusiveness Index and Composite Environmental Sustainability Index, as discussed in Dorffel and Schuhmann (2022), and Jain and Mohapatra (2023) respectively.

These are stories of metrics the evaluation of which is not the concern here but they should be studied as well by social science students wondering about institutions of “good society”, and “good life” therein.

Whether neoliberalism will be replaced by progressivism on the above lines is a multi-million dollar question, though, so to say.

## References

1. Ahn, Pong-Sul (2010). *The Growth and Decline of Political Unionism in India*. ILO. New Delhi.
2. Banerjee, Asha et al. (2021). *Unions are Not Only Good for Workers, They are Good for Communities and for Democracy*. Economic Policy Institute. US. December 15.
3. Bieler, Andreas and Lindberg, Ingemar (2011). *Global Restructuring, Labour and the Challenges for Transnational Solidarity*. Routledge.
4. Bivens, Josh (2009). *Unions Do Not Undermine International Competitiveness*. Economic Policy Institute. US.
5. Bose, Annavajhula J C (2023). *The great Outsider Shankar Guha Niyogi: Technology and Green Politics in India by Radhika Krishnan-Book Review*. Workers Unity. December 24.
6. Bresser-Pereira, Luiz Carlos (2004). *Democracy and Public Management Reform: Building the Republican State*. Oxford University Press.
7. Brezis, Elise et al. (2018). *What We Can Learn from the Nordic Model*. *Intereconomics: Review of European Economic Policy*. 53 (4).
8. Burns, Joe (2022). *Class Struggle Unionism*. Haymarket Books.
9. Chasse, J. Dennis (2003). John R. Commons's *Industrial Relations: Its Development and Relevance to a Post-Industrial Society*. *Economie & Institutions*. Open Edition Journals. <https://journals.openedition.org/ei/722?lang=en>
10. Dinardo, John and Lee, David S (2003). *Do Unions Cause Business Failures?* <https://www.princeton.edu/~davidlee/wp/unionbf.pdf>
11. Dodd, John Alan (2018). *Towards Social Movement Unionism?*, Aad Geomila.

12. Dorffel, Christoph and Schuhmann, Sebastian (2022). *What is Inclusive Development? Introducing Multidimensional Inclusiveness Index*. Social Indicators Research. 162.
13. Greenhouse, Steven (2022). *How Unions Work for the Economy*. The Century Foundation. US.
14. Guest, David E (1987). *Human Resource Management and Industrial Relations*. Journal of Management Studies. 24 (5). September.
15. Guest, David E (1990). *Human Resource Management and the American Dream*. Journal of Management Studies. 27 (4), July.
16. Heiland, Heiner (2020). *Workers' Voice in Platform Labour*. No. 21. Institute of Economic and Social Research. Hans-Bockler-Stiftung. July.
17. Hill, Rod and Myatt, Tony (2010). *The Economics Anti-Textbook: A Critical Thinker's Guide to Microeconomics*. Zed Books
18. Hodgson, Geoffrey M (2021). *Liberal Solidarity: The Political Economy of Social Democratic Liberalism*. Edward Elgar.
19. Jackson, Ben (2016). *Social Democracy. The Oxford Handbook of Political Ideologies*. Oxford University Press.
20. Jain, Neha and Mohapatra, Geetilaxmi (2023). *A Comparative Assessment of Composite Environmental Sustainability Index for Emerging Economies: A Multidimensional Approach*. Management of Environmental Quality. 34 (5).
21. Keane, Bernard (2024). *Nobel Laureate Economist Savages His Own Profession as Clueless and Unethical*. Crikey. March 12.
22. Komlos, John (2023). *Foundations of Real-World Economics*. Routledge.
23. Kucera, David and Sarna, Ritash (2004). *How Do Trade Union Rights Affect Trade Competitiveness*. Working Paper No. 39. ILO. Geneva.
24. Lazes, Peter and Cook, Andrew (2015). *Unions Play Pivotal Role Making Companies More Competitive*. The Conversation. April 10.
25. Lavoie, Marc and Stockhammer, Engelbert (2013). *Wage-Led Growth: An Equitable Strategy for Economic Recovery*. International Labour Organisation.

26. Mankiw, Gregory N (2012). *Principles of Economics. 6th Edition*. Cengage Learning.
27. Moody, Kim (1997). *Workers in a Lean World*. Verso.
28. Munck, Ronaldo (2022). *Rethinking Global Labour: After Neoliberalism*. Agenda Publishing Limited.
29. Myatt, Tony (2023). *The Macroeconomics Anti-Textbook: A Critical Thinker's Guide*. Bloomsbury Academic.
30. Neal, Dave (2011). *Business Unionism vs. Revolutionary Unionism*. IWW Historical Archives.
31. Pratap, Surendra (2022) *Growing Union Strength, Declining Political Power: Understanding the Paradox of General Strikes in India*. Asian Labour Review. July 21.
32. Ramawamy, E. A. ed. (1994). *Countdown: Essays for Trade Unionists*. Friedrich Ebert Stiftung.
33. Scipes, Kim (2016). *Theorising Global Labour Solidarity*. April. [https://www.researchgate.net/publication/315617986 Multiple Fragments--Strengths or Weaknesses Theorizing Global Labor Solidarity](https://www.researchgate.net/publication/315617986_Multiple_Fragments--Strengths_or_Weaknesses_Theorizing_Global_Labor_Solidarity)
34. Stiglitz, Joseph (2019). *People, Power and Profits: Progressive Capitalism for an Age of Discontent*. Penguin Books.
35. Storm, Servaas (2020). *The Economics and Politics of Social Democracy: A Reconsideration*. Institute for New Economic Thinking. May 14.
36. Stubbs, Ian (2023). *Labour Unions & Capitalism*. March 31. <https://www.law.georgetown.edu/denny-center/blog/labor-unions-capitalism/>
37. Tcherneva, Pavlina R (2014). *Full Employment: The Road Not Taken*. Working Paper No. 789. Levy Economics Institute of Bard College. March.



38. TUDCN (2017). *Social Dialogue as a Driver and Governance Instrument for Sustainable Development*. Trade Union Development Cooperation Network. Belgium.
39. Venkata Ratnam, C. S. (2001). *Globalisation and Labour-Management Relations*. Response Books.
40. Venkata Ratnam, C.S. (2003). *Negotiated Change*. Response Books.
41. WBS (2023). *Why Industrial Action is Not Always Bad for Employers*. Future of Work News. Warwick Business School. April 17.
42. Yates, Michael D (1998). *Why Unions Matter*, Monthly Review Press.

# The Evolution of Corporate Governance: Underlying Theoretical Foundations and Adaptations over time

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## Abstract

The paper highlights the corporate governance mechanism followed under various theories which have developed over time with the changes in structure and size of corporations. The different theories have developed in the backdrop of changes in economy, markets, need for governance and control of management and shareholders. One theory is not sufficient to meet the requirement of corporate governance but the combination of mechanisms and codes from various theories may be a better approach. The paper considers the evolution of corporate governance theories as businesses face complexities and challenges. The modern-day businesses have come a long way and are significantly concerned about sustainability being aligned to their organisations. The present paper tries to overview the evolution of corporate governance theories over time.

*Keywords: Corporate Governance, Stewardship theory, Agency theory*

## JEL Classification

G30, G40

## 1. Introduction

Corporate governance reforms have become a global issue over the last two decades because of globalisation and varied governance scams. It has emerged as a widely debatable issue among scholars. Countries around the world are developing new codes of best practices and amending them in the light of successive developments in the financial markets as well as on their economic front. There have been continuous amendments in laws and listing requirements of the stock exchanges in a quest to reform corporate governance. However, this issue of corporate governance is not so nascent; its roots can be traced centuries back when Adam Smith documented the principal- agent conflict.

With the expansion of economic activities, size of business started increasing making it beyond the scope of a single owner to manage it, the advent of partnership infused the concept of mutual dependence and binding among owners. This, to me, seems like the first playground for good governance whereby each supplier of funds was not involved in each decision of firm and agency relationships started. With the introduction of the concept of joint stock company, separation of control and ownership was emphasised and hence greater manifestations of agency theory. The firms that succeeded and survived the test of time were the ones that had strong governance imbedded in their functioning.

“Corporate governance has been defined by Cadbury report (1992) as the system by which companies are directed and controlled”. The inception and development of the concept of corporate governance has been affected by theories from several disciplines including economics, finance, law, organisational theory and behaviour, accounting, management and sociology. Among the new economic theories of the firm, agency theory, which propounds protecting the interest of shareholders from self-serving managers became significant and prominent theory for corporate governance. However, the position of stakeholder theory increased as companies cannot operate only for shareholders, in isolation from other stakeholders and therefore, they need to identify and protect the interests of and provide some benefits to wider stakeholder groups. Stewardship theory on the other hand is a stark contrast of agency theory stressing on involvement rather than control of management. Another theory contributing to the area is resource dependence theory, which talks about establishing certain links among organisations to make efficient use of resources. With Sustainable Development Goals given by United Nations, corporate governance theories have also enlarged their scope and Environmental, social and governance aspects have been taken up by authors. The concept of corporate governance and the underlying environment, social and governance factors in theories has been studied by the authors and reviewed here.

## 2. Objectives of the Paper

- Corporate governance as a concept has been studied in the past, but the present paper aims to relate the underlying approaches related to these theories.
- The newer aspect of corporate governance that not only includes stakeholders but also how the concept of corporate governance and sustainability have been aligned is seen in this paper.
- The aim of the paper is to assess various theories of corporate governance and their adaptations over time.

## 3. Review of Literature

Corporate governance has become imperative since its evolution due to major corporate scandals but newer complexities like environmental catastrophes have changed the perspective and corporate governance has evolved (Aziz et al., 2015). The area of corporate governance can be studied from the perspective of three periods. The initial era which is managerial capitalism (1932-1976) which focuses on separation of managers and owners and has its roots in agency theory. In 1976, next era came of shareholder value where senior management interests were aligned with shareholders. In 1984, the era of stakeholders became prominent (Jaimes-Valdez & Jacobo-Hernandez, 2016). When UN gave us Sustainable Development Goals in 2015, the authors have studied interlinkages between sustainability and governance. (Darus et al., 2016) has explored the impact of corporate governance on sustainability disclosure. Authors studied corporate governance parameters like size of the board with their impact on disclosure of sustainability factors.

(Afza & Nazir, 2014) describe the theories of corporate governance, their mechanisms for understanding the conflicts and problems among stakeholders along with views and solutions to the conflicts. Abdullah & Valentine, 2009 discussed the concept based on social relationship rather than processes and its ever evolving with changes in business environment. Corporate governance can be defined from various perspectives by different theories. (Yusoff & Alhaji, 2012) reiterate that accountability, transparency and honesty are the crucial components of good corporate governance and sustainability of the business. Further the present theories are not competent enough to explain the heterogeneity of the business as governance differs on basis of many factors like culture, level of economic development, culture, politics, and social circumstances. An attempt has been made in this paper to study the mechanism and codes explained by various theories and understand the various factors which can be integrated for good corporate governance.

## **4. Evolution of Theories: A theoretical analysis**

### **4.1 Agency Theory**

Jensen & Meckling (1976) defined “an agency relationship as a contract under which one or more persons (the principal) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent”.

Here for a firm, manager is considered as an agent who acts on behalf of the shareholders (principal) and the relationship is contractual in nature, governed by the terms and conditions of contract between both the parties. This theory tries to find answers to two problems. One, the agent might not be behaving appropriately (in the best interest of the principal) because his desires and goals may not align with those of the principal. The managers may have opportunistic behaviour and try to emphasise on their interest at the cost of owners’ interest. This increases the cost of resolving the conflict by following various corporate governance mechanisms and monitoring systems including monetary and non-monetary incentives (Afza & Nazir, 2014). And the other problem is related to risk attitude of agent and that of the principal being different and may not align, and both may prefer different actions to given risk assumptions. Therefore, agency theory seeks to align the interest of owners and managers presuming an inherent conflict of interest between the owners of the firm and its managers. Another form of agency problem that has become prevalent is oppression of minority rights whereby majority shareholders are able to take any decision irrespective of the views of minority shareholders.

The basic problems inherent in agency relationships are:

- *Information Asymmetry*
- *Risk Asymmetry*
- *Goal Asymmetry*

#### ***Information Asymmetry***

“The problem long accepted as fundamental to finance and corporate governance is information asymmetry. In finance it is between receivers and providers of finance and in corporate governance it is between agent and principal.” (Cai & Tylecote, 2008). The problem is that principal and agent have access to different levels of information. Managers (agents), who are running the firm are assumed to know much more about the firm than the owners (principal) and can use this advantage of having better access to information to serve their self-interest, which may be pecuniary, or any other advantage. “According to agency theory rooted in economics and finance, agents are opportunistic and are strongly motivated to profit from information asymmetry between

them and their principals.” (Fama & Jensen, 1983) “Moreover it is difficult or costly for owners to observe or infer the amount of effort exerted by managers to fulfil their responsibility and therefore managers have an inevitable temptation to shirk work and take advantage of the unobservability of their actions to enhance their personal goals as owners can’t assess the true picture. Managers can also conceal true picture by misrepresenting actual outcome to owners (Crowther & Aras, 2010)”. So, owners cannot assess decisions made properly.

### ***Risk asymmetry***

Another problem is that there may be non-alignment in the attitude towards risk between manager and principal; manager might not be taking appropriate risk in pursuance of maximisation of the benefit of the principal because he might think that those risks are not appropriate. The asymmetry is because, for a shareholder, the stake in the firm is an investment and he can diversify his risk by making an appropriate portfolio of such investments and dilute it; but managers don’t have any such portfolio and hence cannot diversify risk that easily. Therefore, they try to mitigate risk even at the cost of maximising shareholders wealth.

### ***Goal asymmetry***

Both information and risk asymmetry become even more harmful if there is goal asymmetry between the owners and managers whereby managers are tempted to take actions to increase their own utility and not necessarily to maximise the returns on capital invested by financiers. They could be interested in consumption of perquisites, diversion of resources for their own consumption, empire building etc. Moreover, there may be a differential time horizon between the managers and owners, which may lead to managers resorting to short-termism rather than long term wealth maximization. Managers might also pursue growth over wealth maximisation. As their interests do not match, strict monitoring and certain costs like monitoring, bonding costs etc are incurred (Jensen & Meckling, 1976).

According to the agency theory, corporate governance procedures can provide assurance to shareholders that management would try to accomplish results that are in their best interests (Shleifer & Vishny, 1997). Corporate governance mechanisms try to limit agency costs by checking managerial discretion and aligning manager and owner interest.

Two propositions that capture the governance mechanisms have been identified. Firstly, outcome-based contracts with management aligning preferences of agent with those of principal reduce conflict in self-interest

between them. Secondly, clear and complete disclosure through well devised information systems also curb agent opportunism as deceiving the principal becomes impossible.

#### **4.1.1 Corporate governance mechanisms and Agency theory**

##### ***Effectively structured boards with greater proportions of independent directors***

According to various scholars, board of directors actively regulate the decisions of top management to ensure shareholder wealth maximisation. Agency theory suggests greater proportion of independent directors on board. The widespread adoption of normative corporate governance guidelines emphasising on the need of independent directors on the boards by the business communities around the world clearly indicate the acceptance of this model.

##### ***Separation of the role of CEO and chairman***

As per this theory, unitary leadership structure can impact board's functions like monitoring, compensation of board etc. (Barako et al., 2006). Therefore, this theory proposes separation of roles of CEO and chairman of the board. Non-duality would permit the board to effectively scrutinise and monitor the behaviour of the executives. The rationale behind separating the two responsibilities is that if the person who chairs board meetings and controls the information provided to the board simultaneously runs the company, it is doubtful that the boards will be able to adequately assess and challenge such a CEO. As a result, separation reduces the CEO's influence and increases the board's ability to monitor executives.

##### ***Compensation contracts that encourage shareholding orientation***

Agent opportunism can be effectively curbed by outcome-based contracts with the executives, whereby, rewards for both the principal and agent depend upon the same actions hence reducing conflicting interests between the two parties. Providing equity incentive schemes, commissions to managers, golden parachutes, can align the interest of the managers with those of shareholders and provide incentive to managers to maximise shareholders wealth.

##### ***Concentrated shareholdings leading to active monitoring of the executives***

Large outside investors are in a position to protect their interest in a much better way than a large number of small, dispersed investors by investing in information required to vote more consistently in accordance with stockholder's economic interest, as they can efficiently organize themselves to influence management. Dispersed shareholders, given their low stakes in the company, generally do not have the incentive and at times

even the resources to gather sufficient information to monitor management or use their voting power collectively to influence management. That is why the role of institutional investors as a check on management is gaining importance.

***External mechanism of corporate control***

In the agency context, external market for corporate control is an important device, which is stimulated when internal mechanisms for controlling managerial opportunism have failed. Corporate performance of a firm is adversely affected if its management pursues inefficient and ineffective strategies for a prolonged period, making it a soft target for takeover bids. Takeover results in management changes and hence, is a threat for self-indulgent managers; therefore, it acts as a monitoring device and reduces agency problems.

***Greater disclosures and transparency in operations***

To keep a check on the agents, agency theory favours greater disclosures and high level of transparency in operations by the management. Given that the management has an informational edge over the shareholders, and it is practically not possible for investors to gather all information about functioning of organisation on their own account, hence there is a need for an information system enabling the owners to verify managers' behaviour, at least covering important areas of concern. This takes care of information asymmetry to some extent and acts as a barrier towards indulging in self-serving behaviour by managers. There is a widespread acceptance of this mechanism, and all the norms of governance world over prescribe the minimal level of mandatory disclosures by the management in the annual report. Voluntary disclosures are a step ahead in this direction whereby managers provide credible and reliable information to market to enhance the value of the firm; this involves monitoring cost while providing information about investment opportunities, financing policies and other general information about the firm but such monitoring costs do help in reducing agency cost.

Thus, according to agency theory managers are only custodians who are working on behalf of the owners of the business. This theory overemphasises the role of shareholders and ignores other stakeholders who are coincidental to running of a business. Many viewpoints have questioned this emphasis on shareholders as the sole intended benefactors of a corporation, arguing that it does not reflect the way a firm is conducted (Crowther & Aras, 2010). This limitation of agency theory has led to the evolution of stakeholder theory.



## **4.2 Stakeholder theory**

A stakeholder is any group or individual who can affect or is affected by the achievement of an organization's objectives. Edward Freeman's perspective on stakeholder theory revolutionized the way businesses and organizations approach their relationships with various groups. In his landmark work "Strategic Management: A Stakeholder Approach" (1984), Freeman proposed that companies should not focus solely on maximizing profits for shareholders, as suggested by traditional economic theories. Instead, he argued that businesses must consider the interests and well-being of all stakeholders involved, including employees, customers, suppliers, communities, and shareholders. This broad definition moved the focus from the narrow interests of shareholders alone especially under agency theory discussed above to a wider, more inclusive view of organizational responsibility. (Friedman, 1970; Jensen, 2002).

Stakeholder theory views organizations as complex networks of relationships between the enterprise and its diverse stakeholders. These stakeholders can be internal, such as employees, managers, and owners, or external, including customers, suppliers, competitors, government entities, special interest groups or organisations, and society as a whole. The company, to succeed must try to maintain cohesiveness in relationship with all these groups. According to stakeholder theory, a business maximizes its value when its management operates in the best interests of all stakeholders. Returns should be distributed fairly among these stakeholders in a way that is mutually acceptable to everyone involved (Crowther & Aras, 2010). This theory stresses the importance of broadening the organization's purpose to go beyond maximizing shareholder wealth, incorporating the interests of other stakeholders as well namely, the creditors, the customers, the employees etc. The theory argues that the stake holders also include government authorities, trade unions and associations, communities and at sometimes competitors and prospective employees (Yusoff & Alhaji, 2012). Again, to maximize shareholders' welfare, there should be a sense of fairness in the way the firms interact and conduct exchange with other stakeholders. Such fairness is necessary for social efficiency.

### **4.2.1 Corporate governance mechanisms and Stakeholder theory**

#### ***Stakeholder representative on board***

Corporate governance codes in the line of participation and representation of different stakeholders in the board of directors can be viewed as a natural derivation from this theory.(Gupta & Parua, 2006) Their presence on the board is one way of protecting the interest of the concerned group. That is why it is advocated to have employee nominee on the board, there may be nominees of other stakeholder groups like government, financial institutions etc also. In the current scenario, even the small shareholders might be considered as an independent

stakeholder group different from the majority group, having their representative on board, as there may be chances of opportunism by majority shareholders.

### ***Concept of corporate social responsibility***

Carroll introduced the "Pyramid of CSR," categorizing CSR into four levels: economic, legal, ethical, and philanthropic responsibilities. It provides a framework for understanding the multifaceted nature of corporate responsibility (Carroll, 1991). This framework helps define and shape the nature of an enterprise's obligations to the society in which it functions. Corporate social responsibility, according to Epstein, "relates primarily to achieving outcomes from organizational decisions concerning specific issues or problems which (by some normative standard) have beneficial rather than adverse effects upon pertinent corporate stakeholders" (Epstein, 1987). This concept itself has evolved from stakeholder theory whereby each company seeks to contribute something towards society as a stakeholder group. Various endeavours in the field of education, environment protection, and health facilities etc. by companies is a bid to satisfy or rather contribute to the welfare of these stakeholder groups. The growing importance of CSR initiatives taken by companies' world over shows the wider acceptance of stakeholder theory.

Carroll, A. B. (1991). The pyramid of corporate social responsibility: toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.

### ***Whistle blower policy***

In the wake varied corporate scandals like Enron, Vivendi, Lehman Brothers, Satyam where top management and board overlooked their responsibility towards shareholders and stakeholders, the idea of whistleblowing began to gain prominence, emphasizing the need for companies to establish clear procedures for stakeholders to report legitimate concerns about unethical behaviour that could violate the organization's Code of Conduct. These policies are designed to provide assurance that individuals can voice their concerns with confidence, free from the risk of retaliation or victimization. Companies may designate an Ombudsperson to oversee a structured process for reviewing and investigating reported concerns and taking appropriate actions to address the issues. Cases involving serious misconduct handled by the Ombudsperson may also be escalated to the Audit Committee for further review.

However, a universally accepted mechanism for fairly distributing returns among all stakeholders has not yet been developed, and stakeholder theory notably falls short of providing concrete suggestions in this regard.

Nevertheless, the theory is widely recognized and operates on the principle that prioritizing the interests of all stakeholders inherently leads to the maximization of shareholder returns. As a result, the role of management is to optimize the long-term performance of the business to achieve this objective, ensuring that all stakeholders, including themselves as part of the stakeholder group, are rewarded appropriately (Crowther & Aras, 2010).

### **4.3 Stewardship theory**

Stewardship theory recognizes that managers often pursue a diverse range of goals beyond just monetary rewards, such as personal achievement, altruism, growth, and dedication to meaningful work. Unlike agency theory, it argues that there is no inherent conflict of interest between managers and owners. Instead, it suggests that managers are inherently trustworthy and work in the organization's best interests, acting as responsible stewards of the resources entrusted to them (Donaldson & Davis, 1991). According to this theory, the role played by the board of directors should be confined to reviewing the plan of action of the management to achieve the overall goals and cultivate a framework of synchronization with managerial cadres. The theory puts greater stress on reliance on inside directors because of the technical expertise, involvement with the affairs and informational edge they have over the outsiders. This theory places the argument in favour of managers and internal directors that they can act in best manner for company and shareholders because they have intrinsic knowledge of company affairs as compared to independent directors who are outsiders (Afza & Nazir, 2014). The theory snubs any non-alignment of interest of owners and managers and encompasses a long-term horizon, putting a greater reliance on involvement rather than control of insiders on the board. In terms of the renowned motivational theory by Mc Gregor (1960), stewardship theory undertakes a "Theory Y" stance of managers contravening the "Theory X" stance taken by agency theory and undermines the prominence of monitoring the board to improve performance as suggested by the agency theory.

#### **4.3.1 The practices that find their roots in this theory are:**

##### ***Minimum number of board meetings***

Some codes specify a minimum number of board meetings that must be conducted within a certain period whereby plans may be reviewed by directors and inside directors may brief the outsiders with regard to conduct of business and performance against various parameters set. However, the theory does not propound too many meetings of the board as it may hamper the speed of decisions and over involvement of outsiders in conduct of business.

### ***Attendance of directors in meetings***

Board meetings serve as an interface between the insiders and outsiders on the board and hence some minimum prescribed attendance is necessary to ensure participation. Outside directors can be acquainted to the functioning of the organisation through these meeting at the same time insiders can gain from the expertise of outsiders through the interaction while deciding on strategic matters.

However, many of the prepositions of stewardship have not been integrated into corporate governance codes, largely due to the lack of robust empirical evidence, unlike in the case of agency theory, which supports the claim that a greater presence of inside directors leads to improved corporate performance. Some of such views promulgated by the stewardship theory are:

### ***Greater proportion of inside directors on board***

The theory contends that majority inside directors' results in better performance as these directors expend their working life in the company they manage and are close to actual performance of the company. Thus, they have a better understanding of its functioning, greater access to both formal and informal channels of information, can look at the organisation from an overall perspective including the operational aspects and hence, are in a position to take more informed decisions. Whereas an outside-dominated board is more reliant on the information provided by the management and at times may not be well equipped in terms of knowledge, time and resources to take timely and better decisions.

### ***One-man leadership***

The theory favours the argument that company can achieve higher performance if it operates under the leadership of a single individual serving as both chairman of the board and the CEO of the company. A dependable steadfast leadership can avoid a deadlock in boardroom, which may arise in case of diluted leadership where board chair and CEO are different people. As per the theory, fear of jeopardising their own reputation, makes it improbable for senior executives and CEO to act against the interest of shareholders. Hence dual leadership is not required which can in fact slowdown decision-making process.

Stewardship theory assumes that inside directors naturally work for long-term profit maximisation of the firm, and they are reliable individuals. Trust and performance get priority over monitoring and cost control.

#### **4.4 Resource dependence theory**

Resource dependence theory emphasizes the board's role in connecting with the external environment to secure critical resources necessary for the organization's success.. The board plays a critical role in arranging the significant resources for the organisation through their links with the external environment and define the interdependencies with other organisations. These interdependencies are the result of uncertainties in availability of resources because of their scarcity. Board composition can be viewed as a response to the external challenges faced by the organization, reflecting the need for diverse expertise and resources to navigate those challenges effectively (Madhani, 2017). Organisations have continuous interface with the environment and are affected by the same in various ways. The basic premise of Resource Dependence Theory is that organisations seek to influence their environment by acquiring and controlling the resources needed to address external challenges. In order to gain such control, organisations try to inculcate links amongst themselves through the channel of board members from other organisations and institutions. Co-opting boards from other companies, social & legal bodies, educational institutions etc. open channels of information and expertise beyond the core competencies of the organisation.

Interconnected boards enable the organization to better navigate environmental uncertainty, improve access to finance and capital, and establish stronger connections with all key stakeholders. This theory supports the appointment of directors on various boards as it provides the opportunity to get the information and develop network in many ways (Yusoff & Alhaji, 2012)

##### **4.4.1 The practices that find their roots in this theory are:**

###### ***Appointment of directors from other organisations***

The codes for best practices encourage corporations to appoint outside specialist on their board. Business experts can add to performance by providing their expert suggestions on competition, problem solving, strategic decision making etc. Specialists on the board can offer valuable expertise in areas such as law, banking, taxation, insurance, and public relations, while educationists can contribute non-business perspectives, helping to address issues, challenges, and generate new ideas.

### ***Allowing directors to hold certain number of directorships in other companies***

Directors holding multiple appointments can bring significant benefits to the organization by leveraging their extensive networks, which can be utilized to enhance the firm's value. Most of the codes allow directors to hold directorships in other companies and committee memberships as it is recognised that inter-firm directorships add to the pool of resources of a corporation. A caveat in this regard is that too many directorships may hinder the efficiency of the concerned director.

### ***Intensity of board activity***

Board activity is measured by number of board and other committee meetings. It is generally believed that boards respond to poor results with greater level of activity, which in turn is associated with improved operating performance in later years (Jackling and Johl, 2009). Resource dependence theorists believe that increased activity levels of boards lead to greater interaction between board members and free flow of ideas enhancing the effectiveness of the board. At the same time the quality of these meetings in terms of time spent on routine tasks etc. should also be point of consideration.

## **4.5 Legitimacy theory**

Suchman (1995) considers that “Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions”. The Legitimacy Theory posits that organizations, including corporations, engage in activities and practices that are perceived as legitimate by their stakeholders to maintain their acceptance and support within their environment. This theory is rooted in the idea that organizations need to conform to societal norms, values, and expectations.

### **4.5.1 Corporate governance practices that find root in this theory:**

In the context of sustainability, the Legitimacy Theory implies that organizations engage in sustainable practices not only because they are legally required or economically beneficial, but also to maintain their legitimacy in the eyes of stakeholders.

### ***Legitimacy and CSR/Sustainability Reporting***

Companies now a days engage in Corporate Social Responsibility (CSR) and sustainability reporting to demonstrate their commitment to sustainable practices. This reporting is a way of signalling to stakeholders, including investors, customers, and the wider community, that the company is adhering to widely accepted

norms related to sustainability.

### ***Stakeholder Influence***

Sustainability constructs are often influenced by stakeholders who have an interest in environmental, social, and economic aspects of a company's operations. These stakeholders include shareholders, regulatory bodies, customers, employees, local communities, and advocacy groups.

### ***Proactive Approach to Sustainability***

Companies adopting a Legitimacy Theory perspective take a proactive approach to sustainability, going beyond mere compliance with regulations. They aim to shape and influence sustainability norms and expectations in their industry and society.

### ***Transparency and Accountability***

Transparent reporting on sustainability initiatives and performance is crucial for demonstrating a company's legitimacy in this regard. It allows stakeholders to assess whether the company's sustainability efforts align with societal expectations.

## **4.6 Transaction cost Theory**

Williamson developed this theory which focuses on the costs associated with organizing economic activities. It suggests that firms exist to minimize transaction costs, which include the costs of negotiating, contracting, monitoring, and enforcing agreements. TCT suggests that firms adopt specific governance mechanisms to structure relationships and reduce transaction costs.

### **4.6.1 The theory has following postulates:**

#### ***Bounded Rationality and Opportunism***

TCT recognizes that decision-makers have limited information and cognitive resources. It assumes that individuals act opportunistically to maximize their own interests. Governance mechanisms are designed to manage these behavioural realities.

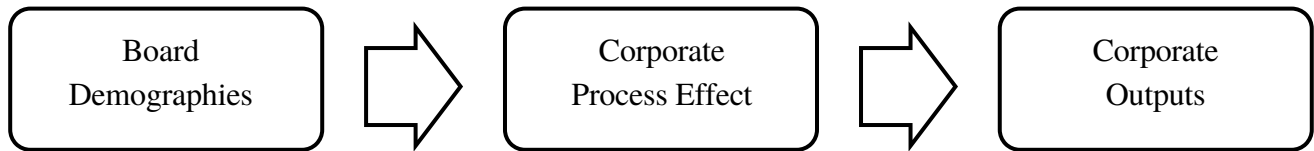
**Long term contracts**

TCT often emphasizes the importance of long-term relationships and contracts to reduce transaction costs. For instance, investing in sustainable supply chain practices can lead to stable and reliable supplier relationships over time.

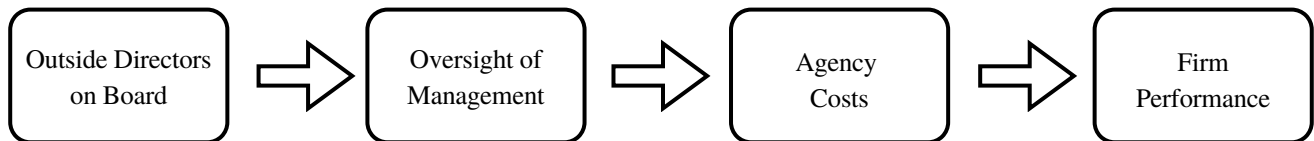
**Governance Mechanisms**

TCT suggests that firms use various governance mechanisms leading to efficient structures and processes to align interests and reduce transaction costs.

The processes described by various corporate governance theories can be represented visually as follows:



**Agency Theory**

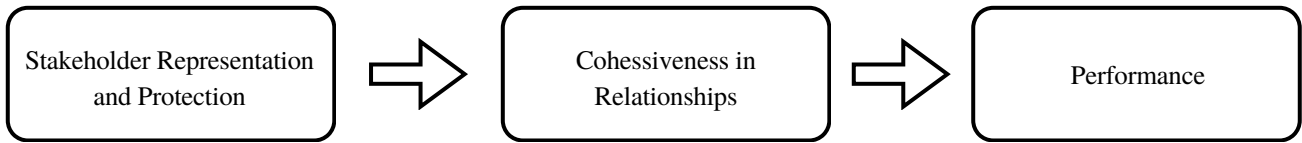


**Pattern**

High ▼	High ▼	Low ▼	High
Low ▼	Low ▼	High ▼	Low



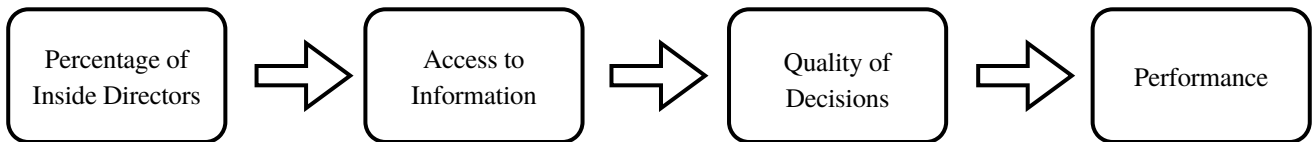
**Stakeholder Theory**



**Pattern**

High ▼	High ▼	High
Low ▼	Low ▼	Low

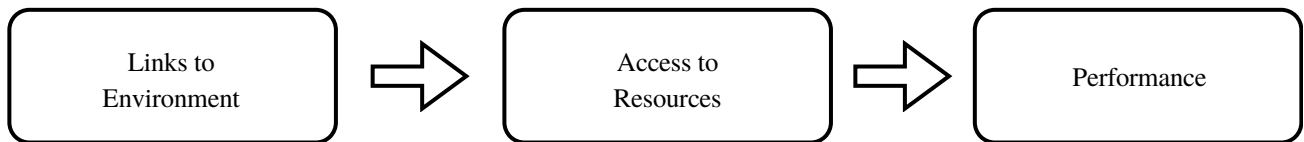
**Stewardship Theory**



**Pattern**

High ▼	High ▼	High ▼	High
Low ▼	Low ▼	Low ▼	Low

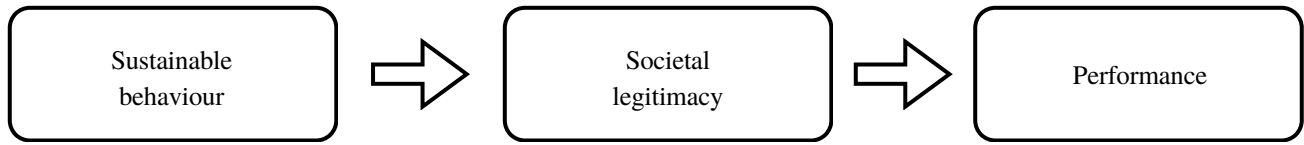
**Resource Dependence Theory**



**Pattern**

High ▼	High ▼	High
Low ▼	Low ▼	Low

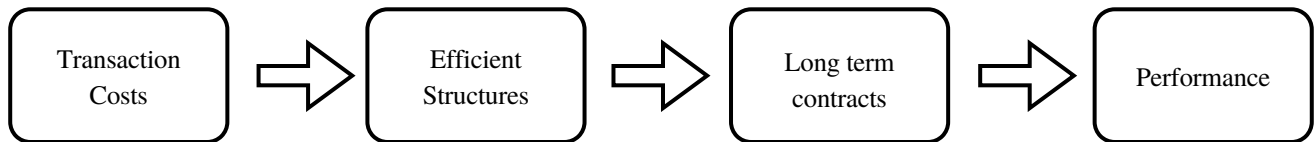
**Legitimacy Theory**



**Pattern**

High ▼	High ▼	High
Low ▼	Low ▼	Low

**Transaction Cost Theory**



**Pattern**

High ▼	Low ▼	Low ▼	Low
Low ▼	High ▼	High ▼	High

Figure 1 Processes predicted by the Theories of Corporate Governance: Adapted from Nicholson & Kiel (2007)

## 5. Conclusion

From the above discussion, it is understood that agency theory favours the separation of ownership from the management while stewardship theory emphasises on the non-duality of the functions of CEO for better managerial harmony and prefers appointment of internal directors over external because of the better knowledge and insight of the company. On the other hand, stakeholder theory considers all-inclusive model for the community, agency theory prefers shareholders over other stake holders. Finally, the resource dependence theory necessitates the inclusion of directors with experience and expertise to be treated as resource for the board of the company (Islam, 2022). Boards in today's time are increasingly looking into expertise in sustainability matters.

The Legitimacy theory suggests that organisations are adhering to societal norms and expectations to gain trust of stakeholders and remain legitimate in their environment. The theory posits that the organisations are influenced by the external environment, and they have to engage in activities perceived legitimate by stakeholders. The Transaction cost theory (TCT) starts with the premise that economic agents (individuals, firms) are motivated by self-interest and operate in an environment of bounded rationality, uncertainty, and opportunism. It highlights the economic rationale behind governance choices and how they relate to minimizing transaction costs in complex organizational settings.

Thus, after discussing the contribution of various theories, it is evident that corporate governance has evolved over a period from what was seen as protection of shareholders from managers to a more wholesome system with delicate balances between insiders and outsiders, with a broader perspective than that limited to shareholders only. But this does not diminish the contribution of agency theory which is still the corner stone of all the codes and practices. The theories that have influenced the evolution of corporate governance should also be observed in the light of other environmental systems that affect the functioning of the corporations like the legal system wherein countries with common law system have better framework for shareholder protection and might need less stringent codes than countries with civil law system leading to weaker protection of shareholders and hence stringent codes of compliance to protect them and other stakeholders. Capital market development has its own role in this area therefore corporations operating in a developed and efficient market may need lesser spoon feeding on governance as the external market for corporate control is an important means to restrain self-indulgent behaviour of managers. Long term inefficient behaviour is penalised by undervaluation of the firm in capital market, making it a soft takeover target and this behaviour acts as a

deterrent for managers to be overtly self-centred. On the other hand, countries with weaker market mechanisms need stronger governance codes and practices. Ownership pattern is also an important influence as same rules of governance may not be suitable for all. Managerial behaviour differs from a family-owned firm to a large, disbursed ownership to a public sector enterprise. Hence the degrees of applicability of various theories depend upon the ownership concentration and pattern. However, there seems to be a common understanding on core aspects of corporate governance where all theories convey the same message such as role played by independent and non-executive directors and importance of transparency and disclosures.

The above theories contributed to development of various codes and practices in the field of corporate governance. In the current business landscape, the demands from stakeholders for ESG, concerns about gender diversity on boards and newer regulations in wake of shareholder activism for board compensation and board composition is pushing up reforms in corporate governance. Corporate governance is not a one size fits all solution to various problems in governance nor is it a one-time phenomenon, it is rather a continuous endeavour to improve fairness, transparency and responsibility in corporate actions. Governance structures are also evolving, and the boards are becoming more inclusive. Moreover, with sustainability being embedded into organisation's structure to achieve sustainable development goals the role of agents of corporate governance becomes even more important keeping in view the stakeholders and protection of environment and social wellbeing. Different theories though have different constructs, but governance in this era has undergone significant transformations to environmental, social and ethical considerations.

## References

1. Abdullah, H., & Valentine, B. (2009). *Fundamental and Ethics Theories of Corporate Governance*. Middle Eastern Finance and Economics, 4. <http://www.eurojournals.com/MEFE.htm>
2. Afza, T., & Nazir, M. S. (2014). *Theoretical Perspective of Corporate Governance: A Review*. European Journal of Scientific Research, 119(2), 255–264. <https://www.researchgate.net/publication/287890145>
3. Aziz, N. A. A., Othman, S. N., & Manab, N. A. (2015). *Exploring the Perspectives of Corporate Governance and Theories on Sustainability Risk Management (SRM)*. Asian Economic and Financial Review, 5(10), 1148–1158. <https://doi.org/10.18488/journal.aefr/2015.5.10/102.10.1148.1158>
4. Barako, D. G., Hancock, P., & Izan, H. Y. (2006). *Factors Influencing Voluntary Corporate Disclosure by Kenyan Companies*. Corporate Governance: An International Review, 14(2), 107–125. <https://doi.org/10.1111/J.1467-8683.2006.00491.X>

5. Cai, J., & Tylecote, A. (2008). *Corporate governance and technological dynamism of Chinese firms in mobile telecommunications: A quantitative study*. *Research Policy*, 37(10), 1790–1811. <https://doi.org/10.1016/J.RESPOL.2008.07.004>
7. Carroll, A. B. (1991). *The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders*. *Business Horizons*, 34(4), 39-48. [https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/10.1016/0007-6813(91)90005-G).
8. Crowther, D., & Aras, G. (2010). *The Agency Problem and Corporate Governance*. In *A handbook and Book of Corporate governance and Social responsibility*. Gower publishing. <https://papers.ssrn.com/abstract=1910547>
9. Darus, F., Jangu, T., Alam, S., & Malaysia, S. (2016). *Board Characteristics and the Extent of Social and Environmental Risks Disclosure*. *Journal of Accounting and Auditing: Research & Practice*, 2016. <https://doi.org/10.5171/2016.150257>
10. Donaldson, L., & Davis, J. H. (1991). *Stewardship theory or agency theory: CEO governance and shareholder returns*. *Australian Journal of Management*, 16(1), 49-64. <https://doi.org/10.1177/031289629101600103>
11. Epstein, E. M. (1987). *The Corporate Social Policy Process: Beyond Business Ethics, Corporate Social Responsibility, and Corporate Social Responsiveness*. *California Management Review*, 29(3), 99–114. [https://doi.org/10.2307/41165254/ASSET/41165254.FP.PNG\\_V03](https://doi.org/10.2307/41165254/ASSET/41165254.FP.PNG_V03)
12. Fama, E. F., & Jensen, M. C. (1983). *Separation of Ownership and Control*. *The Journal of Law and Economics*, 26(2), 301–325. <https://doi.org/10.1086/467037>
13. Freeman RE, Harrison JS, Wicks AC, et al. (2010) *Stakeholder Theory: The State of the Art*. New York: Cambridge University Press.
14. Friedman M (1970) *The social responsibility of business is to increase its profits*. *New York Times Magazine*, 13 September, pp. 26–32.
15. Jensen MC (2002) *Value maximization, stakeholder theory, and the corporate objective function*. *Business Ethics Quarterly* 12(2): 235–256.
16. Gupta, A., & Parua, A. (2006). *An Enquiry into Compliance of Corporate Governance Codes by the Private Sector Indian Companies*. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.962001>

17. Islam, T. (2022). *Revisiting the Fundamental Theories of Corporate Governance: Do the Westernized Models Fit Emerging Economies?* International Journal of Scientific and Management Research, 5(9). <https://doi.org/10.37502/IJSMR.2022.5902>
18. Jackling, B., & Johl, S. (2009). *Board structure and firm performance: Evidence from India*. Corporate Governance: An International Review, 17(4), 492-509. <https://doi.org/10.1111/j.1467-8683.2009.00760.x>
19. Jaimes-Valdez, M. A., & Jacobo-Hernandez, C. A. (2016). *Sustainability and Corporate Governance: Theoretical Development and Perspectives*. Journal of Management and Sustainability, 6(3), 44. <https://doi.org/10.5539/JMS.V6N3P44>
20. Jensen, M. C., & Meckling, W. H. (1976). *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*. Journal of Financial Economics, 3, 305–360.
21. Madhani, P. M. (2017). *Diverse Roles of Corporate Board: Review of Various Corporate Governance Theories*. The IUP Journal of Corporate Governance, 16(2), 7–28. <https://ssrn.com/abstract=2981605>
22. Nicholson, G. J., & Kiel, G. C. (2007). *Can Directors Impact Performance? A case-based test of three theories of corporate governance*. Corporate Governance: An International Review, 15(4), 585–608. <https://doi.org/10.1111/J.1467-8683.2007.00590.X>
23. Shleifer, A., & Vishny, R. W. (1997). *A Survey of Corporate Governance*. The Journal of Finance, 52(2), 737–783. <https://doi.org/10.1111/J.1540-6261.1997.TB04820.X>
24. Suchman, M. C. (1995). *Managing Legitimacy: Strategic and Institutional Approaches*. The Academy of Management Review, 20(3), 571. <https://doi.org/10.2307/258788>
25. Yusoff, W. F. W., & Alhaji, I. A. (2012). *Insight of Corporate Governance Theories*. Journal of Business & Management, 1(1), 52–63. [www.todayscience.org/jbm](http://www.todayscience.org/jbm)

# Artificial Intelligence and Deepfakes in Indian Elections: A review of literature

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## Abstract

Artificial Intelligence (AI) technology has opened up a plethora of opportunities and possibilities for its use and misuse. Stakeholders ranging from educationists, academicians, scientists, military strategists, and political actors—parties and leaders—are using AI technology.

AI entered the Indian political domain in the Delhi Assembly election of 2021 when a state unit of a national party used social media to float two AI-made fake videos of its Delhi president speaking in English and Haryanvi among millions of voters a day before polling. Since then, all political actors have been indulged in using AI to enhance their image and tarnish the characters of their opponents.

The rapid advancement in AI technology in recent years outpaced attempts to regulate or contain it against its misuse. The governments across globe are however attempting to mitigate its misuse and their negative attempts. The rise in flow of AI-created Deepfakes videos were at such a large scale that Government of India had in November 2023 issued an advisory to social media intermediaries for action against reported cases of misinformation.

It was reported that political actors spend millions on authorized AI use in 2024 election season. Against this backdrop, this article attempts to explore (mis) use of AI transforming landscape of Indian politics and how elections are being fought in digital space among political stakeholders with a focus on understanding the role of AI in political campaigns. The article using a literature review attempts to understand (mis)use of AI for spreading misinformation to manipulate the opinion of voters and aggravate vulnerabilities related to cybersecurity vulnerabilities.

In online exploration, research papers, journals, articles, and chapters were found using a dozen keywords, including Artificial Intelligence, Deepfakes, Social Media, Elections, India, Videos, memes, Indian General

Election focusing on usage in election campaigns.

This study attempts to explore the usage of Deepfakes in Indian Elections to better the understanding of domain providing a base for further research.

*Keywords: Artificial Intelligence, Technology, Political Parties, Election, Social Media, Democracy*

## 1. Introduction

Artificial Intelligence (AI) is the ability of machines and computers to imitate humans' cognitive functions that range from problem-solving to learning new things. AI is an umbrella term, that can be used for many things including machine learning, natural language processing, neural networks, pattern recognition, and text mining (Dwivedi et al., 2021 & Dua et al., 2019). Mijwel (2015) noted that the history of the term AI dates back to 1950 with the Dartmouth Summer Research Project on Artificial Intelligence at Dartmouth College, USA.

The AI rose to prominence in recent times with advancements in information technology (IT) paving the way for big-data analysis, storage, computation facility clubbed with speed to transmit information opening up door for plethora of opportunities and floodgates of possibilities for its misuse too. The opportunities ranged from its implications in education, healthcare, agriculture, infrastructure, defence, space science and other domains of society including facilitating in fulfilling Sustainable Development Goals (SDG's) including healthcare access in rural and remote areas to promote people's well-being, reduction in poverty, zero hunger, peace, justice, strong institutions and increasing agriculture productivity. (Dwivedi et al., 2021).

Jack Karsten et al (2023) observed that AI technology has impacted all walks of life including finance, national security, health care, criminal justice, transportation, and smart cities. AI also entered into the sphere of politics as political actors- politicians, political parties, and campaign staffs have been among the early birds to tailor themselves following new technologies including television ads in the mid-20th century and very recently to cryptocurrency contributions (National Conference of State Legislature, 2024). The AI programs are such that they can fabricate multimedia (images, videos, and voices) appearing to be real in the blink of an eye and experts forecasted 2024 to become the first election year witnessing the widespread influence of AI, in poll period that would extend from pre to post of an election, with a focus on crafting and dissemination of messages about candidates and electoral processes. (Noti, 2024).



Explaining the danger of AI-used political ads, Noti (2024) noted that the potential of technology is such that it could generate “deepfakes”, which are realistic appearing false multimedia content. The phenomenon of such AI-enabled false content came to the limelight in 2017 when a Reddit user swapped the face of a porn actor with that of a Hollywood celebrity (Winter and Salter, 2020).

The danger of technology became evident in the USA at the start of the calendar year 2024 when emulation of the voice of President Biden was used for AI-generated robocalls attempting to discourage voters from participating in a primary in New Hampshire; an AI-generated fake image showing former president Donald Trump with a convicted sex trafficker Jeffrey Epstein and a young girl began circulating on Twitter (Hasan, 2023). In his study, Hasan (2023) noted that deepfakes spread across the globe; Slovakia, Indonesia, India, Britain, Taiwan, Pakistan, and Belarus.

The AI-generated deepfakes were used widely during the democratic exercise of franchises in Asian nations including Bangladesh, Pakistan, and Indonesia, where internal political stakeholders were against opposition in elections in 2024 (Wee, 2024). Taiwan was the only exception among Asian nations, where Chinese state actors were blamed for using GenAI applications in an attempt to cause cognitive influence on Taiwanese voters before the election on January 13, 2024. (De Groot, 2024).

The Indian political actors also began using deepfakes for election campaigns during the Delhi assembly elections in 2020. The Indian political domain first witnessed GenAI videos in 2020 just a day before the Delhi Assembly Election. Around 15 million voters were sent two deepfake videos of then Delhi unit president Manoj Tiwari appealing to vote for the BJP in English and Haryanvi (Xavier, 2020).

The floating of deepfake videos during state assembly election in Telangana and Madhya Pradesh in 2023 created furore as they depicted events that never happened. There is no exact count of such deepfake media but according to an estimate, around 500,000 deepfake videos and voices were supposedly shared on social media sites globally in 2023 (Ulmer & Tong, 2023). The deep fake media (audio, video, image and text) in circulation is consistently increasing in 2024 as political stakeholders have begun using it across the globe. The AI technology was used to create images, audio, videos, reels to sway voters during recently concluded General Election, 2024. The misuse or malicious use of AI threatens the sanctity of democracy as it affects individual privacy eroding its fundamentals, manipulating public opinion, swaying elections and impacting individuals psychologically and emotionally and Deepfakes can also have an impact on memory (Sahota, 2024; Dubost, 2023).

## **2. Research Questions**

RQ1: How were Deepfakes used in the context of Indian Elections?

RQ2: What is the type and nature of Deepfakes used in Indian Elections?

## **3. Research Objectives**

- To explore and understand the usage of deepfakes in Indian Elections
- To find the nature and types of deepfakes used in Indian Elections

## **4. Methodology**

The study followed systematic reviews: search, evaluation, analysis, and synthesis, structure. (Grant & Booth, 2009). Elsevier's abstract and citation database, Scopus that is considered a reference in systematic reviews, is used as a pivotal tool for exploring prominent publications investigating the phenomenon of deepfakes across various domains.(Vandellos, et al., 2023). Several keywords including "Artificial Intelligence, Deepfakes, Social Media, Elections, India, Videos, memes, Indian General Election", etc were used as prompts to search these databases. Moreover, some articles were added to the study corpus from the Google Scholar search engine to complement some of the concepts analyzed. The number of freely available publications (N) found was 50 spread across several publications. The study incorporated articles meeting the inclusion criteria, such as articles published between 2020 and 2024, written in English, and featuring a structured format encompassing introduction, methodology, results, and discussion sections (Vandellos et al., 2023). After initial screening of title and themes 20 were excluded that include books, book chapters, reviews, dissertation, and thesis resulting into 30 articles for review.

## **5. Discussion**

In recent times, misinformation and disinformation have had an impact on elections around the globe. Russian trolls discredited Hillary Clinton during the 2016 US presidential election, which Donald Trump won. The 2016 US Presidential Election was the first instance of large-scale meddling in a national election that can be considered a watershed moment in the political history of the world as it kickstarted an unending cycle of undue influencing of voters with the help of technology for (dis)information. The advancement of AI technology further aggravated the situation as spreading misinformation and disinformation through social media platforms became very easy. This new AI technology provided a new weapon in hands of political actors-political parties and politicians for swaying elections across globe.

## **6. AI in elections across globe**

The AI generated deepfakes came to the limelight for their malicious use in the presidential elections of South Korea (2022) and Argentina (2023). A study conducted by Nelson (2024) found that a video spread on social media appeared to show President Yoon Suk Yeol endorsing a local candidate for the ruling party during the Korean election in 2022, which was very similar to what happened in the final weeks of campaigning in 2023 election in Argentina, where President-elect Javier Milei posted an image targeting his rival Peronist rival Sergio Massa as “an old-fashioned communist in military garb, his hand raised aloft in salute.” The fake image fabricated using AI technology got 3 million views on the social media post of Milei pointing towards gathering tractions and may have contributed to the bid to affect the election (Feliba 2023).

Similarly, other parts of the world witnessed election campaigns, where the stakeholders in coordinated efforts tried to influence voters; Germany’s 2021 national elections, the federal election of Canada in 2021, and 2022 France's presidential elections (De Groot, 2024). The research showed that such tactics evolved and transversed boundaries. An AI-generated audio of pro-western Michal Simecka discussing turning the election to his advantage and making an increase of 100% in beer price went viral just before Slovakia’s October 2023 election and the election result turned out that his party lost the election to the pro-Russian party (De Groot, 2024).

The researchers claimed the significant impact of the viral AI-created clip on the Slovakia’s 2023 election results. The usage of deepfakes in the political domain transversed to national elections in Asian nations at the start of the year 2024. The political players used Deepfakes in the election to Pakistan's national assembly. Imran Khan’s Pakistan Tehreek-e-Insaf (PTI) backed independent candidates used AI for campaigning to defy the ban imposed upon them in the election by organising online gatherings (jalsa), setting up Chatbots on account of jailed Khan and telecasted AI-generated speeches of Khan during the campaign (Shahzad and Shahid, 2024).

The rival parties of PTI also employed AI which was evident through the propagation of a deepfake video of former prime minister Imran Khan, declaring that his party wasn’t contesting the national election gathering 1,75,000 views (Ong, 2024). However, PTI-backed independent candidates were benefitted during the Pakistani election by this strategy as they won the highest 99 in a 256-seat national assembly preventing a majority government by any key parties (Al Jazeera, 2024). Similarly, this technology was used in national elections in Bangladesh, wherein pro-government forces and influencers promoted disinformation like an AI-generated anchor criticized the US, following the lines postured by Sheikh Hasina’s government ahead of polls;

a video showed an opposition leader in a self-destructive position while equivocating over support for Gazans (Parkin, 2023). The strategy seemingly helped Haseena, who won a historic fourth consecutive Prime Ministership in Bangladesh. (PTI, 2024).

In another election in neighbourhood of India, the voters were shocked and amazed to see the resurrection of late Indonesian president Suharto advocating for the political party in a deepfake video that gathered 4.7 million views on X alone (Ong, 2014). Moreover, Indonesian politician's 'cute cartoons' were made for campaigning to attract and influence voters. Similarly, The National Election Commission (NEC) in South Korea, where polling take place on April 10, identified 129 instances of election-related content utilising deepfake technology from January 29 to February 16 (Hyo-jin, 2024). A “deep porn strategy” was successfully employed against Muharrem İnce, who was forced to withdraw from the presidential race in Turkey as he faced severe reputational consequences (Łabuz & Nehring, 2024).

The technology also opened up an avenue for external forces to interfere in a national election as evident from Taiwanese presidential election in January that witnessed the use of deepfakes and AI-generated videos, images, and audio clips as tools of personality assassination and China was accused of bombarding Taiwan with fake news (Lau, 2024). Similarly, Russia has been blamed for spreading disinformation using fake online accounts and bots in the Europe, France, Germany, Poland and USA, where attempts were made to tarnish image of President Joe Biden and fellow democrats in advance of the election (Luce and Collier, 2024).

It is clear from the discussions that deepfakes are used election after election in nations across the globe starting from 2022 and this usage witnessed a sudden increase in 2024. Now, let us look at the situation in the largest democracy in the world- India, which underwent polls recently for 18th Lok Sabha in the parliament.

## **7. AI's usage in Indian Elections**

A national political party in India- Bharatiya Janta Party began using 3D hologram projections of Narendra Modi in 2012 for a concurrent “campaign” at different places allowing them to use digital strategies that were extensively used during the 2014 general elections, when data-driven decision-making, real-time engagement, and personalised messaging were embraced. (Sharma, 2024;Thakur, 2014). Consequently, India's political stakeholders began exploring AI-driven tools including machine learning, natural language processing (NLP), and predictive analytics to gain an edge in subsequent elections that helps in predicting voter behaviour and preferences, providing key insights into public opinion, and identifying key issues and potential swing voters helping political entities to tailor their messages and allocate resources strategically. (Tomar, et, al, 2023; Pandey & Kumar, 2020).

Election campaigns in India have been transformed from door-to-door outreach activities and wall posters publicities to AI-generated media (video, audio, and images) due to the easy availability of simple artificial intelligence tools and the campaign teams of political parties across the spectrum in India are sharing deepfakes to voters of concerned constituency through Whatsapp groups known as ‘scratch groups’ at hyperlocal level based on demographic details to influence them. (Sharma, 2024; Sherif, 2023). The spread of fake media were such that National Crime Record Bureau (NCRB) witnessed a rise of 214% in cases relating to fake news, rumours in 2019-election year in comparison to 2018. (Vishwanath, 2021).

Indian political sphere witnessed the first use of AI during an election in Delhi Assembly election in 2020, wherein a day before polling, a video each in English and Haryanavi, of then Delhi unit President Manoj Tiwari appealing to vote for BJP was sent to 15 million voters via 5800 WhatsApp groups. In video, Tiwari was seen criticizing AAP national convenor and Delhi CM Arvind Kejriwal while urging people to vote for BJP in the election. (Xavier, 2021). However, the AI-generated content circulation increased from the start of 2024 as Shah (2024) noted that a deepfake (watermarked) of world leaders such as former U.S. President Donald Trump and North Korean leader Kim Jong-un saying “Jai Shree Ram” was uploaded on Instagram after the inauguration of the Ram temple in January 2024 to showcase a positive image of India crafted at international level by the ruling party to usurp sentiments of voters.

Similarly, another video shared on the same platform showed an altered speech of the leader of the ruling party BJP praising a businessman to tarnish his image. (Shah, 2024). A political party with dominance in south of India, Dravida Munnetra Kazhagam (DMK) on January 21 in the year 2024 resurrected former Tamil Nadu Chief Minister M Karunanidhi, who died in 2018, in Salem during a program, and a month later, Karunanidhi’s AI avatar in his trademark yellow shawl and dark glasses was launched at the autobiography launch of party veteran T.R. Baalu attempting to motivate voters and its cadres. (The Nation, 2024).

Following the DMK, the opposition party, All India Anna Dravida Munnetra Kazhagam (AIADMK) released an audio clip of its leader and former Tamil Nadu Chief Minister J. Jayalalithaa, who died in 2016. (The Nation, 2024). Similarly, the technology was used for ‘shadow campaigning’ in Telangana by political stakeholders. Communist Party of India (Marxist) released an AI-generated video of ailing former Chief Minister Buddhadeb Bhattacharjee, 80, urging people to “save the country and the state.” (Sakunia, 2024).

Sakunia (2024) reported that in February, 2024, the Indian National Congress, used AI tools to make a parody video of a viral song “Chor” (Thief), wherein Prime Minister Narendra Modi was made singing it with altered lyrics that was paired with Industrialist Gautam Adani and shared it on Instagram. The BJP responded with an AI-generated video, wherein former AICC president Rahul Gandhi’s face had been superimposed on that of Tejashwi Yadav, an opposition leader in Bihar, making it to seemingly appear as if he was addressing to Mamata Banerjee, who broked ties with Congress-led INDIA alliance before elections. (Sakunia, 2024). In the first video shared by INC on instagram, the attempt was to highlight alleged relations of PM Modi with industrialist with a connotation of showing him being anti-poor. The BJP, in its response, targeted Rahul Gandhi over the fragile opposition bloc.

To further their chances, AI-powered chatbots were launched to promote success stories of government policies and increase engagement on the prime minister’s official app — NaMo(Deeplina Banerjee, 2024).

In the period of the General Election, 2024, many reels (short videos) of Prime Minister Narendra Modi singing in regional languages, that was made using Genn AI, doinggrounds on social media for enagements and connectivity with voters, which witnessed an adding up to this trend by several meme and political satire pages that used generate AI tools for creating content related to Indian politics. (Sakunia, 2024).

The BJP, keen on expanding its footprints in the south and east of the country, used the government of India’s AI-powered Bhashinito ensure real-time translation of PM Narendra Modi’s speeches into Tamil, Kannada, Bengali, Telugu, Odia, and Malayalam to mitigate language barriers. (Deeplina Banerjee, 2024).

Similarly, AI-created fake videos of Bollywood stars Ranveer Singh and Aamir Khan criticizing the Indian prime minister and lending their support to the Congress, the main opposition party, went viral during the 2024 General Election. (Landrin, 2024).

It was also reported that Meta- the parent company of WhatsApp and Facebook, approved 14 AI-generated electoral ads portraying the language of Hindu supremacists calling for the killing of Muslims and a key opposition leader and some containing false claims that the leader “wanted to erase Hindus from India.” (Deeplina Banerjee, 2024).

The state assembly elections in 2023 in India also witnessed some viral Deepfake videos that include video of Kaun Banega Crorepati over construction of Lord Mahakal Corridor, MP Congress leader Kamal Nath talking about dismantling of women scheme and a minister making claims that in case his government is re-elected youths would not get job. (Desai, 2023). These videos were circulated in an attempt to tarnish image of a political party or leader by opposition and to invoke sentiments in their favours.

Indian political parties have long back ago realised the influence of personality and emotion on their constituents, and they started using AI to bolster their messaging and as part of this strategies these political parties in India spent an estimated US\$50 million on authorized AI-generated content for targeted communication with their constituencies this election cycle. ( Shukla & Schneier , 2024).

Shukla (2024) observed that these AI-generated content has two purposes; first the content is designed to appeal to emotions, is largely translated to regional languages, and tends to tug at the voters' relational bonds with their leaders, especially with resurrected politicians who enjoyed superstardom while alive and veneration upon passing and secondly, this content is distributed on unmoderated and unscrutinized platforms, often packaged by hyper-local content aggregators. Many observers and commentators have been demanding for stricter regulation on AI-generated deepfakes as it poses a challenge for the democracies around the world especially in third and fourth world countries like India.

## **8. Conclusion**

Elections are an integral part of democratic processes and making informed choices are necessary for a thriving democracy. However, in this digital age there is a looming threat over these informed choices as misinformation, disinformation, fake news, and deepfakes have potential to alter the informed choices and many experts considered those as an attack on the heart of democracy. The review study, citing different researches originating across globe tried to point out about the usage of social media enabled election campaigns and the attempts of spreading disinformation that was facilitated by these technologies. The study provided insights through some examples like Turkey, Bangladesh and Pakistan that how these AI-enabled disinformation campaigns during election affected the democratic exercise of the franchise through impact on democratic discourse.

As deep fakes are part of developing technology, there is uncertainty over long-term consequences in democracy, especially in the electoral process, but early researches in this field pointed towards the necessity to engage all actors in the process.

In this age of information warfare, it is hard for politicians and political parties to run their election campaigns without using such strategies. It is now up to government agencies, civil society groups, and educational institutes to take steps like regulation, penalization and awareness to curb the menace and prevent society from sinking. While regulating or penalising, however, the agencies shall take care about not curbing the free speech that is the essence of the democracy.

## References

1. Al Jazeera. (2024, February 9). *PTI-linked independents take Pakistan election lead as counting nears end*. <https://www.aljazeera.com/news/2024/2/9/pti-linked-independents-take-pakistan-election-lead-as-counting-nears-end>.
2. PTI. (2024, January 8). Bangladesh PM sheikh Hasina wins fourth straight term as her party secures two-thirds majority in polls. The Hindu. <https://www.thehindu.com/news/international/bangladesh-pm-sheikh-hasina-wins-4th-straight-term-as-her-party-secures-two-thirds-majority-in-polls/article67717140.ece>.
3. Centre For Public Impact (CPI). (2017, August 30). The good, the bad and the ugly uses of machine learning in election campaigns. <https://www.centreforpublicimpact.org/insights/good-bad-ugly-uses-machine-learning-election-campaigns>.
4. Dasgupta, D. (2023). *Deepfake videos raise concern in India ahead of general election*.
5. De Groot, J. (2024). *Electoral integrity is at stake in Super Election Year 2024*. Atlantisch Perspectief, 48(1), 4- 8.
6. Deeplina Banerjee, S. D. (2024, June 5). *AI amplifies political reach but magnifies disinformation in India elections*. Asia Pacific Foundation of Canada. <https://www.asiapacific.ca/publication/indian-election-use-of-ai-political-campaigns-voter-engagement>.
6. Deeplina Banerjee, S. D. (2024, June 5). *AI amplifies political reach but magnifies disinformation in India elections*. Asia Pacific Foundation of Canada. <https://www.asiapacific.ca/publication/indian-election-use-of-ai-political-campaigns-voter-engagement>.



7. Desai, R. (2023, December 1). This election season was flooded with deepfakes. govt must bring out a robust policy. ThePrint. <https://theprint.in/opinion/this-election-season-was-flooded-with-deepfakes-govt-must-bring-out-a-robust-policy/1862913/>.
8. Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2019). *Artificial intelligence for decision making in the era of Big Data—evolution, challenges, and research agenda*. International Journal of Information Management, 48, 63-71.
9. Dubost, O. (2023). Deepfake videos prompt false memories of films, study shows.
10. Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., ... & Williams, M. D. (2021). *Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice, and policy*. International Journal of Information Management, 57, 101994.
11. Feliba, D. (2023). *How AI shaped Milei's path to Argentina presidency*.
12. FEOnline (2024). MCA fights against deepfake information ahead of Lok Sabha elections through this newly launched WhatsApp Channel.
13. Fleck, A. (2024). *Survey Finds False Information Risk Highest in India*.
14. Grant, Maria & Booth, Andrew. (2009). *A typology of reviews: An analysis of 14 review types and associated methodologies*. Health information and libraries journal. [26. 91-108. 10.1111/j.1471-1842.2009.00848.x](https://doi.org/10.1111/j.1471-1842.2009.00848.x).
15. Hasan, S. (2023, October 24). *The effect of AI on elections around the world and what to do about it*. Brennan Center for Justice. <https://www.brennancenter.org/our-work/analysis-opinion/effect-ai-elections-around-world-and-what-do-about-it>
16. Hyo-ji, L. (2024). April 10 elections under threat from AI deepfake manipulation.
17. Jack Karsten, D. M. W., Henry-Nickie, M., Sunil Johal, D. A., Villasenor, J., Kevin A. Bryan, F. T., & Wyckoff, A. W. (2023, June 27). *How artificial intelligence is transforming the world*. Brookings. [https://www.brookings.edu/articles/how-artificial-intelligence-is-transforming-the-world/#:~:text=Despite%20its%20widespread%20lack%20of,resulting%20insights%20to%20improve%20decisionmaking\\_](https://www.brookings.edu/articles/how-artificial-intelligence-is-transforming-the-world/#:~:text=Despite%20its%20widespread%20lack%20of,resulting%20insights%20to%20improve%20decisionmaking_)

18. Łabuz, M., & Nehring, C. (2024). *On the way to deep fake democracy? deep fakes in election campaigns in 2023*. European Political Science. <https://doi.org/10.1057/s41304-024-00482-9>.
19. Landrin, S. (2024, May 21). *India's general election is being impacted by Deepfakes*. Le Monde.fr. [https://www.lemonde.fr/en/pixels/article/2024/05/21/india-s-general-election-is-being-impacted-by-deepfakes\\_6672168\\_13.html](https://www.lemonde.fr/en/pixels/article/2024/05/21/india-s-general-election-is-being-impacted-by-deepfakes_6672168_13.html).
20. Lau, S. (2024). *China bombards Taiwan with fake news ahead of election*.
21. Luce, D. D., & Collier, K. (2024). *Russia's 2024 election interference has already begun*.
22. Mijwel, M. M. (2015). History of Artificial Intelligence Yapay Zekânın Tarihi. Computer Science, (April 2015),3-4.
23. Nanji, N., & Menon, S. (2023). *Why are there so many deepfakes of Bollywood actresses?* BBC. Nelson, N. (2024). South Korean Police Deploy Deepfake Detection Tool in Run-up to Elections.
24. National Conference of State Legislature. (2024, July 15). *Artificial intelligence (AI) in elections and campaigns*. National Conference of State Legislatures. <https://www.ncsl.org/elections-and-campaigns/artificial-intelligence-ai-in-elections-and-campaigns>.
25. Noti, A. (2024, February 28). *How artificial intelligence influences elections, and what we can do about it*. Campaign Legal Center. <https://campaignlegal.org/update/how-artificial-intelligence-influences-elections-and-what-we-can-do-about-it>.
26. Ong, C. (2024, March 14). *Deepfakes in an election year - is Asia ready to handle misinformation campaigns?*. CNBC. <https://www.cnbcm.com/2024/03/14/as-asia-enters-a-deepfake-era-is-it-ready-to-handle-election-interference.html> Pandey, N., & Kumar, A. (2020). Predictive Analytics in Indian Election Campaigns. 2020 IEEE Calcutta Conference on Contemporary Computing (CALCON), 1-5.
27. Parkin, B. (2023). [\*Deepfakes for \\$24 a month: how AI is disrupting Bangladesh's election\*](#). Roy, A. (2024). *How India is using the Internet*.
28. Saha, B., & Tiwari, S. (2023). *How deep fakes could impact Indian elections- India today*.
29. Sahota, N. (2024). *AI And the Shadow Over Democracy: The Rising Threat To Global Elections*.
30. Sakunia, S. (2024, July 12). *AI and Deepfakes played a big role in India's elections*. New Lines Magazine. <https://newlinesmag.com/spotlight/ai-and-deepfakes-played-a-big-role-in-indias-elections/>

31. Shah, S. (2024). *How AI-Generated Deepfakes Are Playing A Role In 2024 Indian Elections. What Users Can Do To Avoid Pitfalls.*
32. Shahzad, A., & Shahid, A. (2024). *How Imran Khan is campaigning from jail in Pakistan: AI and covert canvassing.*
33. Sherif, A. H. (2023). *Deepfake Elections: How Indian Politicians Are Using AI-Manipulated Media to Malign Opponents.*
34. Shukla, V., & Schneier, B. (2024, June 10). *Indian election was awash in deepfakes—but AI was a net positive for democracy.* The Conversation. <https://theconversation.com/indian-election-was-awash-in-deepfakes-but-ai-was-a-net-positive-for-democracy-231795>
35. Shukla, V. (2024, May 25). *The era of AI-generated election campaigning is underway in India.* Tech Policy Press. <https://www.techpolicy.press/the-era-of-ai-generated-election-campaigning-is-underway-in-india/>
36. Thakur, N. (2014). *'Ab ki Baar, Modi Sarkaar': A Study of Social Media Campaigning in 2014 Indian General Elections.* Journal of Creative Communications, 9(3), 271-284.
37. The Hindu Bureau (2024). *Misinformation during Indian elections: The saga from 2019 to 2024.* The Nation (2024). *Deepfake videos and images grow ahead of Indian polls, stirring unease.* Times of India (2024). *FIR against deep fake video of Yogi.*
38. Tomar, M., Raj, M. N., Singh, S., Marwaha, S. S., & Tiwari, M. (2023). *The role of AI-driven tools in Shaping the democratic process: A study of Indian elections and social media dynamics.*
39. Ulmar, A., & Tong, A. (2023). *Deep faking it: America's 2024 election collides with AI boom-* Reuters.
40. Vandellos, E., Villarroya, A., & Boté-Vericad, J. J. (2023). *What do we know about femvertising? A systematic literature review.*
41. Wee, O. (2024). *Pakistan's Electoral Laboratory Shows the Drawbacks and Incentives of AI Technology for Politics.* Retrieved from <https://www.polygraph.info/a/7481049.html>.
42. Winter, R., & Salter, A. (2020). *DeepFakes: uncovering hardcore open source on GitHub.* Porn Studies, 7(4), 382- 397.
43. Xavier, J. (2020). *Deepfakes enter Indian election campaigns.*

# An Analytical Reflection on Adivasi Research-Observation on Social Determinants of TB Cases

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## Abstract

The tea garden worker communities are positioned at the lower level of social class structure if seen through their wage structure, living conditions, and social status. Since the people came from outside the state boundary, their ethnic status as an indigenous population is contested. Their ancestors were brought from the tribal heartland of mainland India, and these people still contain tribal tradition, making them different from local tribal groups culturally and physically. The study intends to highlight how the people, who are mostly illiterate, are very poorly educated on health issues and their symptoms. Lack of education has made them ignorant of various health issues. They are mostly menial labourers, drawing meagre wages hardly sufficient for their dignified survival. Though such factors determine the access to and availability of healthcare facilities, the garden authorities provide health care facilities free of charge in tea gardens. Thus, more than a treatment issue, it is the issue of other factors responsible for the occurrence of TB.

Increasing evidence shows that people in disadvantaged positions are subject to differential exposure to several risk factors. In tea gardens, unhealthy housing conditions have been a universal phenomenon. The primary data collected from the various tea gardens have shown that the houses consist of only two rooms without proper ventilation, all family members have to share a single room to sleep, and there is a maximum possibility of constant and prolonged exposure to TB germs in case of active TB cases. Lack of balanced food and low-quality food people take are also causes of concern. Social exclusion in the economic, social, and political domains is evident. Several of their behaviours are detrimental to good health.

The study intends to highlight using the framework analysis of WHO how there is every possibility that a uniform healthcare strategy for all population groups would result in a differential healthcare outcome, given that population groups are stratified in terms intertwined with risk factors and differential social determinants. Thus, there needs to be a population-specific healthcare strategy to achieve healthcare equity. By equity in health care, the author means that “everyone in need of health care receives it in a form that is beneficial to them, regardless of their social position or other socially determined circumstances. The result should be the reduction of all systematic differences in health outcomes between different socio-economic groups in a way that brings everyone up to the health of the most advantaged.”.

*Keywords: tea gardens, health, social determinants, tuberculosis, workers*

## **1. Introduction**

The paper intended to understand the socio-economic position of the tea garden workers and their marginalization. Further, the paper aimed to understand how socio-economic marginalisation of the labour influenced the TB incidence among the tea garden workers. The researcher used a qualitative research approach to capture the marginalisation and perspective of the tea garden workers regarding TB. The paper presents the history of the tea garden to understand the historic marginalisation of the tea garden workers as forcefully migrant labourers, their position after independence, and present socio-economic conditions using secondary literature available. The later part of the paper captures the social attributes influencing TB among tea garden workers using primary data collected during field work. The data have been presented according to WHO’s framework to understand the social determinants of health further.

## **2. History of Tea Estate: The land and the people**

In 1839, Assam Company was formed in London with a capital of 500,000. (Behal, 1992). The colonial state provided the British planters with land and capital to establish the tea plantation in Assam. Specific rules were introduced to grant land to the British planters; however, till 1860, only 51 tea gardens were established. In 1865, the number of tea plantations increased from 51 to 86. The tea plantations were majorly controlled by the seven major British companies. The land and capital were not a problem for the establishment of the tea plantation; however, the mobilisation of the labourers to work in the tea gardens was a major problem.

It is well documented in literature that initially the British planters influenced the local tribal people to work in the tea garden, but they denied it. Bhowmik argued that British planters have tried several ways to employ the local tribal people in the tea gardens (Bhowmik, 1996).

Initially, they increased the revenue of the land and banned opium, which would force the people to work in tea gardens for the need of hard cash, yet they were denied from working in tea gardens. Behal argued that later the British planters were also not interested in employing the local tribal people in tea gardens for other reasons, such as they were stigmatised as indolent, lazy, and addicted to opium; they demanded more wages; and they rationalised the fact that they would have better bargaining power. (Behal,1992). In 1861, the Jorhat tea company reported to the government that they needed to import a large number of labourers for the expansion of the tea gardens. The planters needed a large number of cheap laborers. The colonial government allowed labour to migrate labourers from tribal heartlands such as present-day Jharkhand, Chhattisgarh, Telangana, and Bihar to Assam. They migrated in small boats through the waterways. It is documented in history that the act itself was so cruel that it reported the death of several human beings. The labourers employed there were settled in pathetic conditions. They were paid 5 and 4 paise for men and women, respectively. They were settled in filthy and unhygienic conditions. In 1869, the workers' breach of contract was passed. This act gave power to the recruiters to arrest the labourers who tried to flee from their work or even did not match the level of expectation of work. The condition of the recruitment was so brutal, and the settlement conditions were so pathetic that between "1863 and 1866, out of 85,000 labourers, 35,000 died. Due to harsh working and filthy living conditions, the workers reported diseases such as malaria, tuberculosis, typhoid, cholera, etc. The workers were not allowed to take leave. Many works of literature have argued that even pregnant women were not allowed to take leave during their course of pregnancy. Behal documented that in 1906 medical officer Nazaria observed an appalling amount of abortions among pregnant women in tea gardens. 65% of the pregnant women gave birth to still babies. (GOI,1906a: 343). The women workers kept their work during pregnancy, which was a major reason for giving birth to the still babies. The wages in the tea garden were stagnant for 35 years from 1875 to 1900, whereas the price of the food grains increased 100%. The labourers unable to buy proper food pushed them into undernourishment. The work in filthy conditions and the unavailability of proper healthcare facilities increased the number of stillbirths and increased the death rate in tea estates more than the birth rate. In 1880-1901, the average birth rate of women was 86 per 1000, whereas it was 127 per 1000 for the women employed outside the tea estate (Behal, 1992). Several guards (Chowkidaar), Sardaar, and Mouhiris were employed to supervise the labourers and catch them if they tried to abscond. The conditions slowly and steadily angered the labourers, and in many instances, they resisted against the planters. In 1903, serious conflict was between the workers and the management of the Rowmari tea estate in Lakhimpur district.

The labourers attacked the European officials and caused them serious injury. The same group of labourers marched to the magistrate court to protest. Subsequently, they were arrested and were imprisoned for 12 years (ibid.). The violent clashes kept happening, and as a result, Lord Curzon insisted on investigating such cases and their reasons. The commission in 1906 said that the harsh system of recruitment and the condition of the labourers were the reason for such clashes. In 1908, the penal contract system was withdrawn from the tea estate, and the indenture system was paused. Still, until independence, tea estates under British officials were pathetic. They kept suffering from low wage payments, pathetic working conditions, and unhygienic living conditions. The filthy conditions pushed them to suffer from various diseases such as malaria, cholera, and more persistently, tuberculosis.

### **3. Poor health conditions among the tea garden labours**

Medhi et. al. (2006) reveal in a study that in tea gardens the prevalence of underweight among children is 59.9%, and 69.9% of adults suffer from thinness. 65.4% of people suffer from worm infestation. Hypertension and stroke are very common among labourers due to the high use of alcohol and tobacco. Sahoo et al.'s (2002) study among the labourers in Beesakopie Tea State reveals that the people who are not aware of their health condition and the people who are little aware of their health condition go to the hospital and are mostly ignored by the doctors and other health care providers.

Bogohain (2013) has studied the health conditions among the tea garden labourers in Hajua Tea State in Doomdooma and has revealed that the tea estate does not have a hospital. The patients are shifted to the nearest hospital in another tea estate named Khumtai Hajua tea estate. Most of the respondents revealed that they find it difficult to go to that hospital as it is 6 km away from their home. The distance of the hospital from the settlement in the tea estate acts as a major constraint to receiving the treatment. The study further reveals that though in that hospital the medical dispensary is present, the quality is not enough.

Deb (2000) revealed in his study that tea garden labourers mostly suffer from malnourishment and undernourishment because of a lack of adequate food. The authors further claimed that the labourers inside the tea gardens are 100% non-vegetarian, but hardly they consume meat, fish, or eggs due to low wages and high prevalence of poverty. The poor labourers mostly consume rice with salt, chilli, andatoes. They even lack daal with rice. The labourers also lack milk, milk products, and fruits. This leads to a deficiency of protein, vitamins, fats, etc. Barkat et. al. (2010) have studied the tea gardens in Bangladesh and have found the same problems.

He revealed that the people on the plantation mostly consumed rice with boiled potatoes, chilli, and salt. Mostly they consume food two times. The gap period in taking food is huge, which impacts their immunity adversely. They lack nutritious food due to economic incapacity.

Balgir (2009) has studied 6 tea estates in Dibrugarh district and has found that the labourers in the tea garden are extremely vulnerable to communicable diseases such as malaria, leprosy, and TB. Communicable diseases such as TB are more prevalent among labourers due to the prevalence of excessive drinking, smoking/chewing tobacco, and inadequate food intake.

#### **4. Lifestyle behaviour among the labourers in the tea garden**

Borsha Rani Bora (2015) conducted her study in the Teok tea estate and argued that the consumption of alcohol among both men and women is very high. The consumption of alcohol not only adversely affects their physical health but also affects their social health such as increase violence, cognitive dysfunction due to alcohol etc.

Deb (2000), in his study, has revealed that the sampled labourers responded that mostly every day in the evening while coming back home from work they consume alcohol. The workers mostly feel tired and have body pain, and they feel relaxed after consuming alcohol.

Medhi et. al. (2006) have done a cross-sectional study interviewing 650 youths in the tea estates of the Dibrugarh district, revealing that consumption of alcohol among the 15-24 year old youth is prevalent. Fifty-eight percent of youth use at least one substance product. 27.4% of youth among the interviewed have revealed that they consume both alcohol and tobacco.

Sonowal (2018) argued that the consumption of alcohol is common between both rich and poor classes in society. However, due to the quality and harmful drinking patterns, alcohol-related disease and morbidity are more common among the low socio-economic groups. Consumption of alcohol has a more adverse effect on the lower section of society because they are burdened with other vulnerabilities such as low wages, poverty, malnutrition, social exclusion, unhealthy living conditions, etc. In tea gardens, alcohol is easily available. In the neighbourhood, people sell alcohol at cheap quality and without government regulation. The cheap and lower price is one of the major reasons people consume more alcohol.



## **5. Housing facilities in Tea Estate**

Dey (2019) has studied Fatemabad tea estate and has revealed that the labourers mostly live in the quarters provided by the tea garden authorities. The permanent labourers receive their quarters from the tea garden management authority. Among the respondents, 18% of labourers revealed that they live in a pucca house, 74% live in a kutchha house, and the rest, 8%, live in a small house made by them with bamboo and sticks. Most of the houses lack sanitary toilets and drain systems. The lack of a drainage system forces the labourers to throw garbage in the neighbourhood. This leads to the storage of material and water, which further creates health problems such as malaria and typhoid.

Saikia et al. have studied the living conditions of the Sarsurai tea estate in Jorhat and revealed that the labourers were provided quarters by the tea garden management. The land provided to them for their stay is completely contractual. They are only permitted to stay in the house till they are working in the tea estate. The houses can be taken back from them on disciplinary grounds. It is one of the easiest ways to whip the labour and put them under the control of management. The people in the tea garden often use firewood as fuel, provided by the tea estate, for cooking. The burning of firewood in the limited space is one of the major reasons the labourers suffer from health problems such as tuberculosis, asthma, etc.

Sharma and Bhuyan (2016) have studied the living conditions of Moijan Rajgarh Boroline, a privately owned tea estate, and have revealed the similar pathetic living conditions of the labourers in the tea estate. The labourers live in the quarters provided to them by the tea garden management. The average size of the family is 6-7 members, but the rooms provided to them are 2. There is no electricity in the Moijan Rajgarh Boroline tea estate. The unavailability of sanitary toilets and tubewells in the quarter provided by the tea garden management has put the labourers in an unhealthy and unhygienic condition. 60% of households surveyed for the study have revealed that they have no tubewell facility, and they are mostly dependent on the nearby water bodies for the source of drinking and cleaning water.

## **6. A framework of analysis for Social Determinants of Health**

From the discussion made above based on literature, one can safely conclude that some social determinants of health are equally important as the clinical aspects of diseases to delineate in any discourse on the health and well-being of the masses. Based on such understanding, Erik Blas and Anand Sivasankara Kurup (2010) have presented a framework of analysis for Social Determinants of Health primarily based on three dimensions of activity – to analyze, intervene, and measure. For each dimension, there are five levels.

Since the proposed study limits its scope to fact-finding and analysis of social determinants, the discussion will be limited to the analytical part of the framework. The five analytical levels can briefly be described as follows:

### ***Socio-economic context and position***

It has been established that social position puts forth a powerful influence on the type, magnitude, and distribution of health in societies. The differential control of power and resources in societies generates stratifications in institutional and legal arrangements, ultimately distorting political and market forces. Such stratification has a critical link to health inequity. Factors like social class, gender, ethnicity, education, occupation, and income define the position of a person or the community at large. “The relative importance of these factors is determined by the national and international context, which includes governance, social policies, macroeconomic policies, public policies, culture, and societal values. Access to and availability to health is very much determined by such factors”. The socio-economic status of the individuals do not depend on the individuals but state policy, governance and societal value that increase the gaps between communities.

### ***Differential exposure***

There is increasing evidence that people in disadvantaged positions are subject to differential exposure to several risk factors, including natural or anthropogenic crises, unhealthy housing, dangerous working conditions, low food availability and quality, social exclusion, and barriers to adopting healthy behaviors. It has been established that exposure to most risk factors (material, psychosocial, and behavioral) is inversely related to social position. Understanding these “causes behind the causes” is important for developing appropriate equity-oriented strategies for health”.

### ***Differential vulnerability***

It is quite interesting to remember that the same level of exposure may have different effects on different socio-economic groups, depending on their social, cultural, and economic environments and cumulative life course factors. Certain population groups across the countries are burdened with clusters of risk factors, such as social exclusion, low income, alcohol abuse, malnutrition, cramped housing poor access to health services, etc. A similar sort of exposure may have a different effect on population groups who are not burdened with such risk factors. Thus, the health initiatives must contain measures to look into such determining factors.

### ***Differential health care outcomes***

“There is every possibility that a uniform healthcare strategy for all population groups would result in a differential healthcare outcome, given that population groups are stratified in terms intertwined with risk factors and differential social determinants. Thus, the needs to be a population-specific healthcare strategy to achieve healthcare equity. Equity in health care ideally implies that everyone in need of health care receives it in a form that is beneficial to him or her, regardless of his or her social position or other socially determined circumstances. The result should be the reduction of all systematic differences in health outcomes between different socio-economic groups in a way that levels everyone up to the health of the most advantaged”.

### ***Differential consequences***

Poor health may have several social and economic consequences, including loss of earnings, ability to work, and social isolation or exclusion. Further, sick people often face additional financial burdens that render them less able to pay for health care and drugs. While advantaged population groups are better protected, for example, in terms of job security and health insurance, for the disadvantaged, ill health might result in further socio-economic degradation, crossing the poverty line and accelerating a downward spiral that further damages health.

## **7. Research Methodology**

The aim of the study was to understand the socio-economic positionality of the tea garden workers in Assam. The marginalisation and how the social attributed influence TB case among the tea garden workers. The study aimed to capture the perspective of the tea garden workers regarding TB and hindrances in receiving TB treatment. The qualitative, cross-sectional research design was adopted to capture the in-depth perspective of the tea garden workers and their marginalization. Purposive sampling was selected by the researcher. The fresh new TB cases and relapsed TB patients among tea garden workers were selected to meet the criteria of the research objective posed. Four tea gardens from Sonitpur District (Dehkiajhuli, Sirajhuli, Sessa, and Addabarie) were selected. The selection of the tea gardens was based on the permission granted to conduct the research and their affiliations with organisations such as Bhartiya Chai Mazdoor Sangh and Assam Chai Mazdoor Sangh. The affiliation of the tea estates controls the amenities and worker’s rights in the tea estate.

## **8. Present condition of the tea garden, continuation of colonial legacy: Analyzing the data collected from the fieldwork**

The labours interviewed in the fieldwork reflected on the work culture, wage payment, and life after work. The workers revealed that they have to join work at 7:00 AM and work until 5:00 PM. In between, at 1:00 PM they get a lunch break and after half an hour they have to join work back strictly. If any workers are late to join the work at 7:00 AM even for 10 minutes they are sent back home, as the workers are daily wage earners they remain unpaid for that particular day. The workers interviewed revealed details about the work pattern. Each garden has assigned gatekeepers for each settlement line who are known as line chowkidars. The line chowkidaars start whistling early at 5:00 PM to wake labourers up so that they can join work on time. The female labourers whose primary job is to work in the plantation field, plucking up the leaves, and cutting and spraying fertilizers wake up at 5:00 AM. In two hours they finish their domestic work and join work at 7:00 AM. After work when they come home they again start with their domestic work because of which they rarely get sufficient time to sleep and take rest. The inadequate amount of sleep majorly affects their health and the immunity system. The laborers despite working hard and doing such odd jobs across all seasons are paid very little till now. The interviewed labours revealed that when British planters began the tea plantation, the motive was to extract the profit from the labours at most and they were paid negligible. After independence after the shift of ownership of the plantation, barely the owners changed from British to Indian but it did not change the exploitation and the nature of the work. The labourers were still paid a handful and negligible. In 1998, after the Bodo-Adivasi conflict, the Adivasi labours in the tea garden started their cultural-political organisation named AASAA (All Assam Student Association of Adivasi) to unite the Adivasi labours. Across Assam, AASAA tried to mobilise the labours for bargaining against the management and authority for more rights. In 2006, the community under the leadership of AASAA came together in Guwahati to protest for three demands: ST status, an increase in the daily wage, and land rights. As per the former members of AASAA interviewed after independence, the Congress party formed government in both the centre and state. At the state level, the elite, upper-caste Assamese people mostly dominated the party. The group of people was highly prejudiced against the Adivasi community, and they argued majorly that since the Adivasi people were brought from outside the state and are not original inhabitants of the state, they don't deserve the ST status. The Adivasi people in the tea garden consider it a tactic of the dominant Assamese caste society to push the Adivasi community from receiving welfare and benefits through ST status. They also felt betrayed because the economy of the entire state is dependent on tea production across the world, and the people who work in the plantation fields have been kept in miserable condition.

Second, the British planters settled the labourers inside the tea estate, but even after independence, they were not the owners of the piece of land. Therefore, from that point of time till now, the labourer's family can only stay there if any member of the family works in the tea garden. Many labourers in the interview have revealed that they do not want to work in tea gardens but are forced to work to stay in the given place, and as they do not have any resources, they cannot move out either. Third, demand was to increase the wages as the labourers were working at a very low price, 86/- per day. In November 2006, a group of people under the leadership of the AASAA organisation assembled near the state legislature with these 3 demands. Shortly, the dominant Assamese groups attacked the peaceful protesters and beat them black and blue. In the complete situation, the goons from Assamese society stripped naked one young woman protester named Laxmi Oraon. The inhumane and undignified incident angered the community to such an extent that they mobilised among themselves and agitated more against the authority for the three demands. The government during that period to pacify the group of people immediately increased the wage of the labourers from 85/- to 162/-. Since then, the workers were paid 162/- for many years, but recently, due to ongoing protests, the wage was increased up to 250/- per day. Still, the labourers interviewed said that at today's time, 250/- every day is negligible, especially if we compare the work they do. The labourers talked about the multiple problems they face due to low wage payments. They are pushed to poverty and poor situations permanently since the whole generation was working in tea estates and all were paid less. The labourers fail to meet even the daily expenditure, even if all the members of the family work. The low wage payments have pushed them into malnutrition. They are entitled to get food from the ration shops controlled by the tea garden management, but there they get only 3 kg of rice, 3 kg of wheat, sometimes kerosene, and one packet of tea (only to permanent workers). With very low wages, they are unable to buy nutritious food from the open market, such as vegetables, eggs, meat, etc. Most of the labourers in the tea estate are non-vegetarian by the eatery habit, but they mostly have rice with salt and boiled potatoes in 3 meals. Lack of a proper balanced diet has pushed them into malnutrition and thinness. The permanent thinness and malnutrition further lead to other health consequences such as anaemia, tuberculosis, etc. While asking why the labourers don't continue to protest against the authority to listen to their basic demands, the respondent answered that "Even if we try to assemble near the manager's office and meet our demand, the manager will immediately take disciplinary action." Further, he said that the labourers who try to protest or assemble against the manager stop their entire family's work to punish them. Even the manager said once to the protesting labourers, "I will starve you to death; let me see how you can work and earn even to at." Later, the female family members of the labourers went to the manager and asked for pardon with the promise that they would never indulge in any such disciplinary action. The respondent said that since then the labourers are also afraid to protest as they have no other option to work anywhere and they have to work here, so they have adjusted to the lifestyle.

Another worker said, "Our life is no different than the life our previous generation had during the British period; British rules are continuing in tea gardens." These narratives prove the helplessness of the labours that they are placed in. Since 76 years of independence, the labourers are kept at the mercy of the brutal managers who exploit them in every condition. The labourers are not only deprived of low wage payment but are also deprived of other human rights, which were promised to them as per the Plantation Labour Act 1951. The labourers working in the tea estate are settled in inhumane living conditions. They are provided with very small and congested quarters without proper windows and ventilation. The minimum number of people in an average family is 6-7. The large number of family members in small and congested quarters increases high population density occupations. Many labourers do not have toilets and bathrooms in their quarters, and they use community toilets and bathrooms. The rest of the people have Kutch (pit toilet) and no properly constructed bathroom. They made a separate place with four bamboos and clothes and used it as a bathroom. Usually, the locality of the living quarters is unhealthy, with clogged drains with overflow of dirty water, which make the surrounding environment unhealthy and unhygienic.

The labourers trapped in odd work conditions, paid less, and settled in an unhygienic environment were mostly poorly educated. As per the 1951 Plantation Labour Act, the employers are responsible for the education, health, and recreation of the labourers and their families inside the gardens, but the conditions of the schools and the health centres in the tea gardens are worse. The schools mostly suffer from a lack of classrooms and teachers. The health centres too suffer from a lack of quality workforce, resources, and quality health care. Many labourers even said that they suspect the hospitals provide them with expired medicines. Many too complained that after taking the medicines from the garden hospitals, they never were cured. After prolonged illness, they ought to visit government, health care centres, or private hospitals and get treatment. Many labourers who failed to go to town from the tea estate, which is situated geographically at odd and rural places without much transport connectivity, suffer from long and prolonged illness. Many people even died without treatment, or they try to relate illness with superstition and do rituals to counter the black magic.

The uneducated labourers are often ignorant about their health and lifestyle. Most of the labourers in the tea estate are addicted to alcohol, irrespective of gender. Cheap and bad-quality alcohol is easily available in the tea gardens. It is available in any general store inside the tea gardens and in many households to make alcohol. The interviewer herself is a witness to the phenomenon of the sale of alcohol inside the tea garden. Two general stores in Sirajhuli and Addabarie tea estates were there, and both the store's owners (women) sold homemade alcohol, which they call "Haria." In the informal conversation with the women about the sale of alcohol, they revealed that it is okay for them to sell alcohol.

They do not feel it is an immoral job as the wage in the tea garden is too low and they can't meet the expenditure of their family, but while selling alcohol, they are at least earning better, and with that money, they can meet the education expenditure of their own family. Alcoholism is a very common behaviour of the labourers inside the tea garden. Many people rationalise the drinking behaviour by saying that since the work in the tea garden is odd and hard and they do not have any recreation, alcohol is the only way to meet with other labourers and have fun. Other people rationalise it by saying that alcohol is good for their health as it causes their body pain and headaches after a long day of work. One worker in the interview even said that during the COVID period in the tea garden, there were no single COVID cases, even though tea garden health centres are too bad. He said, "It is because they drink alcohol, which increases their immunity to resist alcohol." The instances of teenagers drinking are also too common in the tea estate. The excess consumption of alcohol and sharing the alcohol with others in the same utensils increases the chances of the spread of tuberculosis and increases health problems such as blood pressure and others.

## **8. The social determinants influencing TB cases in selected tea estate of Assam – Analyzing the findings:**

### **8.1 Neighbourhood and built environment**

W.H.O. has identified that the neighbourhood and physical environment influence health among the community people, particularly communicable diseases. The community with more TB burden puts the people at risk of being infected with TB. W.H.O. research reports have shown that TB is a poor people's disease. The countries with low or middle income are mostly under the TB burden. The history of the tea garden discussed above reflects that tea garden labours as a community have been physically constrained within the tea garden areas since the beginning until now. It has led to the social exclusion of the community from other populations. Due to social exclusion, the tea garden's laborers as a community have negligible influence over the politics of the state and the benefit of the policies. The socially excluded community, employed as menial laborers in the tea gardens is the least educated. They have negligible awareness about health and its importance. The British planters settled the tea garden laborers in an unhygienic condition, and they suffered from multiple health problems such as Tuberculosis, Malaria, yellow fever, cholera, etc. The records from RNTCP data also reflect that the tea garden is burdened with Tuberculosis. Due to social exclusion, less education, and lack of awareness and belonging from tribal backgrounds, they have their own set of cultural beliefs about Tuberculosis. Therefore, most TB patients are their family members who fail to understand the early symptoms of TB or they relate TB with black magic or some other superstition. So, rather than visiting doctors at times they perform counter black magic.

The lack of education, relating TB with other diseases or superstitions makes the patient more vulnerable and it puts all other surrounding human beings at risk of TB. The quarters in tea gardens are also very small. It lacks windows and proper ventilation. The people living under limited space and sharing utensils, and food with TB patients make all the people living under that space equally vulnerable.

## **8.2 Healthcare facilities and access to healthcare services**

According to the 1951 Plantation labour Act, every tea estate must have a health center and should have at least one doctor, nurse, and pharmacist. The three-tea estate covered for the study Deckiajhuli, Sirajhuli and Addabarie tea estate have their health centers but the condition of the health centers in terms of infrastructure and services provided to them is below average. The laborers in the tea estate and other TB patients interviewed said that the treatment provided to them is free but the quality is too poor. Many laborers complained that without listening to their health problems properly, the doctors write randomly any medicines and they are not cured by taking those medicines. The tea estate hospitals suffer from the lack of workforce. Even the doctors appointed in the tea estate hospitals are often unavailable in the hospital. The health care experts are supposed to attend the hospitals sharp at 9:00 AM but mostly they report late. The laborers suffering from health problems have to wait for a long time to be treated even when their condition is severe. Even the researcher herself is witness to these phenomena. The menial labourers are least educated and they have minimum power to even complain about the unavailability of the appointed staff within the hospitals. Many laborers in the tea estate interviewed complained that the behavior of the hospital staff with them is often rude and they are disrespected. Other people complained that mostly due to lack of health staff and the infrastructure they are referred to the government hospital in the town which is Tezpur Medical College. The medical college is far away from the tea estate. The permanent laborers and their family members are provided with ambulance facilities but the temporary labourers are not provided with such facilities. Therefore, even with severe health problems people do not visit the medical college if they are referred. Then they mostly depend on other sources to get sure one such is performing religious rituals. On the other hand, the managers and the health care staff interviewed blamed the laborers for their health condition and said, “As they are illiterate they are superstitious so they do not avail the services which are available”. One of the managers of the tea estate even said, “We can’t visit every house to determine who has what problem. The hospitals are there, free treatment is provided if they do not avail, it is their fault. We can't force them to take medicine”.



### **8.3 Risky lifestyle behaviour**

The tea garden workers residing inside the tea garden are inherently poor. The reasons behind the inherent poor condition of the labourers are exploitative working conditions inside the tea estate and low wage payment. Dasgupta stated that the authority of the tea estate as “controlling the labour indolence” rationalises the low wage payment of the workers in the tea estate. Sonowal argued that the labourers often suffer from extreme poverty because of the exploitative nature of garden owners. The labourers are paid extremely low. (Sonowal, 2018). The labourers continue to work in the tea estate. The respondent in the interview said that because of two main reasons the labourers continue to work in the tea garden, they do not have land rights over the quarters they are staying; they are permitted to stay in the land only when any member of the family works in the tea estate as permanent labour. Second, the labourers are least educated and low-skilled. Therefore, it is difficult for them to get a job. The labourers working in the tea estate often complain about their monotonous lives. In the early morning, they wake up and join work, and in the evening they come back home. They lack recreation in their lives. The authorities do not provide any recreation facilities to the tea garden laborers. Due to a lack of resources and low wages, they spent their entire earnings on buying food and meeting the basic needs of life. Therefore, they hardly go out of the tea estate for recreation. The labourers in tea estates, irrespective of their gender identity, consume alcohol. The respondent in the interview said that as their life revolves around only work, consumption of alcohol, and the time when they consume alcohol, it is the only way to divert from their monotonous life. The respondents said that the alcohol available in the tea estate is cheap, so it is easily affordable. Inside the tea estate, there are general shops, but in the evening, shops inside the tea estate sell alcohol, and they do not hold any license to sell alcohol. Other than the general shops, there are many homes inside the tea estate where they make alcohol. It is also known as "Haria." They make alcohol with rice and bananas. The respondent said that the family, which makes and sells alcohol in the evening, lights candles near home. The lighting candles near the home are an indication to the people that alcohol is available there. People rationalise their drinking behaviour in many ways. One such thing is that they say it cures their body ache. The household that sells alcohol rationalises the sale of alcohol as a way to earn money and meet the basic needs in their life, particularly the education of their children. In an interview, the woman who sells homemade alcohol said, “The wage of the tea estate is too low. It is very difficult to meet the need in today’s time. I do not want my children to work in a tea estate. Therefore, I have put them in English-medium school. Therefore, I sell alcohol. Through this, I at least earn a good amount, and I invest it in my child’s education.” Tea gardens are a TB-burden community. Even TB patients do not resist themselves from consuming alcohol. The consumption of alcohol while receiving TB treatment (DOTS) fails the treatment. The failure of treatment often leads to relapse TB cases, drug resistance, and death. The household that sells alcohol often provides the facility of consuming the alcohol there in-group.

Therefore, many people share alcohol and utensils. The TB patients with active symptoms are infected, and TB spreads from one person to another. The patients lately diagnosed or reported consuming alcohol in the same environment and drinking with the same utensils, which put all the people at risk of being infected. In Addabarie Tea Estate, the researcher has met with one such TB patient. The TB patients interviewed responded they sell homemade alcohol (haria); the undetected TB patients consume alcohol in the same utensils. Her husband regularly consumed alcohol from the shared utensils. He was symptomatic of TB after a few months. After a visit to the health centre, I was tested positive for TB. Due to irregularity in treatment, he expired. Therefore, there are many such incidences where risky lifestyle behaviours such as consumption of alcohol and tobacco, chewing of tobacco and sharing them with others, and sharing the same utensils with suspected TB patients have put the people at risk of TB and increased the chances of severity.

#### **8.4 Psychological constraint**

The workers in the tea estate have been working there for generations. The physical containment of the labourers inside the tea estate, lack of communication with the outside world, social exclusion, low wage payment, and negligible education have affected the psychology of the aborers. In the interview, the labourers referred to themselves as “just menial labour” without any power or any human demand other than to work. Many labourers even complained about the way they are treated in their workplace. If the labourers once fail to produce the standard quality of work or for small mistakes, they are subjected to verbal abuse. The line chowkidars are appointed in the settlement lines of the tea estate, and sardaars are there in the plantation field. The line chowkidars (guards) and the sardaar (guard and informer of management) control their lives. They are subjected to verbal and physical abuses from the higher authority, often for smaller misconduct, according to the management. When the labourers from the tea estate once visit the urban areas or town for any work, they are treated as low class, and many people even use their ethnicity “Adivasi ” as a slur. (Sonowal,2018). They are still treated as outsiders because of their age-old migration history and they are denied integration with Assamese society. They are referred to as “Baganiya or "coolie." (Sonowal,2018). The continuous mistreatment has included an inferiority complex within themselves. The community burdened with TB, having difficulty accessing treatment, and facing mistreatment while visiting the hospital fails to unite among themselves and mobilise to demand their rights. Many people accept suffering and TB as their fate and take no steps to recover.

### **9. Conceptualizing the findings based on the concept framework provided by WHO to analyze the social determinants of health**

#### **9.1 Socio-economic position (Social structure)**

The socio-economic position have implication over individual's health. The socio-economic position of the individual determines individual's access and affordability to health care services. The inaccessibility to health care services create further inequity in public health.

The tea garden laborers are socio-economically positioned backward. The Adivasi community are workers in the tea garden. They are still left with complete dependency on the tea garden management for basic things such as quarters, food, work, and earning wages. The complete dependency of the workers on the management has kept the laborers at the mercy of management preventing any protest or resistance from the labour's side against the management. So, they are a working-class category and marginalized for several decades. The laborers are mostly illiterate and unaware which makes them in the position of unawareness about their rights. Socio-economic position determines their wage, living pattern, and food choices. They are the victims of poverty, pathetic living conditions, illiteracy, and poor food intake which have also made them vulnerable to several other health consequences as discussed above such as malnutrition, underweight, thinness, night blindness, Tuberculosis, etc.

## **9.2 Hindrances in receiving health care facilities**

1951 Plantation Labour Act, made it mandatory for the tea garden management to provide proper health care services to the laborers. Every tea estate must have its healthcare centers comprising qualified full-time doctors, nurses, pharmacists, and assistants. The tea garden covered for the study too has its health care centers comprising doctors, nurses, and pharmacists. But the quality of the health care centers is not enough. Mostly the health care centers lack enough man-power and the patients complain that they don't receive proper medicines from the centers. They are not checked properly either. Among the interviewed TB patients many complain about the bad behaviour of the staff and they are even referred to a medical hospital in town for a simple sputum test. The medical hospital in town is far away from the remote tea gardens. The tea gardens often suffer from a lack of transportation. People with their vehicle can only access it at a given time. Many interviewed patients complained about the delay in tests because of the distance between the medical college and their house, no transportation, lack of ambulance facilities for the temporary workers in the tea estate, and the cost of the medicines in private medical shops create hindrances in receiving the health care services which also cause non-adherence to TB treatment.

## **9.3 The differential consequences**

The labours positioned in the lower strata of society face different consequences than any other class in society. The laborers in the tea gardens face adverse effects due to health problems and TB infection.

As TB is a communicable disease and people are stigmatized against the disease, once people are infected they are put out of job. The permanent labourer can continue work after getting a cure and full treatment but the temporary laborers lose their jobs once they are diagnosed with TB. The people who are put out of work remain without wages which pushes them into further financial constraints and poverty. The financial constraints have unavoidable problems in their family such as pushing the children out of school, poorer quality of food, etc. Therefore, health problems such as TB put the laborers into a vicious circle of misery.

## **10. Conclusion**

The analytical framework of WHO in the context of tea gardens in Assam explains the layers of vulnerability among the tea garden labourers. The vulnerabilities leading to non-adherence to TB treatment. The first layer shows the socio-economic status of the tea garden labourers. The tea garden labourers are socio-economically poor, ethnically tribal, migrant labourers. It shows that they are socio-economically lower in status. Next, in terms of occupation, they are employed as tea garden labourers; they are paid a low wage as compared to state guidelines of the Minimum wage Act. They are presently paid only Rs. 250/-. They do hazardous work such as lifting heavy weights, spraying chemicals without proper protection, etc. They are placed in small quarters, with a maximum two rooms without proper ventilation. Therefore, it shows a crowded living condition. Further, the tea garden workers are ethnically tribal, so they have different sets of beliefs. They attach TB with lots of superstitions; relate cause of TB as warmth of deity, etc. So, the TB patients among tea garden workers fear stigmatisation, isolation, and discrimination. So, the TB patients do not open up in front of the community and avoid going to the hospital, which causes delays in identification and treatment. The TB patients in the tea garden are further vulnerable based on their genetic characteristics, such as sex/gender (women fear further marginalisation), senior citizen, etc.

Therefore, clubbing all the socio-economic status, hazardous occupation, their cultural belief regarding TB, stigmatisation, etc. increases the vulnerability of the tea garden labourers to exposure of TB germs and increases the health inequity. The vulnerabilities of the tea garden workers increase the gap between achieving health equity. The tea garden labourers face challenges in accessing, affording, and accepting the modern treatment. Further, it leads to poor health outcomes, such as increased mortality, morbidity, and disability due to TB.

The tea garden labourers were forcefully migrated from the tribal heartland to Assam by the British planters. They were settled inside the tea gardens. During the colonial period, the condition of the Adivasi labourers was the worst. They were denied basic human rights such as low wage payment, poverty, filthy living conditions, and harsh working conditions.

The labourers were kept in extremely unhygienic and filthy conditions; it pushed them into suffering from various diseases such as malaria, cholera, typhoid, tuberculosis, etc. The labourers were ill-treated in such conditions that they were not provided basic health conditions. The existing literature well shows that the ill-treatment of the labourers and the disease have increased deaths among the tea garden workers from 1870-1905. The harsh treatment of the workers also has increased the rate of abortion and birth of still babies among the women in the tea gardens. The colonial government helped the British planters grow and dominate in the market. It introduced laws like the indenture labour act and immigration of islands, which legalised the forceful migration of the labourers, imprisonment of the labourers, and inhumane punishment by the British employer. The labourers were not allowed to leave the workplace before the period allotted, and if they tried to elope, then they were punished. Often the labourers who were caught while eloping were beaten black and blue. So, the labourers never thought of moving out of the tea estate, even after lots of suffering. After independence, the labourers in the tea estate were Adivasi but were denied ST status due to the migration history. In 1951, the Plantation Labour Act was passed, which put responsibility on the employer to provide the rights to the employee. After independence, the ownership of the tea estate shifted from British planters to Indian private companies. The plantation labour act changed the status of the aborers. The plantation labour act made it compulsory for the tea garden companies to provide the basic rights to the labourers working in the tea estate, such as that each garden must have a primary school, living quarters, a health centre, and provide a decent working environment. Yet the situation did not change for the labourers even after years of independence. The condition of the schools is very poor and suffers from a lack of quality teachers. The health centres are also below average in terms of quality and infrastructure. They are still paid very little, which pushes them into poverty-prone situations. They are still regarded as outsiders by the Assamese population and are socially excluded. Tea Garden is a TB-burdened community. Several situations like poverty, malnutrition, filthy living conditions, and risky lifestyle behaviours such as alcohol and tobacco chewing influence TB among the tea garden workers. The poor quality of health services and poor access to the health care system in urban areas affect their treatment-seeking behaviour. Cultural practices such as performing rituals, relating TB with black magic, and confusing its symptoms with other diseases cause delays in treatment. They are menial labourers for several reasons; they lack the bargaining power to demand rights from the authority. The labourers are also victims of the uncertainty. Once the labourers suffer from a communicable disease such as TB, it puts them into a vulnerable situation as they lose their job. It pushes them into the vicious circle of poverty. So, the tea garden labourers in different communities are at risk of getting infected with TB because of the various social and economic situations they are placed into, and they are more vulnerable to the situation as it creates unemployment and poverty among the labourers.

## References

1. Ailinger, R. L., & Dear, M. R. (1998). *Adherence to tuberculosis preventive therapy among Latino immigrants. Public Health Nursing*, 15(1), 19–24. American Thoracic Society (1992). Control of tuberculosis in the United States. *American Review of Respiratory Disease*, 146(6), 1623–1633.
2. Auer C, Sarol J Jr., Tanner M, Weiss M 2000. *Health seeking and perceived causes of tuberculosis among patients in Manila, Philippines. Tropical Medicine & International Health*, 5(9): 648–656.
3. Balgir RS 2009. *Health and Morbidity pattern in the Tea Garden Labour communities of North East India: A Brief Review*. In: S Sengupta (Ed.): *The Tea labours of North East India*. Delhi: Mittal Publications, pp. 223-236.
4. Banerjee A, Harries AD, Nyirenda T, Salaniponi FM 2000. *Local perceptions of tuberculosis in a rural district in Malawi. International Journal of Tuberculosis & Lung Disease*, 4(11): 1047–1051.
5. Barnhoorn, F., & Adriaanse, H. (1992). *In search of factors responsible for noncompliance among tuberculosis patients in Wardha District, India* [Erratum appears in *Social Science & Medicine*, 1992 June, 34(11), II]. *Social Science & Medicine*, 34(3), 291–306.
6. Baruah Pinuma 2009. *A study of health, hygiene and sanitation among the tea garden labours of Assam: A case study in Jamirah Tea Garden*. In: S Sengupta (Ed.): *The Tea Labours of North East India*. Delhi: Mittal Publications, pp. 237-248.
7. Behal, R. P. (2006). *Power Structure, Discipline, and Labour in Assam Tea Plantations under Colonial Rule*. *International Review of Social History*, 51 (14), 143-172. <https://doi.org/10.1017/S0020859006002641>
- Bhowmik, S. K. (1980). *The Plantation as a Social System*. *Economic and Political Weekly*, 6 (15), 1524-1527.
8. Biswas D, Hazarika NC, Hazarika D, Doloi P, Mahanta J 2002. *Study on nutritional status of tea garden workers of Assam with special emphasis to Body Mass Index (BMI) and central obesity*. *Hum Ecol*, 13(4): 299-302.
9. Bora Borsha Rani 2015. *Socio-economic condition of tea garden workers and its impact on women's health with special reference to Teok Tea Estate*. *The International Journal of Humanities & Social Studies*, 3(12): 224-228.
10. Borgohain Jahnu 2020. *tea garden women, issues of socio-economic status: A study on tea garden women of Sivasagar District, Assam*. *Journal of Emerging Technologies and Innovative Research*, 7(3): 1626-1633.

11. Boruah Pallab Jyoti 2018. *Status of water supply, sanitation and hygiene practices: A study on tea garden labourers of Sibsagar District of Assam*. International Journal of Humanities and Social Science Invention, 7(05): 38-43.
12. Brouwer, J. A., Boeree, M. J., Kager, P., Varkevisser, C. M., & Harries, A. D. (1998). *Traditional healers and pulmonary tuberculosis in Malawi*. International Journal of Tuberculosis & Lung Disease, 2(3), 231–234.
13. Cegielski JP, McMurray DN 2004. *The relationship between malnutrition and tuberculosis: Evidence from studies in humans and experimental animals*. International Journal of Tuberculosis and Lung Disease, 8:286–298.
14. Centers for Disease Control and Prevention (1995b). *Improving tuberculosis treatment and control: An agenda for behavioural, social, and health services research*. Proceedings of Tuberculosis and Behavior: National Workshop on Research for the 21st Century, August 28–30, 1994, Bethesda, MD. Atlanta, GA: US Department of Health and Human Services, Author.
15. Centers for Disease Control and Prevention (1995b). *Improving tuberculosis treatment and control: An agenda for behavioural, social, and health services research*. Proceedings of Tuberculosis and Behavior: National Workshop on Research for the 21st Century, August 28–30, 1994, Bethesda, MD. Atlanta, GA: US Department of Health and Human Services, Author.
16. Centers for Disease Control and Prevention (2000). *Core curriculum on tuberculosis: What the clinician should know* (4th ed.). Atlanta, GA: US Department of Health and Human Services, Author.
17. Chakraborty, A. K., Rangan, S., & Uplekar, M. W. (Eds.). (1995). *Urban tuberculosis control: Problems and prospects*. Bombay, India: The Foundation for Research in Community Health.
18. Chelleng PK, K Rekha Devi, Borbora Debasish, Chetia M, Saikia A, Mahanta J, Kanwar N2014. *Risk factors of pulmonary tuberculosis in tea garden communities of Assam, India*. Indian J Med Res, 140(1): 138–141.
19. Das Gupta R 1986. *From Peasants and Tribesmen to Plantation Workers: Colonial Capitalism, Reproduction of Labour Power and Proletarianisation in North East India, 1850s to 1947*. Economic and Political Weekly, 21(4): 2-10.

20. Deb Nath R 2000. *Social and Cultural Life of the Labourers in Dewan Tea Garden*. MPhil Dissertation. Silchar: Assam University.
21. Deb Nath Ruma, Nath Dipak 2014. *Educational vulnerability and risk factors of tea garden workers with special reference to Dewan Tea Garden Village, Cachar, Assam, India*. International Research Journal of Social Sciences, 3(9): 14-21.
22. WHO, 2000. *The stop TB initiative, the economic impact of Tuberculosis*. Ministerial conference Amesterdam.



# The Raisina Summit: Assessing the Suitability of a Presidential System for India

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*“Democracy is not merely a form of Government. It is primarily a mode of associated living, of conjoint communicated experience. It is essentially an attitude of respect and reverence towards our fellow men.”*

*Dr B.R. Ambedkar*

## Abstract

Upon the dawn of freedom in 1947, India and her people were thrust with the duty of evolving a structure of governance and administration suitable for such a vast and diverse country. Our forefathers adopted the Westminster system of parliamentary democracy, the prime reason being its familiarity with the British colonial experience. Among the streams of democratic governance, the Presidential system is most prevalent apart from the Parliamentary system. This research is in pursuit of understanding various notions of democratic governance in the context of India. This research endeavours to chalk out the statutory and political distinctions between parliamentary and presidential forms of democratic government. This research commences with an introduction to the Westminster Parliamentary system and the Presidential system, while also stating the purpose of this research. The research proceeds to the historical context in which India evolved its parliamentary form of government; and how it has shaped the political history of the country. This research charts the theoretical framework – definitions and characteristics of parliamentary systems and key theoretical perspectives on governance, stability, and representation. This research utilizes comparative analysis as a yardstick to compare the two systems on the following basis – 1) Executive-Legislative relations, separation of power, and impact on policy-making and governance. 2) Political Stability. 3) Accountability and Checks and Balances. This research tries to assess the applicability of the presidential system in the socio-cultural and political context of India. Potential drawbacks and advantages will also be discussed, and the constitutional and political implications of transitioning to such a system will be examined. The conclusion will chart out the key findings of the study and will make recommendations for further policy-making and research.

## **1. Introduction - Butter or Margarine?**

During a visit to India as part of the notorious Simon Commission, Clement Atlee, Labour Member of the British Parliament and future Prime Minister of Great Britain, interacted with Indian leaders and suggested a presidential form of government for when India attained independence in due course of time. In Atlee's words, they reacted strongly in the negative – "they rejected it with great emphasis. I had the feeling that they thought I was offering them margarine instead of butter." Indians were more acquainted with the notions of Parliament and the Westminster style of democratic governance, as they had witnessed in their coloniser nation, Great Britain. Their fight was to prove and achieve equality – political and social, to that of the Englishmen, as had happened in the thirteen colonies of British America two centuries ago. Therefore, when the time came, and Indians got the right to determine their destiny by framing a constitution of their own, they laid the groundwork of the world's largest democracy in tandem with the prevailing Parliamentary form of governance.

### **1.1 The Westminster System**

The term Westminster System emerges from the Palace of Westminster which is the seat of both houses of the Parliament of the United Kingdom. The Westminster system has some consistent features of government – i) Nominal or ceremonial head of state, with or without reserve powers, as de jure constitutional holder of executive power and sovereignty ii) Members of Parliament elected from various parliamentary constituencies by various methods – First Past the Post, Proportional Representation etc iii) Prime Minister or Premier as the head of government and de facto holder of constitutional and political authority iv) Head of government is chosen by the convention of the command of a majority in Parliament and is subsequently appointed by the head of state v) No rigid demarcation of Executive and Legislative branches of government; Council of Ministers is selected from amongst the Legislature and holds collective responsibility to the same vi) Parliamentary Opposition to check the power of Government of the day in Parliament vii) Removal of government through a Motion of No-Confidence; and dissolution of Parliament viii) The executive power is vested in the Council of Ministers collectively.

### **1.2 The Presidential System**

The Parliamentary system was essentially rooted in maintaining harmony between the Monarch's sovereignty and the people's aspirations. The Presidential system, on the other hand, fundamentally originated from the defiance of the Monarchy and the Monarch's divine right to rule. Though experimented before (as Lord Protector of the Commonwealth of England, Scotland, and Ireland), it was not before the formation of the United States of America that the Presidential system was devised as we know it now. Thomas Jefferson, American philosopher, and Founding Father wrote in the Declaration of Independence –

*“A Prince whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free people... these United Colonies are, and of Right ought to be Free and Independent States; that they are Absolved from all Allegiance to the British Crown...”*

Features of the Presidential system are such – i) Single Executive Leadership; President as Head of State and Head of Government (Except in the case of Semi-Presidential Republics, where the role may vary) ii) Separation of Power between three branches of Government – Executive, Legislature, and Judiciary iii) Election of President either through Popular Vote (as in Mexico) or through Electoral College (as in USA) iv) President exercises executive powers vested in him; however these powers can be checked by Legislature and Judiciary v) Legislature is entrusted with law-making, however, laws can be vetoed by the President vi) Fixed Tenures; President can only be removed from office in cases of death or resignation, or through impeachment by the Legislature vii) The President is the individual executive authority and all executive authority originates from him.

## **2. India’s Tryst with Parliamentary Democracy**

*“Our difficulty is not about the ultimate future. Our difficulty is how to make the heterogenous mass that we have today take a decision in common and march on the way which leads us to unity. Our difficulty is not with regard to the ultimate, our difficulty is with regard to the beginning.”* Dr Bhimrao Ambedkar said these words as India was entering its historic phase as a parliamentary democracy. As the first blushes of independence covered the sky of India, the responsibility of electing representatives of the world’s largest democracy was thrust upon its citizens. There were a lot of reasons why democracy would not work in India – i) The state of illiteracy and poverty amongst the masses ii) post-partition trauma iii) the sheer size and scale in which elections were to be held iv) the diverse nature of the nation along the threads of religion, caste, creed, and gender. But India had just one reason for democracy to work – The trust and faith the people possessed through the virtues of their national movement and the spirit of democracy. With this spirit, India conducted its first ever general elections in 1951, and with this began the pilgrimage of a billion people towards the ideals of democracy, self-rule and stride towards the dreams that were for India, but also for the world.

Since 1951 till 2024, India has conducted eighteen general elections, electing successive governments belonging to a variety of political groups and subscribing to various political, social, and economic ideologies. The table given below represents the trend of the number of seats won and the total vote share achieved by the political party that formed the government after the conclusion of each general election. An interesting observation that can be made from the data is the fact that since independence, no political party or pre-poll alliance has successfully achieved a majority of the nationwide popular vote. Indian National Congress (INC) in 1957, under the leadership of Jawaharlal Nehru, achieved the largest share of the popular vote ever at 47.78%. This was the period when there was virtually negligible political opposition to the INC, and therefore it held sway in a majority of the seats except a few pockets where marginal regional political parties posed a challenge to it.

<i>Year</i>	<i>Political Party</i>	<i>Seats Won</i>	<i>Vote Share (%)</i>
1952	INC	364	44.99
1957	INC	371	47.78
1962	INC	361	44.72
1967	INC	283	40.78
1971	INC (R)	352	43.68
1977	JP	295	41.32
1980	INC	353	42.69
1984	INC	414	46.86
1989	JD	143	17.79
1991	INC	244	36.26
1996	JD	46	8.08
1998	BJP	182	25.59
1999	BJP	182	23.75
2004	INC	145	26.53
2009	INC	207	28.55
2014	BJP	282	31.00
2019	BJP	303	37.36
2024	BJP	240	36.56
<i>Average</i>	-	<b>264</b>	<b>34.68</b>

***Table 1: Comparison of won seats and vote share achieved by political parties that formed government after each general election***

Interestingly, the Indian National Congress secured 371 seats in the same election, which considering the contemporary strength of 505 in the Lok Sabha, amounts to about 73.4% of the whole membership of the house, a three-fourth majority. On seven occasions, the party which formed the government secured less than a third of the total popular vote in the general election.

On at least two occasions, the party that formed the government did so after winning less than twenty per cent of the popular vote. Taking an average of all eighteen general elections held to date, the parties that formed the government have won 34.68% of the popular vote, which is about one-third, and 264 seats in the Lok Sabha, 8 short of the required number for an effective majority in the house.

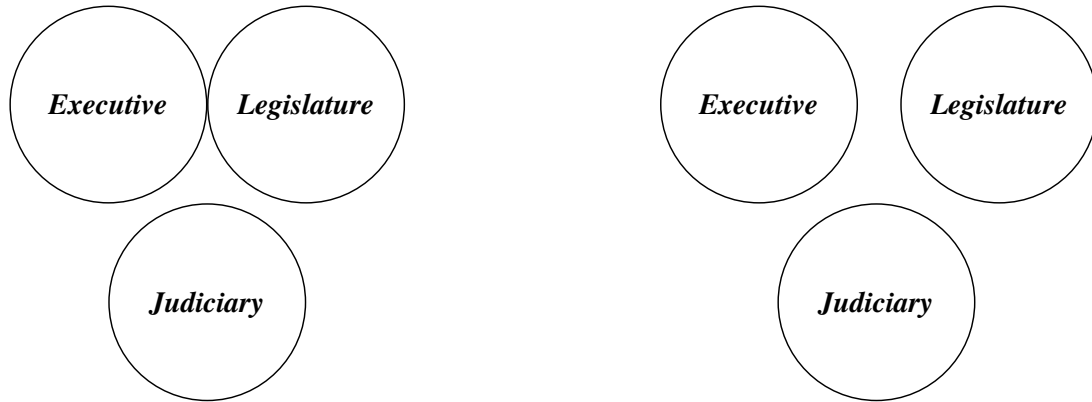
These trends and figures are testimonials for the coalitional nature of politics in India, and a large part of it is due to the First-Past-the-Post System adopted by India for election. For example, In the first general elections held in 1951-52, the Indian National Congress (INC) secured 44.99% of the popular vote and its candidates successfully contested across 364 constituencies. If these elections were to be held under the Proportional Representation System, with the preferences of the voters intact, INC would have ended up with just about 220 seats in Lok Sabha, falling short of majority and compelled to form a coalition government. P.A. Sangama, 11th Speaker of the Lok Sabha writes in his paper “Functioning of Parliamentary Democracy in India” – “The merit of the First-Past-the-Post System is that in our country of a billion people, we can conduct elections without complicated procedures inherent in the Proportional system of representation. The latter system also results in a multiplicity of parties in the legislative bodies.”

### **3. Comparative Analysis – An Indian Optic**

Today, the presidential style of government is the form of constitution of democracy in a great number of nations across the globe. But that does not necessarily mean that the system would be fit for a dynamic nation such as India. Therefore, it is important to compare the features of the Presidential and Parliamentary democracies through certain yardsticks, keeping in view the need for an Indian perspective.

#### **3.1 Executive-Legislative relations; Separation of Power; Impact on Policy Making**

Under the present Indian Parliamentary democracy, the principle of separation of power is employed to a lower degree in contrast to the United States, where it is the basis of the democratic government. In India, the Executive and the Legislature are intertwined cooperatively, while the Judiciary maintains an independent and nonpartisan locus. The Council of Ministers, the primary executive institution, serves per its proven majority in the Lok Sabha, the lower house of the Indian Legislature, and can be removed if the House loses its confidence in it. Article 75 (3) of the Constitution of India pronounces “*The Council of Ministers shall be collectively responsible to the House of the People.*” The members of the Council of Ministers, including the Prime Minister, are also drawn from the two houses of Parliament – the Lok Sabha (House of the People) and Rajya Sabha (the Council of the States). Article 75 (5) of the Indian Constitution states “*A Minister who for any period of six consecutive months is not a member of either House of Parliament shall at the expiration of that period cease to be a Minister.*” These provisions of the Constitution testify that our forefathers had, while drafting our Constitution, envisioned a government where only elected representatives served in key portfolios or high offices.



***Fig 1: Separation of the branches of government as in the Parliamentary System (Left) and the Presidential System (Right).***

The Indian system can be contrasted with the system followed in the United States of America, where the founding fathers created the three branches of government as autonomous and competent organs. In the United States, key executive offices, such as that of the President and Vice-President, are elected directly by the popular vote through an electoral college. These officials are elected for an established tenure of four years and do not depend upon the legislative majority to continue in office. The President is not required to prove the confidence in either House of Congress – the House of Representatives and the Senate; and the Congress could remove only through a motion of impeachment. The Cabinet of the President, of which heads of various departments are members, styled as Secretaries, is never drawn from the Houses of Congress; they are however subject to confirmation by the Senate. These Secretaries are not collectively responsible to Congress and serve at the pleasure of the President.

It can be understood that the Presidential system offers an opportunity to accommodate policy experts and advisors with experience working in a specific field or background of past achievements. In the USA, often bureaucrats, army veterans, bankers, industrialists, entrepreneurs, attorneys, and major public figures, instead of career politicians, are called upon to serve in the Cabinet due to their pre-requisite value and experience. These essentially establish law-making or legislation and administration or governance as two distinct functions of government, being performed by two distinct organs – Legislature and Executive respectively. This also ensures that the Legislature decides upon matters of public interest without the anticipation of fear and favour from the ruling Executive. Also, the members of the legislature have the opportunity to interact with the people of their respective constituencies and generate their faith in democracy.

In India of the 21st century, one of the biggest challenges for us is that of ‘Brain Drain’; meaning that a majority of competent professionals migrate out of India in search of adequate opportunities. In such circumstances, it would be prudent if our government could benefit from the expertise and experience of the professionals who have worked in specific fields, such as – health, education, agriculture, or foreign affairs. In political terms too, a distinction will be established between the functions of the law-making and policy-making.

### 3.2 Political Stability

One of the inherent de-merits of the Parliamentary form of government is the unstable nature of government it produces. John P. Mackintosh, former Member of the British Parliament, who interestingly was born in Simla, British India has written in his book ‘The British Cabinet’ – “*The difference between law and convention is just that there is no formal procedure for enacting or enforcing conventions, though some conventions (e.g., the monarch shall not veto laws passed by both Houses; the Prime Minister shall resign if he is defeated on a major issues in the [House of] Commons) are as important as any laws and perhaps even more difficult to alter.*” In the United Kingdom, under the Westminster System, if the government is defeated in the House of Commons, over a major issue, the Prime Minister is expected to resign from his position by convention. The consequence has been that since 1950, the UK has held twenty-one General Elections and has had thirty different governments. As elucidated in the table below, India, another parliamentary democracy, has conducted eighteen general elections during the same duration and has had twenty-seven different governments.

<i>Country</i>	<i>Government/ Administration Formed</i>	<i>General Elections Held</i>
United Kingdom	30	21
United States of America	14	18
Republic of India	27	18

**Table 2: Number of Governments/Administrations formed and General Elections held in the United Kingdom, United States of America, and the Republic of India since 1950**

It is interesting to evaluate the position of the United States during the same period, as since 1950, the USA has held eighteen general elections like India, but at an interval of four years and not five. More interestingly, these eighteen general elections have produced only fourteen administrations or governments, which is in stark contrast to any parliamentary democracy of the USA’s standing. Presidential democracies like the USA also employ the principle of presidential succession, where the Vice-President followed by other principal executives are in line to take up the presidency in the event of a vacancy. This principle is aimed at ensuring that there is not a political vacuum at the helm of affairs and that the government functions stably.

In India, due to the parliamentarian nature of democracy, the coalitions have emerged as rules instead of exceptions. The era of the 1990s is specifically characterised as the era of coalition politics in India, as between 1989 and 1999, in a span of ten years, India held five general elections and witnessed eight different governments, none of which enjoyed a majority in the Lok Sabha and were hence unsuccessful to govern for full tenure. The Indian political system has always been on the extremes – first, it witnessed an era of One-Party dominance, as the Indian National Congress dominated the Indian polity from the attainment of independence till the 1980s. This era produced governments that enjoyed strong majorities in the Parliament and led to long continuous tenures for its Prime Ministers – Jawaharlal Nehru (1947-1964) and Indira Gandhi (1967-1977; 1980-1984).

The era of 1989-2014 played out in another extreme as no single party was successful in achieving an absolute majority in the Lok Sabha, and hence all governments formed were that of a coalition. V.P. Singh, the 8th Prime Minister of India, characterised coalition politics as “*management of contradictions*”. His government was supported from the outside by the right-wing Bhartiya Janata Party (BJP) and the left-wing Communist Parties concurrently, not for any ideological purpose but to ensure that the ruling Indian National Congress was ousted from power.

Since the rise of coalition politics, another feature that emerged in the Indian political landscape was the upsurge of defections across political parties disregarding political ideologies, the will of the constituents or even the basic sense of democracy, undermining the mandate delivered by the people. Such defections create an environment of political instability in the state and result in an upsurge in corruption, favouritism, demotivation of commercial investments, and distrust in the State’s economic machinery and capabilities. In a presidential style of democracy, political stability can be ensured in a far better manner than the incumbent parliamentary system.

### **3.3 Accountability; Checks and Balances**

Under the notion of separation of powers, the three branches of the government – Executive, Legislature and Judiciary, work in a sense that is always independent of the former and the latter. However, to ensure that no single branch of the government dominates or overrides the functioning of the others, a system of separation of powers and checks and balances has been devised. Dr Anup Chandra Kapur in his “*Principles of Political Science*” quoted German-American theorist Carl J. Friedrich on the form of true constitutional government. Friedrich proposes that a true constitutional government does not exist “*unless procedural restraints are established and effectively operating. Such restraints involve some division of power; for evidently some considerable power must be vested in those who are expected to do the restraining. Such a division of governmental power under a constitution has largely taken two forms: the functional division – such as that into legislative, executive, and judicial, and the spatial (territorial) division of federalism.*” French philosopher Montesquieu considered the exponent of the theory of separation of powers writes – “*When the legislative and executive powers are united in the same person, or in the same body or Magistrate, there can be no liberty. Again, there is no liberty if the judicial power is not separated from the Legislative and Executive power.*”

The Parliamentary form of Government, as perceived in Britain, has evolved into a system in which there is an absence of rigid separation of powers. In Britain, as the sovereignty of Parliament took shape, and the authority of the Crown diminished, the Prime Minister and its Cabinet of Ministers, holding dual membership of the Executive and Legislature, emerged as the most powerful political institution in the British Isles. English essayist Walter Bagehot has remarked, “*The Cabinet is a hyphen which joins, buckle which fastens, the legislative part of the State to the executive part of the State.*” The presidential system of government, as followed in the United States of America, has a larger degree of Checks and Balances.



#### **4. Presidential Democracy – Up to down or down to up?**

If Presidential democracy is adopted in India, it would not just be at the level of the Union government, as such a transition would impact and change the federal polity of India. The State Governments, whose style of constitution mirrors that of the Union Government, are led by the Governor as de jure nominal head of state; and Chief Minister as de facto executive authority, along with the Council of Ministers. The Chief Minister, along with his ministerial council are appointed on the convention of proven majority in the Legislative Assembly of the state. The Governor of the state, unlike the President of India, is not elected by an indirect election through the electoral college but is appointed for a fixed tenure of five years by the President on the advice of the Union Government. For all practical purposes, the Union Government selects and appoints individuals in the role of Governors, and therefore the office plays a dual responsibility of being the representative of the Union Government to the state while also continue being the constitutional head of state, in whose name the government rules. It has been seen that such an arrangement has resulted in a confrontational attitude between the Governor and Chief Minister when the ruling parties at the Centre and the State are not the same. Switching to a Presidential system would mean that the office of the Governor will practically cease to exist with its current mandate and powers, and would be replaced by the Governor who will be elected directly by the people of the state through popular vote and will serve in dual responsibility of Head of the State and Government.

In the present three tiers of government in India, it can be observed that the lowest rung of the government, which is composed of the Urban Local Bodies (ULBs), and Village Councils, follows a system that is, in some sense, close to the Presidential form of governance. Urban Local Bodies like Municipal Corporations have the separate executive authority of the Mayor, who is elected directly through popular vote, while the legislative authority rests with the Assembly of Councillors, elected individually on the ward level. However, these systems are not uniform across the nation and vary from state to state as the rules are laid out. If a Presidential system is to be adopted, these basic and most absolute units of democracy will have to be accommodated accordingly with the changing dynamics of Indian polity.

#### **5. The Case for the Presidential System**

In India, there have been many academicians and politicians who have been advocating for the adoption of a presidential form of government, with Bhanu Dhamija and Shashi Tharoor being the most prominent voices among them. During the launch event of the book “Why India Needs Presidential System” by Bhanu Dhamija, Shashi Tharoor, former Union Minister and Member of Parliament, remarked “*I happen to share Mr Shanta Kumar’s view that the Parliamentary system as we practised it for the last seventy years, has demonstrated some flaws and shortcomings, and it is therefore really the time to look at an alternative.*” He further highlights how Indian freedom fighters and leaders were reluctant to adopt the idea of presidential democracy compared to the Westminster Parliamentary democracy.

He remarked *“The reason for this is of course very clear. Very much like the nationalists of the 1770s, the Indian nationalists of the 1930s and 1940s were fighting for the rights of the Englishmen. They saw that the British had ruled us for almost 200 years, and created a great deal of respect for British superiority of arms and institutions. And so, the Indian leaders tended to think that the model to aspire to is the British model. If they could rule us, maybe we would do better if we ruled ourselves the way they ruled us. And so, the Westminster became the aspiration.”*

Tharoor highlights that the adoption of the Parliamentary system in India is owed more to the British-influenced notions of the power of Parliament and the significance of the Westminster system, rather than the merits or demerits of either of it. Shashi Tharoor and Bhanu Dhamija, however, disagree on the historicity of the events, as Bhanu Dhamija argues that Jawaharlal Nehru was responsible for spearheading the cause of the Parliamentary system, whereas Shashi Tharoor argues that this was the collective will of the Constituent Assembly and not the personal argument of any individual.

## **6. Secular Approach towards Legislature and Executive**

The line between the Legislature and the Executive is blurred in the Westminster System of Government. This can be attributed to the fact that they were effectively trying to create two organs of the government – the Crown and the Parliament. The Crown was supreme and had a divine right to rule, but the Parliament was sovereign too and enjoyed a popular mandate. The English Civil War and the subsequent trial and execution of Charles I were key events in the demarcation of the authority of the monarch and the Parliament. In this constant tussle of authority, the separation of the Executive and Legislative functions of the government was not a primary concern for the Parliamentarians. It was later, in the form of the deliberations of the American Constituent Assembly, that the need to secularise these two noble functions of government was discussed and decided upon. American nationalists were afraid of the concentration of power, as they witnessed as subjects of the British Crown. Alexander Hamilton and James Madison wrote about the need for separation of power in the Federalist Papers – *“In order to lay a due foundation for that separate and distinct exercise of the different powers of government, which to a certain extent is admitted on all hands to be essential to the preservation of liberty, it is evident that each department should have a will of its own; and consequently, should be so constituted...”*

In India, when a voter exercises his right to vote, he effectively is deciding upon two questions put forth to him – A) Who would represent your constituency best in the legislature? B) Who do you find best suited to form the government? Voters elect MPs and MLAs and they in turn form the government, providing scope for deviation of popular mandate by the elected representatives. Also, among these elected representatives are elected the head and members of government, which leaves a low degree of legislative function for them. The argument that takes shape is why should the voter answer two questions with a single vote. A secular approach towards the separation of Legislature and Executive would mean that the voters can put in two votes – one to decide who should represent their electoral constituency, and the second to decide who should form and run the government. These norms would be not just for the Union but also for the constituent States – providing a federal polity that distributes power not just vertically, but horizontally too.

## **7. Key Findings and Recommendations**

The following are the key findings of the research:

- The framers of the Constitution envisioned the Republic of India as a Parliamentary form of democracy due to its sheer size and magnitude of diversity; but also due to the influence and imprint the colonial rule left to them.
- The coalitional nature of electoral politics in India has resulted in the instability of the government at all levels.
- A presidential form of government can offer a more stable and responsible form of government, as compared to the parliamentary system.
- The presidential system as followed in the United States of America can be observed as a model of institutionalism, but cannot be mirrored in the Indian context.
- If instituted, any Presidential form of Government in India will be required to assimilate the history of its communal statute and the experiences of its Parliamentary past, along with the needs of the impending future, to devise the best executive and legislative practices.
- Rigid separation of the Legislature and the Executive as institutions secular to each other, may result in a more responsive democracy and institutional set-up.
- In order to establish true federal polity, horizontal, in addition to the vertical distribution of power and responsibility would have to be initiated.

## **8. Conclusion - Majestic March of the Elephant**

S. Narendra in his book 'India's Tipping Point' presents an interesting insider anecdote of the Indian government during the era of the 90s. Narendra served as the Principal Information Officer in P.V. Narasimha Rao's PMO and spearheaded the PR campaign for the 1991 economic reforms. There was a debate back then among policymakers about picking up a mascot for the advertisements attracting foreign direct investment in India. The tiger comes as a natural choice being the national animal of India, but the term 'Tiger Economies' was already in use in the context of the emerging Southeast Asian economies. At last, the good old Elephant was chosen as the mascot, despite several apprehensions and objections. It was explained that the gradual march of the Elephant is always majestic and sure-footed. This is how the Indian economy will prosper, majestically and assuredly.

The elephant as a symbol has been used by various people to support various narratives like Narendra did with the economy. But the mighty elephant can also be very well used as a symbol of India's majestic stride towards true democracy. Our actions have been very sure-footed, promising the best to those with faith in the Constitution, and even to those who do not. Also, our forge ahead has had a peculiar element of majesty and charm, originating from a popular non-violent struggle for independence. A possible transition to a presidential democracy from the parliamentary form could mean the effective realisation of this journey we have endured. Popular and political support for the same needs to be tested and seen.

## References

1. Tharoor, S. (2023, September 18). *Crafting a new chapter in parliamentary conduct*. The Hindu. <https://www.thehindu.com/opinion/lead/crafting-a-new-chapter-in-parliamentaryconduct/article67319134.ece>
2. Mansfield, H.C. (2024, September 06). *Presidential Immunity From Plato to Trump*. The Wall Street Journal. <https://presidentialsystem.org/2024/09/09/u-s-president-is-a-strong-executive-but-no-king/>
3. Madhav, R. (2023, September 09). *Constitution is not a rigid document*. The Indian Express. <https://presidentialsystem.org/2023/10/22/constitution-is-not-a-rigid-document-ram-madhav/>
4. Dhamija, B. (2015, October 15). *Why India Needs The Presidential System*. Harper Collins.
5. Dhamija, B. (2020, August 12). *Why a Presidential System makes sense*. The Indian Express. <https://indianexpress.com/article/opinion/why-a-presidential-system-makes-sense-6551935/>
6. Luxemburg Centre for Contemporary and Digital History. (1946, March 15). *Address given by Clement Attlee to the House of Commons*. Hamsard No. 420. [https://www.cvce.eu/content/publication/1999/1/1/1c712462-349f-43199b3bfadf8e198aad/publishable\\_en.pdf](https://www.cvce.eu/content/publication/1999/1/1/1c712462-349f-43199b3bfadf8e198aad/publishable_en.pdf)
7. Tharoor, S. (2007, December 16). *It's time to rethink the parliamentary system*. The Times of India. <https://timesofindia.indiatimes.com/shashi-tharoor/shashi-on-sunday/its-time-to-rethink-parliamentary-system/articleshow/2625159.cms>
8. Dhamija, B. (2020, November 04). *Why India should switch to a US-like Presidential System*. [Scroll.in](https://scroll.in/article/976252/why-india-should-switch-to-a-us-like-presidential-system). <https://scroll.in/article/976252/why-india-should-switch-to-a-us-like-presidential-system>
9. ATTLEE, Clement. [*Indian Policy. Memorandum by the Prime Minister*]. [en ligne]. Londres: Great Britain. Cabinet Office. 22-05-1947. C.P.(47)158. Consulté le 07-12-2024. Disponible à l'adresse <https://www.cvce.eu/s/c3>.

10. Puig, G. V. (2002). *Parliamentary versus Presidential Government*. AQ: Australian Quarterly, 74(5), 9–40. <http://www.jstor.org/stable/20638116>
11. Belliappa, C. M. (1967). *What Kind of Democracy in India? Case for the Presidential System*. Economic and Political Weekly, 2(36), 1649–1652. <http://www.jstor.org/stable/24477964>
12. Sen, S. R. (1993). *India's Political System: What Is to Be Done?* Economic and Political Weekly, 28(1/2), 27–34. <http://www.jstor.org/stable/4399275>
13. *Presidential Prime Minister*. (1985). Economic and Political Weekly, 20(42), 1759–1760. <http://www.jstor.org/stable/4374923>
14. PATHAK, D. N. (1958). *IS PARLIAMENTARY GOVERNMENT SUITABLE TO INDIA?* The Indian Journal of Political Science, 19(4), 335–342. <http://www.jstor.org/stable/42753634>
15. OZAKINCI, T. (2023). *The Impact of the Transformation from Parliamentary System to Presidential System on the Budgetary Process in Türkiye*. Journal of Civilisational Studies, 8(1), 1-17. <https://dergipark.org.tr/tr/download/article-file/3154235>
16. Toygür, I. and Kirişçi, K. (2019). *Turkey's new presidential system and a changing west*. Brookings. <https://www.brookings.edu/articles/turkeys-new-presidential-system-and-a-changing-west/>
17. Bisariya, S. (2023). *Transitions to Parliamentary System: Lessons Learned From Practice* - Discussion Paper. International IDEA. <https://www.idea.int/sites/default/files/2023-11/transitions-to-parliamentary-systems-lessons-learned-from-practice.pdf>
18. Thakur, R. (2020, September 26). *In Parliament's Defence: Parliamentary democracy usually trumps the presidential form of it*. The Times of India. <https://timesofindia.indiatimes.com/blogs/toi-edit-page/in-parliaments-defence-parliamentary-democracy-usually-trumps-the-presidential-form-of-it/>
19. Continental Congress. (1776, July 4). *Declaration of Independence: A Transcription*. National Archives. <https://www.archives.gov/founding-docs/declaration-transcript>
20. Bose, S. (2024, May 13). *The crisis of India's Parliamentary Democracy*. Down To Earth. <https://www.downtoearth.org.in/governance/the-crisis-of-india-s-parliamentary-democracy-96105>

20. IGNOU. (?). *Parliamentary Democracy in India*. E-Gyankosh. <https://egyankosh.ac.in/bitstream/123456789/70383/1/Block-2.pdf>
21. Viswanathan, T. K. (2012). *The Indian Parliament*. Lok Sabha Secretariat. [https://eparlib.nic.in/bitstream/123456789/68/1/The Indian Parliament\\_Eng.pdf](https://eparlib.nic.in/bitstream/123456789/68/1/The Indian Parliament_Eng.pdf)
22. Shankar, B. L. and Rodrigues, V. (2011). *Introduction: India's Parliamentary Democracy and its Critic*. Oxford Academic. <https://academic.oup.com/book/33072/chapter-abstract/281791320redirectedFrom=fulltext>
23. Sangama, P. A. (?). *Functioning of Parliamentary Democracy in India*. VIF India. <https://www.vifindia.org/sites/default/files/Functioning%20of%20Parliamentary%20Democracy%20in%20India.pdf>
24. DH Web Desk. (2024, April 12). What is a parliamentary democracy and how it differs from other types of democracy. Deccan Herald. [https://www.deccanherald.com/elections/india/explained-what-is-a-parliamentary-democracy-and-how-it-differs-from-other-types-of-democracy-2975718#google\\_vignette](https://www.deccanherald.com/elections/india/explained-what-is-a-parliamentary-democracy-and-how-it-differs-from-other-types-of-democracy-2975718#google_vignette)
25. Kapur, D. and Mehta, P. B. (2006). *The Indian Parliament as an Institution of Accountability*. United Nations Research Institute for Social Development. <https://casi.sas.upenn.edu/sites/default/files/bio/uploads/The%20Indian%20Parliament.pdf>
26. Singh, T. B. (1996). *Principle of Separation of Powers and Concentration of Authority*. JTRI Journal. Issue 4 & 5. <https://ijtr.nic.in/articles/art35.pdf>
27. National Assembly of France. (1789). *Declaration of the Rights of Man*. Yale Law School. [https://avalon.law.yale.edu/18th\\_century/rightsof.asp](https://avalon.law.yale.edu/18th_century/rightsof.asp)
28. Mackintosh, J.P. (1977). *The British Cabinet*. Stevens & Sons.

# Class Inequality and Educational Policies in India: A Sociological Study of Historical and Contemporary Disparities in Education

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## Abstract

Educational inequality in India is a persistent issue deeply embedded in the country's historical, social, and economic contexts. This paper conducts a sociological analysis of educational policies from the pre-industrial era to the present, highlighting how these policies have both reflected and shaped class disparities. During the pre-industrial period, informal and community-based education primarily served upper castes, leaving lower castes marginalized. The introduction of Western-style education during colonial rule helped entrench existing inequalities with a new educated elite.

Post-independence, policies such as the Kothari Commission Report (1964-66) and the National Policy on Education (1986) have been aimed at equity in education, but the results have been mixed. The Right to Education Act (2009) and Sarva Shiksha Abhiyan have focused more on access, but there have been problems with implementation and quality, especially for disadvantaged groups. Despite the higher enrollment rates, huge disparities in educational quality remain, especially between upper and lower castes. This paper argues that the eradication of these inequalities requires a holistic approach, considering socio-cultural contexts and addressing both access and quality. The recent National Education Policy (NEP) 2020 introduces reforms that are aimed at inclusivity and quality improvement but must be critically evaluated for effectiveness. Ultimately, this study emphasizes the need for sustained initiatives to foster an equitable educational system that genuinely serves all segments of society.

*Keywords : Educational Inequality, Class Structure, Sociological Analysis, Policy Impact, India*

## **1. Introduction**

Educational inequality is one of the most significant challenges to India, deeply rooted in the country's historical, social, and economic contexts. In this paper, the researcher tries to answer the following research question: How do educational policies in India promote class inequalities, especially when the new National Education Policy 2020 has been introduced recently? The NEP 2020 aims to create an inclusive and equitable educational structure; hence, it requires critical examination of its potential impact on current disparities.

Historically, the caste, class, gender, and geographical location have had their influence on access to education (White&Ruther, 2015). In the pre-industrial period, education was mostly informal and community-based, which involved significant inequalities favoring the upper castes while relegating the lower castes. The colonial period reinforced such disparities through the introduction of Western-style education, creating a new elite that was educated.

Post-independence initiatives include the Kothari Commission and the National Policy on Education, which focused on promoting equity. But their implementations have been inconsistent over time. Although policies such as the Right to Education Act and Sarva Shiksha Abhiyan have contributed to increased enrollment rates, they have not addressed educational quality or the structural problems that marginalized groups face in society. Children from the poorer classes experience higher dropout rates and poor academic performances due to fewer resources available to them.

This paper will trace the evolution of educational policies across various historical periods and how they have reflected and contributed to class inequalities over time. By referring to sociological studies, historical documents, and contemporary research, it attempts to critically outline the interplay between educational policy and class structure in India. It underlines, therefore, the need for targeted interventions that consider socio-economic factors and power dynamics to bring about an equitable educational system for all.

## **2. Overview of Educational Inequality and Class Structure in India**

Education in India accurately reflects the class structure. Access to education throughout Indian history has been majorly determined by caste and economic status—heralding the creation of gross inequalities in education across classes (GS, 2024). Perpetuation of these inequalities in present-day India demands a rigorous sociological probing of educational policies.



### **3. Pre-Industrial Education Systems and Class Dynamics**

The system of education in pre-industrial India was all but informal and community-based, with glaring inequalities based on castes and classes. Traditional systems of education, such as the gurukul, pathshala, and madrassa systems, mainly catered to upper-caste people; in fact, lower castes have remained considerably outside the pale of formal education (Sankhdher, 1999). The Varna system further exacerbates the inequality by creating obstacles for the marginalized. With the great access provided to upper castes, especially the Brahmins, there was an actual denial of admission to the lower castes and other groups who were considered relatively low.

#### **3.1 Traditional Education Systems in Pre-Industrial India**

Before the advent of Western-style education under colonial rule, India had well-established systems of traditional learning. The gurukul system prevailed in Hindu society and consisted of a residential school with students living with their teacher (guru) for education in such diverse subjects as the Vedas, philosophy, and the arts. On the other hand, the pathshala represented a somewhat informal system of elementary education normally attached to temples or mosques, by which students learned reading, writing, and elementary arithmetic (Azad, 2024).

#### **3.2 Access to Education Based on Caste and Class Status**

Access to the traditional education systems was governed more or less by caste and class status (Kumar, 2021). With the greatest access to formal education allowed to the upper castes, especially the Brahmins, there was an actual denial of admission to the lower castes and other groups who were considered relatively low. This essentially meant that a system of education-based and caste-based hierarchy created very little mobility for those not born into the upper echelons of society (Deshpande, 2012).

#### **3.3 Role of Religion and Social Status in Determining Educational Opportunities**

Educational opportunities during the period of pre-industrial India were mostly caught up in a myriad of factors combining the effect of religion and social status. The Varna system divided this society into four main Groups- Brahmins, the priests and scholars; Kshatriyas, the rulers and warriors; Vaishyas, the merchants and farmers; and Shudras, laborers and servants. Such a hierarchical structure predetermined one's occupation and thus one's access to education, along with all ensuing social privileges. Access to formal education was the highest among Brahmins and Kshatriyas, although for Shudras and those 'outside the Varna', like Dalits, these opportunities were very few. Opportunities for education in the case of the Islamic madrasas were mainly confined to elites among Muslims. These factors institutionalized class and caste-based educational inequalities prevailing well into the colonial period (SETHI, 2015).

#### **4. Impact of Industrialization on Educational Access and Class Structure**

The advent of industrialization in the 19th century set a trend in terms of changing India's educational scene and its effect on the Indian education system. It introduced policies typical of colonial rule, ushering in Western education to Asia and creating a new class of educated elites with access to modern education and consequently better employment opportunities, thereby exacerbating existing inequalities. Industrialization created economic opportunities that favored those with access to education, further entrenching class divisions.

##### **4.1 Expansion of Western-Style Education Under Colonial Rule**

The British colonial regime initiated western-style education into India mainly to suit their administrative and economic interests. Institutions like the Fort William College in Calcutta, established in 1800, and the Calcutta Madrasa, established in 1781, marked the formal beginning of Western education in India. Funds for the "revival and promotion of literature" and the "encouragement of the learned natives of India" were provided by the Charter Act of 1813, expanding Western education (iZGi, 2014).

##### **4.2 Emergence of an English-Educated Elite Class**

Western education gave birth to a new class of English-educated Indians, mostly from the upper castes and classes. This educated elite class acted as an interface between the colonial masters and the masses in the task of administering British Empire (Whitehead, 2005). The English language thus became a symbol of power, social status, and prestige opposite to the mass population not able to access that education (Torri, 2017).

##### **4.3 Widening Gap Between Upper and Lower Classes in Educational Attainment**

The expansion of education in the Western style during the colonial period accentuated pre-existing inequalities in educational attainment. The upper castes and classes now had the resources and social capital to access this new form of education and so could entrench themselves further. In contrast, the bulk of lower castes and classes, much more so those from rural areas, continued to suffer a lot of barriers in accessing Western education, thus a continued chasm between these two strata of society (Chauhan, 2008).

## **5. Post-Independence Policy Shifts and Class Inequalities**

The realization by the government, soon after the country's independence in 1947, that education had a key role in ensuring social justice and equality, was incorporated into the Directive Principles of State Policy. These principles were envisioned to provide the framework necessary for the universalization of education and mitigating class inequalities. The Kothari Commission, 1964-66, and the National Policy on Education, 1986, became prominent in bringing about educational reforms with a view to removing these disparities.

### **5.1 Directive Principles of State Policy and the Goal of Universal Education**

The Directive Principles of State Policy, spelt out in Article 45 of the Indian Constitution, laid down an obligation upon the State to provide free and compulsory education for all children up to the age of 14 (Rao, 2008). It brought into clear relief the constitutional commitment to education as a basic right and an instrument of social equality. However, the translation of this universal education into practice has been slow due to unsupportive infrastructure in the form of inadequate teaching resources and strong socio-economic barriers for citizens who are already marginalized. Although evidence might point toward the fact that enrollment rates have considerably risen, disparities in educational attainment and quality still subsist among the lower castes and rural areas.

### **5.2 Kothari Commission (1964-66) and Its Recommendations for Equitable Education**

The Kothari Commission, appointed by the Government of India, carried out a comprehensive review of the educational system and made many basic recommendations for the promotion of equality. It called for a national system of education that puts emphasis on access, quality, and relevance. It suggested that a 10+2+3 educational structure be adopted so as to ensure that education is not only accessible but also relevant to the needs of the economy (Development, 2020). The policy put the emphasis on vocational education and the need to reflect, in curriculum formulation, the diverse cultural and social realities of India (Mishra, 2019). Notwithstanding these recommendations, its implementation has been very inconsistent.

### **5.3 National Policy on Education (1986) and Its Focus on Access and Quality**

The National Policy on Education (1986) also built up on the recommendations of the Kothari Commission, aiming at providing an integrated approach to education that took into concern the questions of access and quality. It specifically focussed on the fact that there was a dire need for inclusive education, particularly for disadvantaged groups. This policy also aimed at increasing the participation of women and Scheduled Castes and Scheduled Tribes in educational opportunities (Bhola, 1988); (Kalyanpur, 2008). The policy laid the ground

for big-ticket reforms; however, very disproportionate progress across geographies and among various social groups has been made. It is supported by research that despite increased enrollment, quality of education still remains a huge concern, wherein disparities in learning outcomes between urban and rural students, as well as among different caste groups, exist (Jain&Prasad, 2018); (Bandyopadhyay et al ., 2021).

#### **5.4 Recent Policies and Measures to Reduce Educational Disparities**

The Government of India has, in the past couple of years, been framing policies aimed at reducing educational inequities and promoting education for all. Most important among these are the Right to Education Act of 2009 and Sarva Shiksha Abhiyan, both aimed at enhanced access to education among children, especially from the marginalized sections of society.

#### **5.5 Right to Education Act (2009) and Its Impact on Enrollment and Retention**

The Right to Education Act was a pathbreaking legislation that made education a fundamental right for all children in the age group of 6 to 14 years. The Act provided for free and compulsory education and laid down that private schools should reserve a certain percentage of seats for economically disadvantaged students (Sinha&Verma, 2014). Preliminary reports have suggested that there is a considerable rise in enrollment rates since the enactment of the RTE Act, especially in the case of deprived sections of society. There are still some problems regarding retention and quality of education. Reports are coming in that though enrollments have increased, dropout rates for students from Scheduled Castes and those from rural areas continue to be high due to socio-economic pressures, infrastructural problems, and lack of support systems (Shah&Steinberg, 2019).

#### **5.6 Sarva Shiksha Abhiyan and Other Initiatives for Universalization of Education**

Sarva Shiksha Abhiyan, launched in 2001, had the objective of universalization of elementary education through a community-driven approach. The program focuses on infrastructural development of schools, pre- and in-service teacher education, and improvement in children's learning achievements (Srivastava et al ., 2019). Though it succeeded in achieving enrollment targets, it has been criticized for not being able to effectively address quality differentials (Yadav et al ., 2018). On the other hand, research shows that though there has been increased access to education, the quality of education, especially in rural areas and amongst disadvantaged groups, has remained a far cry. Many schools do not have basic facilities and properly trained teachers, which adversely affects their functioning (Pahwa&Indira, 2021); (Parbin, 2022).

### **5.7 Challenges in Implementation and Persistent Disparities Along Class Lines**

Despite all the ambitious objectives of recent educational policies, there are still serious problems relating to their operational aspects. The problems of inadequate funding, bureaucratic inefficiencies and socio-cultural barriers persist (Chaudhary, 2023). Moreover, it is at the intersection of caste, class and gender that educational inequalities have multiplier effects for groups at a disadvantage. Available research substantiates the fact that though policies have been enrichment-oriented, the deep-seated structural barriers within the socio-economic fabric of India have continued unabated to perpetuate inequalities in access and outcomes in education (Nawani&Jain, 2010); (Velaskar, 2010). While post-independence policies forms the base for policies aimed at promoting equity in education, the persistence of these challenges calls for a more holistic approach to address questions of access and quality, creating opportunities for every child to succeed in school regardless of background.

## **6. Evaluation of Policy Effectiveness in Reducing Class-Based Inequalities**

The effectiveness of Indian educational policies towards reducing class-based inequalities has been highly debated and researched. Progress has been made on access and enrollment, but the disparity in quality education between various social classes is still pretty significant. This analysis takes Pierre Bourdieu's Capital Theory as a consistent framework to explore how educational policies could perpetuate class inequalities while identifying the structural barriers which prevent equitable educational outcomes.

### **6.1 Progress Made in Improving Access and Enrollment**

Since the introduction of key education policies, notably the Right to Education Act in 2009 and Sarva Shiksha Abhiyan, the rate of enrollment in the most diverse categories has improved spectacularly, with children belonging to Scheduled Castes (SC) and Scheduled Tribes (ST) at its forefront. According to the figures, enrollment of SC and ST children increased from roughly 70% at the beginning of the 2000s to more than 90% over the last few years (Deka, 2015); (Gupta, 2024); (Garg, 2024). However, in terms of retention rates, these lower castes have still lags behind the upper castes (Assari&Zare, 2024). It means that a policy should be enacted not only for enrollment but also to sustain students till the completion of their qualification.

Bourdieu's concept of cultural capital is crucial here; children from lower socio-economic backgrounds often lack the cultural resources—such as familiarity with academic norms and language—that facilitate success in educational settings. This lack of cultural capital can lead to lower retention rates, as students may feel alienated or unsupported within the educational system.

## **6.2 Continuing Gaps in Quality of Education Between Classes**

Despite the increase in enrolment, there is much inequality in the quality of learning experienced by students from the various social classes. Evidence suggests that students from more marginalized socio-economic backgrounds are more often taught in under-resourced schools with poor infrastructure and with poorly trained teachers (Martins&Wangenheim, 2024). A study further found that even though enrolments of SC and ST have increased, their performance in standardized tests remains significantly lower than that of upper-caste students (Dalwai&Singh, 2024). Moreover, Bourdieu's theory illuminates the way in which schools become sites of social reproduction, whereby dominant cultural values are emphasized over the more marginalized cultures. This, in addition to inequalities based on educational quality between cities and rural areas, makes matters even worse. NAS results repeatedly prove that the students coming from rural areas have a relatively lower grade than those students who hail from urban cities in subjects like mathematics and reading. This indicates that simply increasing access does not guarantee equitable educational outcomes (Iftikhar, 2022).

## **6.3 Limitations of Policies in Addressing Structural Barriers**

It is apparent that educational policies cannot really tackle structural barriers in class-based inequalities. While affirmative action policies, such as reservations in higher education, are instituted to make the playing field more level, they hardly take into account socio-economic deterrents to educational attainment. Studies reveal that the persistent problems of poverty, lack of education of parents, and social stigmatization continue to prevent the educational development of the marginalized.

Furthermore, bureaucratic inefficiencies and corruption often impede the proper operation of educational schemes at both central and state levels. School infrastructure and teacher training improvement funds often do not arrive at their destinations, hence the policy rhetoric and the actual practice. Bourdieu's model explains how this systemic factor perpetuates class inequality by keeping the status quo that works to the advantage of those who already have cultural capital. (Smith, 2010); (Walters, 2019).

Although significant developments have been made regarding educational access and enrollment among marginalized groups in India, substantial quality gaps and fixed structural barriers continue to undermine the effectiveness of educational policies aimed at reducing class-based inequalities. Employing Bourdieu's Capital Theory throughout this analysis highlights the critical role that cultural capital plays in shaping educational experiences and outcomes. To foster a more equitable educational system, it is essential for policymakers to address both access and quality while recognizing the diverse forms of capital that influence student success.

## 7. Conclusion

This paper focused on the intricate relationship between education policy and class inequality in India, examining how historical and contemporary policies have shaped educational disparities.

While India has made considerable strides in terms of access and enrollment of marginalized groups, there still remain substantial quality gaps and entrenched structural barriers that compromise the effectiveness of educational policies for reducing class-based inequalities. This analysis, using Bourdieu's Capital Theory, illustrates the role that cultural capital plays in shaping educational experiences and outcomes.

While reviewing different education policies, such as the Right to Education Act, Sarva Shiksha Abhiyan, and affirmative action measures, it is important to understand that these policies should not only be considered in isolation but also in relation to each other. Understanding how these policies interact within the broader, evolving political and economic landscape is crucial for a comprehensive analysis. Hence, for example, the overall implications of NEP 2020 might be better understood when the document is read in a historical context with previous measures and current socio-economic realities.

This will call for a more balanced access and quality approach in education, which recognizes that various forms of capital are crucial in shaping the prospects of students. Targeted interventions, focusing on socio-economic factors and taking into account the interconnectedness of educational policies, would be needed to break these barriers perpetuating inequality within India's educational landscape. Only then can we genuinely hope for equity in education for all.

## References

1. Assari&Zare. (2024). *Caste-based Diminished Returns of Educational Attainment on Wealth Accumulation in India*. Open Journal of Educational Research, 2-3.
2. Azad, Y. (2024). *The 21st Century Education System in India: Barriers to Overcome in Learning. Transforming Indian education in the 21st century: challenges, innovation, and solutions* | 1, 1-2.
3. Bandyopadhyay et al . (2021). *Exploring Rural–Urban Education Divide in India*. Bridging the Education Divide Using Social Technologies, 165-166.
4. Bhola, H. S. (1988). *A Policy Analysis of Adult Literacy Education in India: Across the Two National Policy Reviews of 1968 and 1986*. Retrieved from Annual Conference of the Comparative and International Education Society (32nd, Atlanta, GA, March 17-20, 1988).: <https://files.eric.ed.gov/fulltext/ED290909.pdf>

5. Chaudhary, H. C. (2023). *MAJOR CHALLENGES OF EDUCATION SYSTEM IN INDIA AND EFFORTS FOR SOLUTIONS*. International Journal of Emerging Knowledge Studies, 268-269
6. Chauhan, C. P. (2008). *Education and caste in India*. Asia Pacific Journal of Education, 217-218
7. Dalwai&Singh. (2024). *Caste in education: promises and reality*. Political Science and Public Policy 2024, 298-299
8. Deka, B. (2015). *RIGHT TO EDUCATION AND THE GIRL CHILD: A STUDY OF THE ROLE OF THE SARVA SIKSHA ABHIYAN IN DARRANG DISTRICT OF ASSAM*. Gauhati.
9. Deshpande, S. (2012). *Inclusion versus excellence: Caste and the framing of fair access in Indian higher education*. South African Review of Sociology , 127-129.
10. Development, C. f. (2020). *Kothari Commission Report (1964–66)*. Quarterly Newsletter of Council for Social Development , 2-3.
11. Garg, M. (2024). *Learning Crisis at Elementary School Level in India: Need for Systemic Interventions*. Asian Journal of Education and Social Studies, 85-86.
12. GS, S. B. (2024). *Unequal Educational Opportunities and Challenges in Online Learning during the Pandemic in India*. Review of Development and Change, 1-2.
13. Gupta, R. (2024). *AN ANALYSIS OF CHANGING TRENDS IN GROSS ENROLLMENT RATIO AT PRIMARY & UPPER PRIMARY LEVELS IN JHARKHAND*. International Journal Of Creative Research Thoughts, 334-335.
14. Iftikhar, F. (2022, May 26). *NAS 2021 highlights progressive decline in learning levels of school students*. Retrieved from [www.hindustantimes.com: https://www.hindustantimes.com/india-news/nas-2021-highlights-progressive-decline-in-learning-levels-of-school-students-101653504148459.html](https://www.hindustantimes.com/india-news/nas-2021-highlights-progressive-decline-in-learning-levels-of-school-students-101653504148459.html)
15. iZGi, M. C. (2014). *British Colonial Education Policy: The Orientalist- Evangelist Controversy in India (1780-1835)*. Turkey, Turkey.
16. Jain&Prasad. (2018). *Quality of Secondary Education in India Concepts, Indicators, and Measurement*. Singapore: Springer.
17. Kalyanpur, M. (2008). *Equality, quality and quantity: challenges in inclusive education policy and service provision in India*. International Journal of Inclusive Education , 243-244.



18. Kumar, N. (2021). *The History of Education in South Asia*. Handbook of Education Systems in South Asia, 259-260.
19. Martins&Wangenheim. (2024). Martins, R. M., & Gresse von Wangenheim, C. (2024). *Teaching Computing to Middle and High School Students from a Low Socio-Economic Status Background: A Systematic Literature Review*. Informatics in Education, 23(1), 179-222. . INFORMATICS IN EDUCATION, 179.
20. Mishra, A. (2019). *Vocationalisation of education: Improving productivity and employability through skills development*. International Journal for Environmental Rehabilitation and Conservation , 44-45.
21. Nawani&Jain. (2010). Nawani, D., & Jain, M. (2010). *Learners and learning in India: History, perspectives, and contexts*. In Handbook of Asian education (pp. 503-528). Routledge. Routledge.
22. Pahwa&Indira. (2021). *Performance evaluation of Sarva Shiksha Abhiyan (SSA): A comparative study of two states in India*. International Journal of Research in Social Sciences, 86-87.
23. Parbin, R. (2022). *Role of Sarva Shiksha Abhiyan in Inclusive Education of Assam*. Journal of Positive School Psychology.
24. Rao, P. (2008). *FUNDAMENTAL RIGHT TO EDUCATION*. Journal of the Indian Law Institute, 585-586.
25. Sankhdher, B. (1999). *Education System on the Eve of World War I, 1914*. New Delhi: Deep and Deep Publication.
26. SETHI, C. (2015). *Indian education system in ancient India*. International Research journal of Management Sociology & Humanities, 350.
27. Shah&Steinberg. (2019). *The right to education act: Trends in enrollment, test scores, and school quality*. AEA Papers and Proceedings, 232-233.
28. Sinha&Verma. (2014). *An exploratory study on the feasibility and challenges of implementation of Right to Education Act (RTE)*. The International Journal of Indian Psychology , 162-163.
29. Smith, L. (2010). *Psychology, poverty, and the end of social exclusion*. Miami: Teachers College Press.
30. Srivastava et al . (2019). *Private Sector Research Study: Sarva Shiksha Abhiyan*. London: The Department for International Development (DFID) UK-India.

31. Torri, M. (2017). *Westernized Middle Class': Intellectuals and Society in Late Colonial India*. The Congress and Indian Nationalism, 300.
32. Velaskar, P. (2010). *Quality and inequality in Indian education: Some critical policy concerns*. Sage.
33. Walters, V. (2019). *Parenting from the 'Polluted' Margins: Stigma, Education and Social (Im)Mobility for the Children of India's Out-Casted Sanitation Workers*. Journal of South Asian Studies, 52-53.
34. White&Ruther. (2015). *Educational Inequality in India: An Analysis of Gender Differences in Reading and Mathematics*. Indian Human Development Survey, 2-3.
35. Whitehead, C. (2005). *The historiography of British imperial education policy, Part I: India*. Journal of the History of Education Society, 315-316.
36. Yadav et al . (2018). *Sarva Shiksha Abhiyan: Achievements, Problems and Future Prospects: A Comparative Analysis of Some Indian States*. Reflecting on India's Development, 175-176.

# CITIES: Demystifying & Tracing Urban Governance in India

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## Abstract

Cities in India have been posited in the civil administration of multiple agencies since independence, making the city jurisdiction endowed with paltry inter-institutional synchronisation and sporadically, confrontationist attitudes. Against this backdrop, the paper seeks to unravel and expound the complicated nuances of modern urban governance in India, while drawing on the enriching repository of urban planning flowing from ancient and medieval India namely, the Harappan Civilisation, the Kautilyan wisdom and the standard of architecture in Mughal India as a pedagogic paradigm. It highlights the intricacies of “the 74th Constitutional Amendment Act (CAA)” and brings forth the degeneration set in Urban Local Bodies in the twentieth century. This paper then delves into the granular aspects of urban local governance in Uttar Pradesh, the largest state, in terms of population, in India and throws light on the entanglement of multiple parastatal agencies in the discharge of civic services in UP at the expense of strategic and organisational interests of Urban Local Bodies (ULBs). Following this, the paper delineates bottlenecks in urban governance in India along with recommendations while reinforcing the prescriptions with corroboratory illustrations or citations. Finally, the paper submits a comprehensive audit report, presenting key analytical findings that shore up the argument of vitalising Urban Local Bodies and closes with a forward-looking conclusion.

*Keywords: 74th CAA, ULBs, multiple agencies, Municipal Corporations, Urban governance, Urbanisation, decentralisation*

## **1. Introduction**

Urbanisation has become one of the key drivers of economic growth amidst the overhaul in the global fiscal arena. Statutory municipal bodies are the cornerstone of urban centres in India as these bodies currently constitute the third tier of governance. Urban local government, à la mode traces its institutional provenance to British rule, during which the maiden Municipal Corporation came up in Madras in 1688, followed by the inception of similar corporations in Bombay (presently, Mumbai) and Calcutta (presently, Kolkata) in 1762.

## **2. Tradition of Urban Governance**

### **2.1 Harrappan Civilisation: an Indigenous Guiding Light**

The conception of Urban governance, both in theory and praxis, is historically affiliated to the Indian subcontinent. Excavated remnants of Indus Valley Civilisation augur the presence of a mature system of urban governance. What distinguished Harappan cities from other civilisations was their meticulous drainage system. The roads and streets in Mohenjodaro were laid out along an approximate “grid” pattern, intersecting at right angles. It seems that streets with drains were laid out first and then houses built along them, indicating the precedence of town planning over construction in those days. Ernest John Henry Mackay, a famed British archaeologist from Bristol, noted “It is certainly the most complete ancient system as yet discovered” in the context of the extensive drainage system of Harappan cities. Bricks used for the construction of Harappan cities also manifested signs of planning as “the bricks were of a standardised ratio where the length and breadth were four times and twice the height respectively”. In addition to this, the “spaces were specified for the elite class and masses” (Danino, 2008).

### **2.2 Kautilyan Wisdom on Urbanisation**

Kautilya in his magnum opus, Arthashastra expounded the role of Nagar Adhyaksh or Nagrik, the officer entrusted with the maintenance of municipal law and order in the city. He envisioned local bodies to be free from regal interference. Kautilya’s intellectual products shed light on urban planning principles for early Indian cities. He writes about a hierarchy of urban centres and administrative decisions. These classifications were mainly contingent on the size of the population and were influenced by resources available in the region and the opportunities for economic development.

Kautilya in his profound sagacity, exhorted migration to the countryside to avert overcrowding in cities (Deshkar 2010) . This policy might have been intended to ensure the panoramic development of all the regions of the country. As regards land use, Kautilya exalted the paramountcy of land to olympic altitude. Depending upon the productivity of the soil, he mentioned apropos applications for such lands. However, to tap into the kinetic and potential value of the land, Kautilya ennobles human effort over the qualitative aptitude of land. ‘The value of land is what man makes out of it’ (ibid.). He also advocated the “formation of densely populated places either on new sites or on old ruins thus building up human capital and shoring up wealth generation through trade”. He floated “measures to induce foreigners to immigrate to the kingdom” for cultivating human assets (ibid.)

### **2.3 State of Urban Governance in Mughal India**

Town planning also pervaded the mercurial Mughal India. Shahjahan, was an ardent advocate of urban planning, as Muhammad Salih Kamboh, a contemporary historian avers that, in the course of his regular court ceremonies, “nobles and princes placed their plans for building complexes and lawns” before Emperor Shahjahan, and in the evening he used to take stock of the designs of “buildings which were under construction” (Salih, G. Yazdani) .Shahjahan founded the city of Shahjahanabad in Delhi. Its city style emulated the aristocratic retinue of the ruling elite. Chandni Chowk of Delhi epitomises the architectural grandeur of Medieval India. “Long before Paris set the fashion (1670 AD) of having the principal streets of the city flanked with avenues, and boulevards became the attractive features of the modern towns in modern Europe, Shahjahan had planned in 1638 a beautiful boulevard in the Chandni Chowk of Delhi” (ibid.). Bazaars were the face of Mughal cities, brimming with trade and commerce. These bazaars were replete with commercial as well as social connotations. Symmetric architecture and dedicated space for specific genres of trade and commerce enhanced the ordered influx and outflux of the crowd. These places served as places of social reunion where people hailing from diverse social roots interacted and exchanged ideas, adding to the fiscal aspect of these marketplaces. For instance, in Delhi, the ingenious layout of the market facilitated its expansion to cater to the demands of the rising population (Muraqqa-e-Dilli). The office of Kotwal in the Mughal era was compendiously accredited with the rights and duties of the modern offices of Municipal Commissioner and City Magistrate (Aggarwal, 2023).

## **2.4 British Brainchild of Statutory Local Bodies**

Samuel Laing, a member of the Hon'ble Viceroy's Council advanced the idea of "self-efficient local government in the Budget Speech of 1861-62". "In 1870, Lord Mayo, in his resolution advocated for the idea of decentralised administration" (Banerjee, 2021) . In the light of same, various municipal acts were enacted.

In 1882, Lord Ripon, the father of municipal self-governance in India, unveiled his resolution where he advocated for an extensive web of "local self-government institutions, reduction of the official element to not more than a third of the total membership, a large measure of financial decentralisation, adoption of election as a means of constituting local bodies, etc." (ibid.) .Ripon's resolution was hailed as the Magna Carta of local self government. This resolution enunciated "adequate resources which are local in nature and are suited for local control, should be provided to local bodies". "Consequent to the resolution, the Bombay City Municipal Corporation Act came into being, enabling the Bombay City Council to be constituted mostly by elected and nominated personnel" (ibid.)

## **2.5 Picture of Urban Governance in Independent India**

Since then, the structural functional anatomy of urban bodies maintained the *status quo* notwithstanding the proliferation of urban centres and further complications of urban problems. India's Independence in 1947 and the enforcement of the Constitution of India in 1950 enlisted "urban affairs" into the "state list". The rich prowess of urban governance bequeathed to us began to degenerate in the 20th century on account of the shifting sands in the country's political landscape. ULBs, deriving funds from state governments, became toothless and dysfunctional in sharp contrast to Gandhi's idea of local self-governance. The growing urbanisation starkly juxtaposed with debilitating urban local governance impelled the union government to enact the 74th constitutional amendment in 1992 which administered the remedy of constitutional status to frail and feeble ULBs, plagued by gross negligence and weak institutional structure.

The 74th CAA mandated the transfer of 18 functions listed in the 12th schedule of the Constitution to ULBs by the states besides, prescribing some institutional reforms to be undertaken by state governments to provide a fillip to urban local governance. However, various states did not abide by the directive of the 74th CAA. "By the year 2013, only 11 out of 31 states/UTs transferred all 18 functions to ULBs" (Banerjee, 2021).

Surprisingly, “the states of Arunachal Pradesh, Jammu and Kashmir, and Meghalaya did not transfer a single function to ULBs” (ibid.) This ensued in a generation of disparities in urban local governance across the Indian territory. “The primary objective of the 74th CAA was to invigorate democratic ideals at the grassroots level through urban local governments, and the secondary aim was to raise the level of participation of elected representatives of urban citizens in the governance of the cities” (ibid.). The 74th Constitutional Amendment advanced the following reforms to aggrandize municipal governance and public participation in urban local governance:

- “Constitution of municipal bodies for five years through universal adult franchise for each statutory urban body of the country. If a municipal body was dissolved before the completion of its term then a new municipal election has to be conducted within a span of 6 months from the date of dissolution(Article 243 U)” (ibid.).
- “There must be a State Election Commission (SEC) in each state to ensure the regular elections for ULBs in the respective state (Article 243 K)” (ibid.).
- “No less than one-third of seats in the municipal bodies will be reserved for women candidates. Whereas for SC and ST candidates seats will be reserved in a proportion of their population in the respective urban body (Article 243 T)”(ibid.).
- “Based on the population size, revenue structure and economic status, statutory urban bodies of the country can be placed under three different categories, such as Municipal Corporation, Municipal Council and Nagar Panchayat or Town Area Committees (Article 243 Q)” (ibid.).
- “The Governor of every State has been given the responsibility to constitute a State Finance Commission for a tenure of 5 years (Article 243Y) to review the financial condition of ULBs”(ibid.).
- “For every district and metropolitan region, a District Planning Committee (Article 243 ZD) and a Metropolitan Planning Committee (Article 243 ZE) have to be constituted, with the rationale of preparing developmental plans for their respective area of interest”(ibid.).
- “Article 243W of the Constitution requires the state laws to equip the municipal bodies with such powers and authority as may be necessary to enable them to function as the institutions of self-government. The 12th Schedule has been attached to the Constitution that provides recommendations to the states regarding the transfer of 18 mandatory functions to ULBs, in order to increase the capacity of municipal bodies to function as self-efficient governance units”(ibid.).

### **3. Case Study: A Ringside view of Functional Fitness of ULBs in Uttar Pradesh**

Given the context, it becomes seminal to meticulously examine the various facets of urban governance in Uttar Pradesh (“the largest state in terms of population”) to understand how the state machinery deals with the day-to-day affairs of the largest population in the country. Municipal Corporations are the primary civic service provision agencies in cities that have a population greater than 3 lakhs followed by Municipal Councils for cities having a population ranging from approx. 50 thousand – 3 lakhs and then come the Town Area Committees/Nagar Panchayats for serving a population of approx. 10 thousand – 50 thousand. An overview of the functional health of ULBs vis-à-vis mandatory transfer of 18 functions, as mentioned in the 12th schedule paints a disgruntling picture of civic bodies in UP.

“Urban and town planning (1st function) and Regulation of land use and construction of buildings (2nd function)” rest with the Department of Housing and Town Planning in UP in lieu of ULBs. “Planning for social and economic development (3) and Roads and Bridges (4)” entails multiple stakeholders including various departments of the state government. “Water supply for domestic, industrial and commercial purposes (5)” is carried out by ULBs.

“Public health, sanitation conservancy and solid waste management function (6) involves both ULBs and state health department, with sanitation conservancy and solid waste management pertaining to the functional domain of ULBs”.

“Fire services (7)” in UP fall under the jurisdiction of the Department of Home Affairs.” Urban forestry, protection of the environment and promotion of ecological aspects (8)” are collaboratively looked after by the forest department and ULBs. “The function of safeguarding the interests of weaker sections of society, including the handicapped and mentally retarded (9)” is performed by multiple departments of state governments which may sporadically include ULBs. “Slum improvement and upgradation (10) and Urban poverty alleviation (11)” are assigned to District Urban Development Authorities (DUDA) which report to District Collectors in accord with ULBs. “The functions of the Provision of urban amenities and facilities such as parks, gardens, and playgrounds (12)” and “the Promotion of cultural, educational and aesthetic aspects (13)” are discharged by the Department of Housing and Town Planning and ULBs in concert with each other. “ULBs minister to Burials and burial grounds; cremations, cremation grounds and electric crematoriums” (14). “State police are responsible for the prevention of cruelty to animals (15) while ULBs are concerned with the management of cattle pounds (15). Functions from 16 to 18 rest with ULBs”.

Owing to the interplay of various parastatal agencies in the discharge of functions, people often deem ULBs as adjunct bodies to district administrations Municipal Corporations in UP are governed by the **UTTAR PRADESH MUNICIPAL CORPORATION ACT, 1959**.



Municipal Corporations in Uttar Pradesh are vital statutory local bodies in large cities, which are meant to dispense a range of civic services to common citizens. At present, there are 17 Municipal Corporations in Uttar Pradesh. All executive powers are cardinally vested in the position of Commissioner of Municipal Corporation while Mayor serves as the constitutional chief of civic bodies.

Municipal Councils and Town Area Committees/ Nagar Panchayats function in compliance with the **UTTAR PRADESH NAGAR PALIKA ADHINYAM, 1916**. Chairman (elected) and Executive Officers sourced from allied state civil services jointly exercise financial and administrative control over both Municipal Councils and Town Area Committees/ Nagar Panchayats. As per the data furnished by the State Urban Development Department, there are 200 Municipalities and 545 Town Area Sources of finances in ULBs.

ULBs receive funds mainly from the “Government of India and the Government of Uttar Pradesh”. ULBs are provided funds by the central government through 15th Finance Commission grants, SBM, AMRUT, Smart City Mission, PMAY, NULM and different central schemes like Namami Gange etc. State government dispenses funds to ULBs through State Finance Commission grants, State Smart City Mission, CM-NSY, CM-GRIDS, CM-VNY, Kanha Goshala, Antyeshti Sthal Vikas Yojna, urban drainage schemes etc. and state shares in different central schemes. In addition to deriving funds from the Government of UP and the Government of India, ULBs generate their revenue through taxation, user charges and fees on different services like advertising, parking, mutation fees, fees on different kind of licenses, door-to-door waste collection charges, rental incomes etc.

Santosh Sharma (IAS), Commissioner of Ayodhya Municipal Corporation notes, “Now, Municipal Corporations are evolving to respond to changing needs of urban populace. Missions like AMRUT, PMAY, CENTRAL SMART CITY MISSION and SWACHH BHARAT MISSION are changing the face of Municipal Corporations. In state of UP, various initiatives are being taken by state government to enhance the ease of living of urban citizenry through multiple schemes such as State Smart City Mission (for those corporations who are not registered in Central Smart City Mission), CMNSY (for new areas acceded to the territorial jurisdiction of Corporations), CMGRID (incentive-based scheme for providing positive reinforcement to Corporations), CMVNY (an incentive-driven scheme for strengthening the ULBs), and UPVAN (for enhancing greeneries and fulfilling oxygen demand of cities)etc. The state government is proactively introducing IT in Urban Governance. We are moving towards paperless offices.”

Sharma is a distinguished IAS officer in UP, who has been associated with urban governance for the last 9 years and is currently one of the senior Commissioners of Municipal Corporations in the state. He is currently also the inaugural CEO of Shri Ayodhya Ji Teerth Vikas Parishad, a key state body chaired by CM Yogi Adityanath, which has been established to facilitate the holistic progress of the Ayodhya Region.

#### 4. Roadblocks in Urban Governance & Recommendations

State governments bankroll dependent ULBs as the sun endows the non-luminous moon with its resplendence. The dismal performance of many ULBs can be attributed to the recalcitrance of state governments to empower ULBs. State governments have tacitly devised ways to subvert the stature of ULBs by allotting functions of ULBs to other agencies. For example, “The Tirupati Urban Development Authority was founded by the Government of erstwhile Andhra Pradesh in 1982 to solve twin problems of housing and water supply in Tirupati city and its adjacent counterparts. Thus, the state government gradually eroded the powers of the Tirupati Municipal Corporation by establishing a parallel body, i.e. Tirupati Urban Development Authority” (Banerjee, 2021). Therefore, First and foremost, every state and union territory must ensure that all functions written in the 12th schedule are devolved to ULBs so as to maintain parity in urban governance across the country. This step will ramp up the dexterity of services extended to the citizenry by centralising all functions of a civic nature in one authority. Excessive decentralisation, as critics of scholar Max Weber suggest, leads to displacement of the ultimate goal as subunits begin to take over tasks in silos.

**ILLUSTRATIVE CORROBORATION:** The managerial prowess of Brihanmumbai Municipal Corporation was lauded by the Honourable Supreme Court in the wake of COVID-19 management. Connoisseurs argue that the better performance of Mumbai as opposed to Delhi, in COVID management, was on account of a centralised chain of command with BMC at the apex, whereas in Delhi, multiple agencies were entrusted with the same task, which virtually gave effect to constitutional wither and mismanagement. BMC is governed by an act of the colonial era,(THE MUMBAI MUNICIPAL CORPORATION ACT,1888) that bestows humungous powers on the Commissioner of BMC and consequently ensures closer and robust inter-organisational synergy., unlike other Municipal Corporations of Maharashtra which abide by MAHARASHTRA MUNICIPAL CORPORATIONS ACT,1949. As a matter of fact, Iqbal S. Chahal, IAS, Additional Chief Secretary to the Government of Maharashtra once stated, “BMC Commissioner is virtually the CEO of Mumbai city.” Chahal is a dynamic IAS officer in Maharashtra and has been widely extolled for his role as BMC Commissioner in COVID management of Mumbai”.

The discretionary capacity to ordain “municipal revenue base, i.e. tax authority, tax base, tax rate settings, local tax autonomy, or even the grants-in-aid and other forms of financial transfers rest with the state governments” ((Banerjee, 2021). “As an obvious consequence, ULBs suffer from circumscribed financial autonomy and the absence of any well-ordered and structured method to transfer the financial resources to municipal authorities makes them subject to the whims of state government” (ibid.). In a nutshell, state governments must bestow financial powers on ULBs to make them more relevant locally. These bodies should determine tax rates etc. based on their domestic assessment of their areas.

**SUPPLEMENTING EVIDENCE:** According to Compendium Performance Audits on the implementation of “the 74th Constitutional Amendment Act (CAA) 1992”, released by the Comptroller and Auditor General of India in November 2024 only 32% of the total revenue of ULBs flows from their own sources, while the rest is replenished by the Union and state governments by way of funds. State governments sometimes, severely delimit the capacity of ULBs to exact taxes from citizens, jeopardising their financial strength for electoral dividends.

ULBs should wield power to frame their customised schemes and policies pursuant to policy directions of centres and states for ensuring inclusive development of different urban settlements as the top-down approach is not as effective as the bottom-up approach.

**REASON:** Local citizens often feel alienated from the lowest tier of governance given the frequent and fervent interference of the second tier of governance. Most of the policy constructs are foisted upon ULBs by the State governments, in disregard of the local purview of the concerned ULBs. Local citizens, owing to the over-the-top intercession of the state governments, view ULBs as auxiliary arms of the mighty state.

Additionally, the delivery of some civic services in big cities is impaired as it counts on the support of police or local law enforcement agencies which are beyond the directorial purview of Municipal Corporations. Municipal corporations are duty bound to enforce municipal regulations such as launching anti-encroachment drives, no parking zone norms, Solid waste management clauses, pre-empting illegal hoardings and local bye-laws, within their jurisdiction, in the course of which, these public institutions require complementary gestures from local law enforcement agencies, that may not be available on every occasion. For this purpose, state governments should postulate an internal bureaucratic arrangement that streamlines the deputation of state police personnel in Municipal Corporations, which will embellish the regulatory capacity of Municipal Corporations.

**SUBSTANTIATING CITATION:** As respect stepping up the regulatory capacity of Municipal Corporations, Santosh Sharma, IAS, remarks, “Municipal Corporations are confronted with a range of issues, such as ensuring execution of non-vending zones, which necessitate police intervention for smooth implementation. We need police for different kinds of enforcement activities like anti-encroachment drives, regulation of parking and no parking zones, vending and no vending zones, control on stray animals, seizures of restricted polythene, and other restricted items. rescue measures in different kinds of calamities etc. Equipping ULBs, especially Municipal Corporations as they take care of large cities, with a cadre of police personnel would lead to better civic regulation and management of the cities.”

State Election Commissions must solely conduct delimitation exercises in place of state governments despite the constitutional obligation that the municipalities will be constituted for five years only and the State Election Commission is constitutionally obliged to conduct municipal elections as per requirements,

in many states, the State Election Commissions are incapacitated to do so because the authority for delimitation of municipal wards is with the state governments and they seldom undertake this electoral task within stipulated time period.

**ILLUSTRATION:** The Telangana State Election Commission placed its plea before the High Court for timely conduct of municipal elections, accusing the state government of intentionally withholding the preparatory processes.

The civic provision agencies of cantonments, that is, cantonment boards must mandatorily espouse representatives from local municipal bodies for seamless interoperability between agencies entrusted with civic functions. The cantonment boards, presently, incorporate delegates/ nominees of the district administration, sometimes to the exclusion of the interests of municipal bodies which in turn, obfuscates intra-executive organisations and yields fractured delivery of civic functions, especially in areas of cantonment boards contiguous to the territorial demarcation of local municipal bodies. The ULBs ought to model their legal configuration after that of the cantonment boards as powers appertaining to civic administration in the framework of cantonments are concentrated in cantonment boards, resulting in an ameliorated service delivery in the territorial jurisdiction of the latter.

**CORROBORATIVE CITATION:** In this regard, Mrs Jigyasa Raj, IDES, Chief Executive Officer, Cantonment Board of Ayodhya opines “cantonment Boards closely deal with urban local bodies to streamline the delivery of civic services. Therefore, it should be legally mandatory to enlist representatives from urban local bodies. In fact, the Centre’s policy direction of facilitating the accession of some stretches of the territory of cantonment boards to the territorial ambit of relevant urban local bodies entails robust coordination with urban local bodies. As urbanisation matures, primacy must be given to urban local bodies in civic matters.” Mrs Raj is an illustrious IDES officer and has previously served as CEO of Kasauli, Dagshai and Shahjahanpur Cantonment Board before being roped in to spearhead the Cantonment Board of Ayodhya.

The potential of ULBs must be exploited to meet the Sustainable Development Goals set by the United Nations. Citizens are the fulcrum of Sustainable development goals, as they are at the helm in the third tier of governance, so, ULBs are aptly positioned in the plane of governance to eventuate Sustainable Development Goals. For instance, Sustainable Development Goal 11 *viz.*, *Sustainable Cities and Communities* directly echo the larger mandate with which ULBs have been charged. All the tiers of government must synergise their resources and coordinate effectively to accomplish the comprehensive aim of sustainability.

## 5. Comprehensive Audit and Findings

Most of the municipal bodies in India are paradoxically inundated with legal obligations while being divested of their bonafide rights. Local municipal authorities in many regions of India are not even in concert with the benchmarks laid by the Honourable “Supreme Court of India” for local authorities in “the Mohammad Yasin vs. Town Area Committee, 1950” case. “Pursuant to the adjudication of the Honourable Supreme Court in the said case, a local authority must meet the following benchmarks:-

1. Have a separate legal existence as a corporate body
2. Not be a mere government agency but must be legally an independent entity
3. Function in a defined area
4. Be wholly or partly, directly or indirectly, elected by the inhabitants of the area
5. Enjoy a certain degree of autonomy (complete or partial)
6. Be entrusted by statute with such governmental functions and duties as are usually entrusted to locally (like health, education, water, town planning, markets, transportation, etc.)
7. Have the power to raise funds for the furtherance of its activities and fulfilment of its objectives by levying taxes, rates, charges or fees.”

It has come to light by practitioners of urban governance that developing regions in India often exude a propensity to attach undue paramountcy to the institution of Collector/ Commissioner of Police/ Superintendent of Police attributable to the direct interface of these institutions with the citizenry in regulatory matters. Such authorities primarily exercise supervisory jurisdiction and prioritise enforcement contingencies over advancement in the civic realm. Such functional vestiges of colonial dispensation in underdeveloped regions repudiate the theoretical plinth of facilitative authorities adopted by the Indian state. Local municipal bodies are facilitative arms of the elective domain of the state, and are hence, prescient for augmenting and streamlining development. The predilection of policymakers towards regulatory regimes, as manifest in overpowering regulatory institutions lays bare the need for civilisational maturation that the populace needs to undergo as the Political System Theory of David Easton avers that the demand for any change must emanate from the general population. The subversion of the third tier of government by wresting powers constitutionally vested in them and delegating them to other parastatal agencies is legislative *ultra vires*, in the light of the 74th CAA and impedes integrated development. Logically, the realisation of facilitative “Directive Principles of State Policy” which confer on the citizens the rights of positive orientation, is contingent on the operational and transformational competence of the ULBs, for example,

“Article 47 - The State shall opt for measures to improve public health and prohibit consumption of intoxicating drinks and drugs that are injurious to health.”

“Article 48 – The state shall restrict the slaughter of cows, calves, and other milch and draught cattle and improve their breeds.”

The ULBs in developed countries outclass those in India, especially in the Northern heartland, in terms of legal accreditation, which can be empirically inferred as one of the reasons for their ascendancy in urban development. Urbanisation in India casts upon policymakers the additional obligation of generating employment as urbanisation has not been a corollary of the Industrial Revolution, unlike the West. Such a predicament appended to the demographic surplus bound with the Indian setting warrants a punctilious focus on strengthening facilitative organs viz., ULBs of the state.

“According to Compendium Performance Audits on the implementation of the 74th Constitutional Amendment Act (CAA) 1992, released by the Comptroller and Auditor General of India” in November 2024, only 4 functions have been decentralised to ULBs and on average, grants etc. The Comptroller and Auditor General of India in its report, has prescribed increased involvement of ULBs in essential areas like planning to enhance their functionality and decision-making capacity. Such reports call for urgent capacity building of ULBs and demand political will from state governments to effect legal benefaction of certain functions to the ULBs.

## 6. Conclusion

*“This framework is neither democratic nor autocratic; it is a cross between the two, and has the disadvantages of both.” - Pt. Jawaharlal Nehru*

This is what Nehru observed while expressing dismay at the state of municipal administration in British India in his autobiography. However, his view on British municipal governance has transcended temporal as well as political frontiers for today, it can be fathomed as the quintessential critique of the precarious affairs of urban local bodies even after seven decades of Independence, indicating the perpetuation of unjust institutional practices propounded by Britishers to serve English interests. Now the focus of policy makers globally is gravitating towards urban local governance. The adage stating that India lives in villages is losing its pertinence, with maturing globalisation. Urban settlements are emerging as new economic engines of the country due to unprecedented breakthroughs in the tertiary sector. A robust and smart civic infrastructure is indispensable to fuel India’s ascent in international theatre. Governments must leverage the changing tapestry of increasing urban settlements by making urban affairs the bright spot of policy-making while keeping rural interests intact. India’s stride against fleeting time should be evenly propelled by burgeoning cities and the inherited repertoire of *tranquille* rural heartland.

## References

1. Iman Banerjee, Banaras Hindu University (2021). “*Problems of Urban Self-governance in India*”.
2. Amal-I Salih, ed. G. Yazdani, Vol.1, p.248
3. MUMBAI MUNICIPAL CORPORATION ACT, 1888
4. Directive Principles of State Policy; Part IV of the Constitution of India
5. Dargah Quli Khan (tr. Chander Shekhar, Shama Mitra Chenoy) 1989. Muraqqa E Delhi. Deputy Publication Delhi
6. THE CANTONMENTS ACT, 1924
7. UTTAR PRADESH MUNICIPAL CORPORATION ACT, 1959.
8. Hussain, M. A. (2007). *Urban Governance and Politics: A Case Study of Tirupati*. The Indian Journal of Political Science, 68(3), 509-522.  
<https://www.jstor.org/stable/41856351>
9. Savage D. and Dasgupta S. (2006). *Governance Framework for Delivery of Urban Services*. In A. Rastogi (Managing Ed.), India Infrastructure Report: Urban Infrastructure
10. National Portal of India. (2012, October, 12). The Constitution (Seventy-fourth Amendment) Act, 1992. Retrieved April 25, 2021, from  
[https://www.india.gov.in/my-government/constitution-india/amendments/constitution-india\\_seventy-fourth-amendment-act-1992](https://www.india.gov.in/my-government/constitution-india/amendments/constitution-india_seventy-fourth-amendment-act-1992)
11. UTTAR PRADESH NAGAR PALIKA ADHINYAM, 1916
12. Sameer M. Deshkar (2010) *Kautilya Arthashastra and its relevance to Urban Planning Studies Institute of Town Planners*, India Journal.
13. Aijaz, R.(2006), *Challenges for Urban Local Governments in India*. Working Paper 19, Asia Research Centre. London: London School of Economics and Political Science.
14. Vamshidhara, V. (2019, June 26). *HC gives TS 149 days to conduct municipal polls*. Hyderabad: The Deccan Chronicle.

15. <https://thebetterindia.com/254984/mumbai-model-coronavirus-covid-19-second-wave-decentralisation-supreme-court-oxygen-supply-beds-positivity-rate-war-rooms-bmc-pandemic-india-gop94/>
16. Pt. Jawaharlal Nehru (1935). *An Autobiography*. Penguin Books
17. Chaubey, P.K *Urban Local bodies in India: Quest for making them self-Reliant* [https://fincomindia.nic.in/writereaddata/html\\_en\\_files/oldcommission\\_html/predocs/s\\_peech/chaubey\\_ulb.pdf](https://fincomindia.nic.in/writereaddata/html_en_files/oldcommission_html/predocs/s_peech/chaubey_ulb.pdf)
18. Sandro Serpa, University of Azores (2019). *The Concept of Bureaucracy by Max Weber*. International Journal of Social Science Studies
19. Rao, Koneru Ramakrishna, '*Ramarajya: Gandhi's Model of Governance*', *Gandhi's Dharma* (Delhi, 2017; online edn, Oxford Academic, 22 Mar. 2018)
20. *Urbanisation beyond Municipal Limits: India's Growing Cities* (2022). World Bank.
21. Kundu, A. (2011). *Trends and processes of urbanisation in India. Urbanisation and Emerging Population Issues* Working Paper 6. London: *IIED & UNFPA*.
22. Bhattacharya, B. (2019). *Urbanization in India: Trends, patterns, and policies*. New Delhi: Oxford University Press.
23. The Uttar Pradesh Shree Ayodhya Jee Teerth Vikas Parishad Act, 2023 Act No. 23 of 2023
24. Michael Danino, IIT Gandhinagar (2008). *New Insights into Harappan Town-Planning, Proportions and Units, with Special Reference to Dholavira*. In *Man and Environment*, vol. XXXIII, No. 1, pp. 66-79
25. Ernest Mackay (1948). *Indus Valley Civilisation*.
26. Academic engagement with Santosh Sharma IAS
27. *National Portal of India*
28. Academic engagement with Jigyasa Raj IDES
29. Compendium Performance Audits on the implementation of the 74th Constitutional Amendment Act (CAA) 1992 (2024). The Comptroller and Auditor General of India.
30. R.E.M. WHEELER (1976). *My Archaeological Mission to India and Pakistan*.



# Understanding the Geopolitical Aspects of Renewable Energy Transition

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## Abstract

Energy-rich countries, particularly in the 1970s which had vast oil reserves, held significant influence in global geopolitics, leveraging their resources to dominate and shape international alliances. These nations used their energy wealth as a tool to exert influence, aligning with or pressuring other countries to secure favourable terms, ensuring their dominance in global affairs like OPEC countries. The OPEC oil embargo was an indication to the world to initiate processes that would shift the dependence of economies on oil. The 1992 Rio Declaration set the topic of Climate Change on the world stage. Since then the inception of Conference of Parties in 1995, adoption of Kyoto Protocol, Copenhagen Accord and finally, the Paris Agreement have been important events through which the need for a renewable energy transition has evolved. The paper acknowledges that deteriorating climate conditions have created awareness about the need to shift to renewable energy. However, it extends the discussion to more relevant drivers of renewable energy transition. Each of these drivers put emphasis on a global consensus that acknowledges unequal vulnerabilities of the transition, the infrastructural and financial imbalances yet prioritises environmental security. The paper further discusses the role of these drivers in Energy Diplomacy of two major economies of the world that is China and the European Union. The paper concludes with an understanding of how power differentials and geopolitical rivalries hinder a smooth transition. Moreover, how even an era after transition would see such rivalries and monopolies, though the players might change.

*Keywords: Renewable Energy, Common but Differentiated Responsibility, Energy Transition, Geopolitical dynamics*

## 1. Introduction

An emerging topic that examines the relationship between international relations, global politics, and renewable energy technology is called "geopolitics of renewable energy." It focuses on how the switch from fossil fuels to renewable energy sources will affect politics, the economy, and geopolitics in reshaping the world's energy landscape. The geopolitics of renewable energy is gaining attention as the world grapples with pressing concerns such as climate change and the need for sustainable energy sources. This has implications for international relations, resource allocation, and strategic decision-making. The world's energy systems have changed dramatically over the last few decades as countries have realized the risks to their economy, security, and the environment that come with relying too much on fossil fuels.

The shift to renewable energy is thought to have been initiated by the potential of renewable energy sources as alternatives to traditional fossil fuels, which are becoming less expensive and more efficient. However, a complicated mix of political, economic, and strategic aspects determines the geopolitics of renewable energy. Governments are beginning to understand that switching from fossil fuels to renewable energy sources not only combats climate change but also presents substantial opportunities to improve energy security, economic competitiveness, and geopolitical influence. New dynamics in global power politics are arising as countries endeavour to develop and use renewable energy resources, which are changing conventional energy hierarchies and reallocating geopolitical leverage.

## 2. Literature Review

This article employs a theoretical framework and conceptual model to engage with the debate surrounding renewable energy. It examines the multifaceted factors that influence decision-making and resource allocation among nations aiming to achieve climate goals. The study builds on the principle of Common but Differentiated Responsibilities (CBDR), articulated in Principle 7 of the Rio Declaration during the 1992 Rio Earth Summit. This principle asserts:

*“In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.”* (Development, 1992)

Historically, developed nations have relied on technological advancement and fossil fuels to drive economic growth, whereas countries in the Global South have experienced delayed development. To address climate change equitably, the CBDR principle placed a greater burden on developed nations to reduce emissions. Over time, however, this principle has faced criticism from developed countries, leading to a contentious geopolitical discourse on renewable energy.

The geopolitics of renewable energy revolves around the persistent divide between the Global North and South. Challenges such as the high costs of capacity building for renewable energy, reliance on economically viable fossil fuels, and the pressing need for poverty alleviation in developing and least-developed countries act as significant barriers to the energy transition.

The study draws on Overland's (2019) assertion that "renewables will change the premises for international energy affairs." (Overland, 2019) Unlike fossil fuels, renewable energy is more evenly distributed, potentially enabling a less geopolitically contentious international energy system. This transition could result in a more equitable distribution of economic and security benefits while minimizing risks associated with technological bottlenecks.

However, the shift towards renewable energy is hindered by unequal access to technology and financial resources, further complicating the global energy transition. The paper highlights the disruptive potential of renewable energy to reshape existing geopolitical dynamics, which may explain the hesitance of certain nations to fully commit to this transition.

Finally, the study delves into emerging energy diplomacy, characterized by the interplay of soft power and intellectual property rights. It presents case studies of China and Europe to illustrate how renewable energy might shift global competition from physical resource control to technological and intellectual property dominance.

### **3. The Conventional Energy Landscape**

Fossil fuels, primarily oil and gas, were used extensively throughout most of the 20th and early 21st centuries, defining the energy landscape. It had a significant impact on international politics by establishing a power structure based on who possessed more and less energy resources.

Major impacts of this system were seen in international politics, economy, and security. Nations possessing substantial fossil fuel deposits, like Venezuela, Saudi Arabia, and Russia, held considerable political influence.

The Organization of the Petroleum Exporting Countries' (OPEC) unofficial leader, Saudi Arabia, had significant global influence on oil prices. It benefited greatly from its vast oil reserves and output for many years, which stabilised the world oil market and gave it significant influence in international affairs. In a similar vein, Russia established itself as a key force in the European energy market by utilising its vast natural gas reserves. By maintaining control over energy supply, it safeguarded its political interests through its state-owned gas corporation, Gazprom. The gas dispute between Russia and Ukraine that triggered gas shortages and increased price levels in several European nations, highlighted the dynamic geopolitical implications of energy dependency. The impact of the Russia-Ukraine war and the EU's restriction on Russian gas supplies had a number of macroeconomic consequences, including inflation rates hitting an all-time high at the end of 2022 due to increases in energy prices and product value chains. Global economic growth rates have considerably slowed.

Venezuela strengthened its standing in Latin America and the world by utilising its huge oil reserves. Hugo Chavez was a significant figure in the early 2000s since the government utilised oil revenue to support social projects and regional diplomacy throughout his administration. However, these resource-rich nations were at the mercy of countries that mostly relied on imported energy. The majority of the European Union, Asia, and other energy-importing regions struggled due to supply disruptions and fluctuating energy prices. For example, Japan's reliance on imported energy made it vulnerable to international energy crises like the 1973 oil crisis, which had a detrimental economic impact. Similarly, Europe's long-standing reliance on Russian gas has created security worries and led to searches for other energy supplies.

The conventional energy landscape has resulted in strategic alliances and conflicts. Because of America's need for Saudi oil, the US-Saudi alliance, for example, has managed to persist despite huge ideological differences. Similarly, to counterbalance the losses caused by the OPEC embargo, India, led by Prime Minister Indira Gandhi, reached favourable agreements with Iran and Iraq. In February 1974, India and Iran signed a deal that set the price of crude at \$8.50 per barrel, provided India with a \$500 million credit to pay some of its oil purchases, and assured supplies for a refinery in Madras that was built with Iranian assistance.

Competition for energy resources has been fuelled by the region's oil and gas potential, leading to issues such as territorial disputes in the South China Sea. In conclusion, the conventional energy scenario, which is based on fossil fuels and has led to the formation of power structures, dependencies, and strategic alliances, has produced the global political order. The advent of renewable energy technology, however, is changing this situation and could lead to a shift in the global power structure. Given these developments, it is critical to comprehend how state-to-state relations, domestic policies, and cross-border investments are changing in order to assess their implications and significance in the global energy transition that has generated a lot of interest.

## **4. Drivers and Challenges of Renewable Energy Transition**

### **4.1 Policy Change**

Efficiency and cost reduction are not the main drivers of the energy transition. The necessity to cut carbon emissions and achieve net zero carbon targets is what is driving this shift. Prior energy transitions relied on competition amongst fossil fuels that proved to be effective energy sources for rapid industrial growth and consequent economic expansion. Today, the goal of energy transition is to prevent or lessen the effects of climate change caused due to atmospheric emissions.

After comprehending the motivation for the energy transition, we have to acknowledge that it can only be accomplished with the support of all parties involved. Consumers must cut back on their use of unabated hydrocarbons, and producers must be urged to decarbonize their output. At the same time, investors won't feel inspired unless they see real-world projects and opportunities for expansion in renewable energy. Achieving the necessary shift will be hampered by a lack of understanding of environmental externalities. Taking into account the externalities and the necessary cross-sector involvement, Policy Regulation will prove to be a catalyst in driving energy transition because of the ability of government policy in coordinating expectations.

In order to decide upon measures to stabilise the expectations of investors, producers and consumers alike, it is suggested that the policymakers ask the following questions: “what type of targets are being set to reduce emissions and meet climate goals and how are they being adjusted over time? In relation to this, what are the implications of specific targets for renewable electricity or other forms of decarbonised energy, both for incumbent and new industry players and consumers? Furthermore, what is the impact and relative cost of different technologies on emissions outcomes and what are the efficient routes to achieving climate targets? (Henderson et al., 2021)”

Answering these critical questions will lay a foundation for strategizing climate policies. "The network of institutions in the public and private sectors whose activities and interactions initiate, import, modify, and diffuse new technologies" is how Chris Freeman defined the National System of Innovations. Freeman emphasized that “the integrated approach to R&D, design, procurement, production, and marketing within large firms; the high level of general education and scientific culture, coupled with extensive practical training and frequent industry updates; and the beneficial role of government, working closely with industry and the scientific base (Freeman, 1995)” to encourage vision, development and marketing of most advanced technologies.

Expectations regarding the continuity or stability of policy frameworks are critical. Policies can only be improved by comprehending the breadth and complexity of innovation processes. Furthermore, understanding stakeholders' roles as 'enablers' in advancing sustainable innovation across the policy-making and implementation process is critical. This method may help to address the environmental policy concerns of locked-in technologies and a lack of representation of innovators in policy making. This would lead to increased public and governmental support for sustainable innovation. All of these points emphasize the need for policy reform in accelerating the transition to renewable energy.

#### **4.1.1 How Does Common but Differentiated Responsibility fit into worldwide policy frameworks to achieve Net Zero Carbon Emissions?**

Climate policies and investments in the developed countries alone are not sufficient to solve climate change issues worldwide. Any effective solution will need to engage the developing economies too.

While the efforts of developed countries towards reaching net zero emissions are notable. Climate Inequalities and Vulnerabilities cannot be ignored. The narrative that the Global North has a historical responsibility to reduce their emissions in order to compensate for the delayed industrial growth started in the Global South is criticized. It is believed that this principle excludes high emission countries like China and protects them from changing their development patterns. However, a linear understanding of energy transition ignores the realities of developing countries. Some of the key barriers facing the Developing Countries are:

- ***Affordability of Contemporary Energy Technology***

Solutions feasible and on the verge of implemented in the developed countries such as the Carbon Capture Utilisation and Storage (CCUS) technology, electric vehicles, hydrogen production is inaccessible in developing countries. A major section of the population lacks the resources to access energy services and therefore the aggregate public response in adopting the contemporary energy services is weak. Developing countries struggle in creating infrastructure, finance and necessary regulatory framework to encourage the adoption of renewable energy.

- **Infrastructural Barriers**

The shift to Renewable Energy is not swift. Without supplementary infrastructure development the transition objectives cannot be met. Supply nodes like power plants, hydrogen hubs and interconnections over large distances are required. For such endeavours land procurement, which gets difficult in many developing countries where land ownership is fragmented, permits system are corrupted and involve multiple stakeholders.

- **Investment**

Attracting capital and securing favourable financial terms is essential for a transition to sustainable energy sources. Limited access to capital markets, high borrowing costs, and real or perceived investment risks deter domestic and foreign investors. This problem is even more pronounced in today's high-interest-rate environment. Political instability, Currency volatility and uncertain regulatory environment undermine investor confidence. Mobilising up-front capital independently is difficult for many developing countries.

- ***Climate Inequalities***

Apart from Domestic Barriers, Geopolitical and International Framework related factors also foster climate inequalities. Essentially the effect of geopolitics on Renewable Energy consumption is significantly different depending on the income level. “For comparatively low income countries, the rising geopolitical uncertainty adversely affects the renewable energy sector; however, geopolitics and renewable energy have a positive connection at higher income levels. Richer countries have a greater capacity to develop clean technologies in times of uncertainty; however, the Renewable energy sector in emerging and developing countries seems more vulnerable to geopolitics. (Nidhaleddine Ben Cheikh, 2024)”

- ***Carbon Laws***

It is the need of the hour that a higher rate of decline is achieved for energy emissions compared to the expanding rate of economic output. “However, the increased globalisation of trade creates a policy issue, because emissions are generated throughout a supply chain that is widely geographically dispersed. Moreover, International trade enables the costs of decarbonisation to be shifted outside national borders, creating negative externalities elsewhere.” (Henderson, *The Energy Transition: Key challenges for Incumbent and new players in global energy systems*, 2021) This carbon leakage is facilitated by Offshoring Carbon Intensive Production, waste exportation etc. This concern is relevant to low income countries because of less stringent anti-carbon laws to facilitate production. An important finding is that it is easier for dirty industries to shift to countries with lax or less stringent environmental regulations.

Furthermore, efforts such as the implementation of carbon border adjustment mechanisms (CBAMs), which try to reduce carbon leakage by placing a fee on imported commodities depending on their carbon content, exacerbate the split. With the goal of leveling the playing field for domestic producers who face carbon costs and discouraging companies from shifting production to countries with lower or no carbon pricing, measures like these create competitiveness issues for producers in hard-to-abate sectors by requiring them to pay additional costs to offset the embedded carbon in their goods. This would make their products more expensive than those from countries with lower carbon costs, diminishing their worldwide competitiveness. This can be observed in the case of India and the European Union. The Carbon Border Adjusted Mechanism devised by EU impacts India in the following way:

- Given that coal dominates overall energy consumption the carbon usage in Indian products is higher than that in EU. Moreover, direct and indirect emissions from iron and steel is higher in India due to increased proportions of coal-fired power. This translates into significant carbon tariffs to be paid to EU.
- The mechanism creates the risk of Export Competitiveness. This might expand to sectors such as refined petroleum, pharmaceuticals, textiles, which are among the top 20 goods imported from India by the EU. Moreover, the risk might have discriminating effects. Countries with carbon pricing systems might have to pay less or get exemptions. However, countries like India with no such system will face higher consequences.

Considering the unique vulnerabilities of economies related to decarbonisation, the negative impacts of such frameworks are disproportionate. Poorer countries, which heavily rely on mineral resources will be worse off.

Finally, for a just energy transition acknowledging the responsibility of Global North is important. Developed countries are yet to take substantial actions on their financial and technological commitments to the developing countries. The inability of Financial and technological transfers consolidates these barriers. Even the policies of countries are highly influenced by their energy requirements from developed countries. In such a scenario, expectations of transition from conventional sources of energy to renewable energy is unfair.

Thus, Acknowledging the barriers and differences in realities of The Developed and Developing countries, it becomes quintessential to recognise that while the hazards of climate change are common but the vulnerabilities and exposure are different. Therefore, any policy regulation or technological advancement cannot be imitated or accepted universally.

#### **4.2 Infrastructure**

A thorough understanding of the geographical and technical characteristics of renewable energy systems reveal both the infrastructural requirements as well as the barriers posed by geopolitical factors. There are several technical characteristics that need to be evaluated before exploring Renewable energy sources. However, two of the main characteristics influenced by international relations are as follows:

- ***Global Disparities in Resources and Potential***

Renewable energy sources are not scarce or as geographically constrained as fossil fuels. Every country has access to at least some form of renewable energy, however the supply value chains differ substantially. Any country must identify its potential and then judge which energy it is equipped to harness. The potential for renewable energy is not spread equally across the globe. Just like the reserves of fossil fuels, some countries and regions are better endowed than others. In addition, the potential for energy generation is not the same for all renewables. Solar and wind potential is far larger than that of biomass, hydro, or geothermal energy. The renewable energy sector is highly capital intensive. A thorough estimation of the cost of financing structures that would drive the transition along with the estimation of returns raises questions over its viability especially in the case of developing economies.

- ***Commercial viability***

The transition to cleaner technologies require electricity supply and financial instruments that several low income countries lack. For example, African countries suffer from public utility resistance in addition to concerns over energy security and deliberate attention on developing domestic sources of energy. The affordability, ease of availability and technological maturity of oil in some regions have contributed to the slow uptake of investment in renewable energy projects. Therefore, commercially viable endowments of fossil fuels provide a strong incentive for continued investment in these sources.



- ***Concentration of Rare Earth Metals and Infrastructural Gap***

Rare earth metals are critical components in various renewable energy technologies due to their unique chemical properties. The demand for these elements has surged as the world transitions towards cleaner energy sources. The central role that rare earth metals play in the transition cannot be overstated. In the process of decoupling economic growth and greenhouse gas emissions, there is intensive recoupling of economic growth with extraction and mining. China has leveraged its geo-economic rise to power over the last two decades on the back of integrating supply chains of rare earth metals from extraction, processing and export. It's interesting to note that while developing companies highlight their commitments to reduce greenhouse gas emissions, they heavily rely on China for processing rare earth metals that they extract. The Mineral Commodity Summaries of 2024 released by United States Geopolitical Survey revealed that 72% of United States' Rare Earth Imports source from China. This paper later discusses the critical role of China in monetising its control over the processing of rare earth minerals through the Belt and Road Initiative and how it fits into the puzzle of renewable energy transition.

Rare earth metals are abundantly available in the earth's crust, the problem lies in the capacity to process them. The Chinese recognised the potential for profit took leverage over other countries through its processing capabilities. This enables it to continue its lax environmental standards and control the market. The dependency of nations on China raises serious questions like does the shift to renewable energy erase the economic hazards fossil fuels posed?

Won't countries that control the supply chain have the potential to block the world's supply? Finally, how green is the renewable energy transition? More importantly, is the accumulation of environmental damages caused today for acquiring decarbonisation tomorrow worth it?

### **4.3 Participation of Economies in Renewable Energy Transition**

In December 2015, the parties to the United Nations Framework Convention on Climate Change (UNFCCC) reached a joint agreement to combat climate change. With its 195 signatories, the Paris Agreement constituted a truly global consensus to take appropriate measures to keep global warming well below two degrees Celsius. Nationally Determined Contributions (NDC's) ensured that every signatory specifies their greenhouse gas emission reduction target.

The differentiation in mitigation and review related actions set under the Kyoto Protocol between Developed Economies and Developing economies was scrapped in the Paris Agreement. Under their Nationally Determined Contributions, all participants had to set targets to reduce carbon emissions, increase their renewable energy market share and increase energy efficiency. By disintegrating the Common but Differentiated Responsibility principle, the Paris Agreements ignores the varied vulnerabilities of economies. The historical responsibility of the developed world for creating the problem of emissions is erased and the burden of transition moves to the still developing world.

This affects the participation of economies along with any tangible improvement in their efforts. “Article 9 of the Paris Agreement stipulates that developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention (The Paris Agreement , 2015).” There is no stringent enforcement apart from periodic reporting. All participants are obliged to submit reports of their actions in the form of national emissions inventories and progress towards achieving their NDCs.

In order to understand the participation of economies as a driver of renewable energy transition, we must understand the direct effects of non-participation in the Paris Agreement to the global carbon emissions and the welfare of the economies. In each economy the goal is to find an optimum point where the economy is indifferent to the climate damages and economic cost of cutting down emissions.

There are finding in consequent to non – participation in the Paris Agreement that “that if all countries fulfil their NDCs, global emissions are lowered by 25.4%. Furthermore, the model took into consideration the welfare effects, and how their national welfare is affected in the full cooperation scenario in which all countries fulfil the pledges made in their NDCs. While almost all countries face some real income losses due to the carbon pricing required to fulfil their NDCs, these losses are mild in most countries and they are typically offset by lower climate damages. Countries experiencing a welfare loss from the global NDC implementation mostly have very high income from selling fossil fuels and in some cases low climate damages, for example oil exporting countries like Saudi Arabia (Larch & Wanner, 2024).”

#### **4.3.1 How do Power Dynamics and Economic Trade-offs influence the Participation of Nations?**

##### **Petro States**

First let us take the example of Petro States. The states might profit in the transitioning phase but will end up being geopolitical losers, losing their leverage at the end of the transition when oil will cease to exist as a key global commodity. This comes as an encouragement to states mainly dependent on fossil fuel exports to look for alternate energy sources and join the renewable energy transition. Iran, for instance, has joined hands with China and formally became part of the Belt and Road Initiative to stimulate investment in the renewable energy sector.

However, the primary concern for oil-rich countries is the disruption of their energy economic models. They need to understand how to incorporate a low-carbon plan into the current energy grid. In oil-rich countries, the strategic quandaries are fundamental alterations of the existing energy industry and the national economy. New resources' interventions in renewable energy sectors do not generate as much cash as the oil and gas industry. Furthermore, domestic conflicts and proxy warfare in the Middle East raise uncertainty about the transition to renewable energy. Threats to energy security will slow the transition.

## **Russia**

Among states which are rich in Oil resources and indispensable to the renewable energy transition is the Russian Federation. The Russian invasion of Ukraine strangled Europe and caused a global energy crisis. Immediately afterwards it caused a spike in the use of Coal for heating and power ensuing an increase in the greenhouse gas emissions. However, in the medium or long run it has proved to be a catalyst of Europe's green transition. Despite the tensions caused Russia remains essential for the transition to renewables. Russia had a significant leverage in Nuclear power generation, and mineral supply chain critical for decarbonisation. The development of Nuclear Energy depends upon Uranium. Russia has 8% of known deposits. "While Australia and Kazakhstan together have 43%, Russia has 40% of the world's uranium conversion capacity and 46% of global enrichment capacity. In 2021, the U.S. bought 14% of its uranium from Russia and used Russian enrichment services for 28% of its needs. For Europe, 20% of its uranium and 26% of enrichment comes from Russia. Most immediately, countries that are already operating Russian VVER (WATER-WATER POWER REACTOR) nuclear power plants (NPPs), such as Ukraine, have been somewhat stuck because only one company outside Russia makes the necessary fuel. Moreover, 50% of NPPs currently under construction are Russian models going up in Turkey, Bangladesh, and Hungary, among others (Jayanti, 2023)."

Apart from China, Russia is a silicon mining country. It is the third largest nickel exporter, with its Iberian Norilsk Nickel company being the world's largest producer of high grade nickel. Russia's stronghold over critical minerals can be grasped by the case of Ukraine. After the invasion, commodities' prices soared over 50% in 2022. It is the crucial role Russia plays in the supply chain of renewable energy transition that makes its participation necessary.

## **United States of America**

Another nation of importance is The United States of America which is speculated to leave the Paris Agreement again after the re-election of President Donald Trump. In his last term, he made the announcement in 2017. As per the terms of the accord, the US was officially a non-member in 2020. Under the Nationally Determined Contributions, the US was liable to pay \$ 3 Billion out of the \$100 Billion the Developed Countries are expected to pay to developing countries annually for their transition. In the speech in which the president announced the withdrawal from the Paris Accord, he made claims underlining the impact of continuing to be a part of the accord on the US economy. Citing reports of NERA Economic Consulting, Massachusetts Institute Of Technology, he sought to explain the miniscule decrease in greenhouse gas emissions as opposed to substantial increase in joblessness in the United States.

Not only were these claims misinterpreted but also reflect how politics of convenience is often prioritised over the collaborative effort towards renewable energy transition. It has been analysed that:

1. Trump's undue emphasis on America First ignores the global nature of the human-induced climate-change problem. As Cropper (2018) points out, "If all countries considered only the domestic effects of their greenhouse gas emissions, about 86 percent of climate change impacts on US citizens would be ignored" because no one outside the country would be factoring in the impact of their actions on the United States' climate.
2. The space and equity for development in developing countries would have been narrowed down and crowded out. Trump openly denied the belief in the principle of Common but differentiated responsibility. He could link environmental and trade issues to make developing countries take on environmental responsibilities and obey environmental standards similar to that of developed countries. He can use environmental articles in trading agreements to impose green barriers to developing countries.
3. Moreover, Donald Trump's re-election caused a hit in the Renewable Energy stocks, especially the solar power sector. Fears that the Inflation Reduction Act enacted under the Biden regime driving clean energy initiatives on tax incentives have emerged (ZHANG Hai-Bin, 2017).

#### **4.3.2 Conference of Parties 29 (COP-29)**

The COP '29 summit followed a massive outrage from the developing countries. The financing is based on vague pledges instead of scientific and equity based targets. All nations have a responsibility to reduce their emissions. However, under the Paris Agreement the pledges made by several developing nations are partially or totally dependent on international finance, technology and capacity building. Implementation of these commitments becomes difficult in a scenario where the financing pledged by the developed nations does not materialise. In the COP'29 summit, developed nations have promised to continue to provide \$300 billion annually by 2035. However, part of the funds that have been pledged are in the form of debt creating loans. Developed countries' suggestion that nations could cover the shortfalls in climate finance by borrowing money from the World Bank and International Monetary Fund reflects their inaction towards their pledge and historical obligation to provide financial help to developing countries for a swift renewable energy transition.

Moreover, without a legal check over these financial pledges, double counting becomes evident. Developed nations reassign humanitarian aid, investment in foreign banks and development banks as climate finance. Double claiming through bilateral relations, market mechanisms can also be facilitated. In other cases, funds are diverted from other developmental activities such as education and healthcare to climate financing. Therefore, the funding that should be new and additional becomes superfluous. An overestimation of mitigation results due to Double Counting hinders tangible achievement of internationally agreed objectives.

Finally the carbon credits scheme approved in the summit is a false solution. The deal paves the way for countries and companies to buy credits removing or reducing greenhouse gas emissions elsewhere in the world and recognise it as their own efforts towards climate actions. This could further lead to Double Counting where the funds generated may be tagged as climate finance. The new rules and standards proposed under this Paris Agreement Trading Mechanism are fraught with problems of Temporary Carbon Removal. Countries and Companies may try to offset their emissions by gaining credits through temporary carbon removal such as carbon storage in soils and forests. However, the fossil fuel emissions that remain in the atmosphere for millennia cannot be offset by these temporary methods.

While the summit represents the hope for multilateral actions against climate change, it has become a war of attrition between the developed and developing countries. There are ambitious commitments made by developed countries which do not turn into tangible actions while the developing nations wait and the political haggling continues. With an assertive declaration of the United States of America to exit the Paris Agreement the difficulties become more prominent. This underlines the fact that politics of convenience remains a major element influencing the pledges of nations, environmental concerns are often an afterthought.

The COP '29 Summit has received a major backlash from developing countries. This consolidates the argument that international climate requires more than just negotiating climate agreements, making promises to decarbonize, and mitigating the national security implications. Nations are making decisions based on the geopolitical concerns that surround them. Crisis such as the Russia-Ukraine War or the conflict in Gaza reflect an important truth - Crisis leads to an increase in Oil Prices due to market expectations of disruption in Supply. Energy sourced from fossil fuels still makes up a major part of economies. Moreover, the transition towards renewable energy depends upon energy derived from fossil fuels. Increase in oil prices will affect the economies of these projects. Moreover, technology that is key to solving technical and logistical problems cannot eliminate competition, power differentials or the incentive countries have to protect their interests and maximise their influence. Failing to identify this reality will lead to discontinuities.

The greatest risk of failing to identify this pitfall is that if national interests and security concerns come into conflict with climate change ambitions, a successful transition might not take place at all. (O'Sullivan, 2021) This necessitates the need to understand the geopolitical dynamics while considering the transition to renewable energy.

The drivers and dynamics of energy transition can be understood better through case studies of two major economies steadily increasing their influence in the renewable energy landscape.

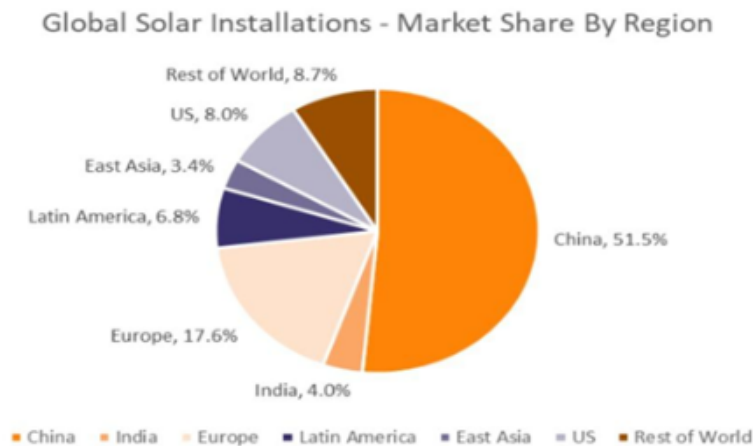
## **5. Energy Diplomacy**

### **5.1 China: The Transformation of Solar Power, The Belt and Road Initiative, the control over rare earth minerals and Its Impact on Global Energy Politics**

China has become a global leader in the production and technology of solar energy, utilising its investments and manufacturing prowess to reduce costs and increase solar capacity globally. The ambitious Solar Silk Road Initiative is the spearhead of China's efforts to promote solar power diplomacy. The Solar Silk Road is a proposed addition to the Belt and Road Initiative that intends to create a network of solar power installations connecting Europe, Asia, and Africa. The collaboration between China and Pakistan on the Quaid-e-Azam Solar Park is one prominent example of the Solar Silk Road Initiative in action. This project, which covers an area of more than 11,000 acres, is a prime example of China's dedication to aiding Pakistan in its energy transition and promoting bilateral cooperation through the development of renewable energy. China's utilisation of solar energy to fulfil Pakistan's increasing energy needs not only strengthens economic relations but also showcases China's ability to promote sustainable development via energy diplomacy.

China, being the largest producer of solar panels and components globally, is crucial in reducing the price of solar energy and increasing the availability of clean electricity. China enhances its standing as a global centre for solar energy innovation and investment by encouraging the manufacture and application of solar technologies domestically.

China will be a major player in determining the direction of international relations and the future of global energy governance as it continues to increase its presence in the solar energy industry.

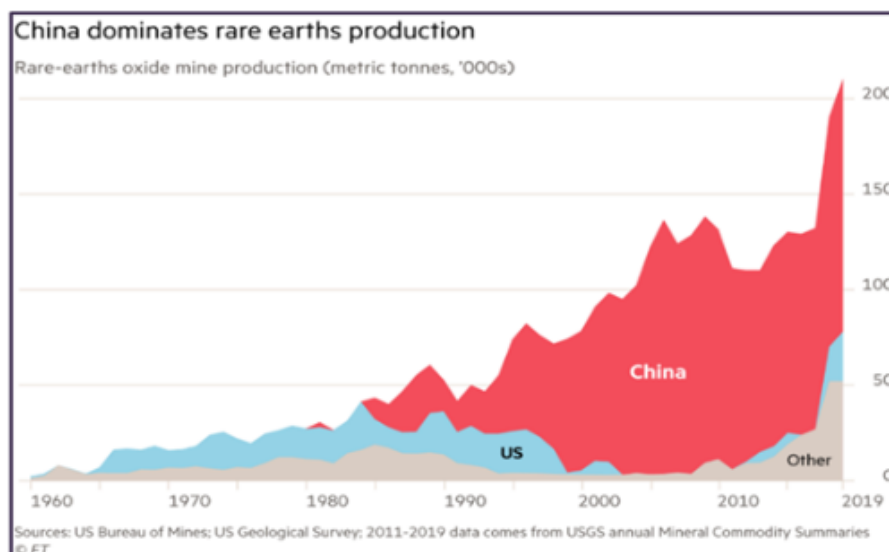


*Figure 1: Source: China leads photovoltaic, wind power, concentrated solar power and electric vehicles*

### 5.1.1 Control of China over rare earth minerals

In order to achieve “green growth” China recoupled economic growth with intensive mineral extraction. To harness renewable energies like the sun and the wind, China developed solar panels, windmills and batteries. It was feasible as in the case of China as it is gifted with tons of non-renewable rare earth minerals which are essential in developing the technology.

It is very clear by now that countries who tend to maximise energy efficiency tend to dominate geopolitical dynamics. China dominates the processing of Lithium, Cobalt and Nickel. “At present China produces 60 percent of the world's rare earths but processes nearly 90 percent, which means that it is importing rare earths from other countries and processing them. (Baskaran, What China’s Ban on Rare Earths Processing Technology Exports Means, 2024)” This has given China a near monopoly over critical minerals. China skilfully leveraged its geo-economic rise to power by integrating supply chains for rare earth from extraction to processing to export. The European Union is 98% dependent on China for rare earths. China through its Belt and Road initiative is trying to get access to more mineral resources.



*Figure 2: Source: China's control over rare earth supply chain*

China's stronghold over Rare Earth Metals was grasped first in 2010, when it cut exports to Japan. "China behaved in a way that resembles OPEC, the oil-producers' cartel, cutting exports by 5-10% per year." (The Economist, 2010) When Japan arrested Chinese Fishermen who had entered the disputed territorial waters, Japan claimed that as a response China blocked supplies and suspended shipments entirely. The case was filed in the World Trade Organisation, which ruled against China and stated that "China's policies to restrict exports of several metals, such as bauxite and magnesium, violated its WTO obligations." ("FINDINGS AND CONCLUSIONS IN THE APPELLATE BODY REPORT IN DS431," n.d.)

One reason behind the Chinese dominance in Rare earths could be from heavy investments in the 1980s when China's economy began to open. In 1992 Deng Xiaoping said "the Middle East has oil; China has rare earths". As China's production came on stream in the 1990s, it came to dominate production as it could mine rare earths cheaply even if at great environmental cost, causing international prices to plummet and pushing out competing foreign (e.g., US) producers out of the business through mine closures. "Rare earths executives complain western industry prioritises low-cost products rather than ensuring its supply chain is not dominated by a single company or nation." (Smyth, 2020) In order to establish a non-Chinese supply chain, public funding, international co-operation and collaboration and investment will be required.

### **5.1.2 Soft power strategy**

China's leadership in the field of energy landscape goes beyond technical norms. It encompasses wider geopolitical ambitions. Its efforts are motivated by the desire to portray itself as a responsible global leader and expand its legitimacy globally.

China's strategic goals of strengthening its position in international energy politics and promoting economic cooperation with allies are reflected in the incorporation of solar power diplomacy into the Belt and Road Initiative. China aims to enhance energy relations with participating countries, ease investments in solar projects, and encourage the adoption of solar energy technology through the BRI.

Additionally, their cooperation on solar energy projects with Southeast Asian nations is indicative of their efforts to bolster their influence in the area and offset that of other regional powers. China positions itself as a major player in the energy transition of the region by extending its economic clout and soft power through programs like the Mekong Solar Initiative. China expands its geopolitical influence and strengthens its economic relationships with participating nations by investing in solar infrastructure, creating alliances and dependencies that serve its strategic objectives.

Finally, the continuous expansion of the Belt and Road initiative along with its monopoly over the rare earth metals has enabled China to set up markets around the world, notably in the United States of America too. Re-election of Donald Trump might lead to imposition of tariffs but that wouldn't be different from policies he devised in the last term. Moreover, China has been anticipating this verdict and took measures to stabilise its leadership in the Global South. Additional long term measures have been adopted to arm china against the trade war Trump leadership can reignite. It has the capability to weaponize its dominance over critical minerals such as Lithium crucial to modern technologies. It is this ability China has to influence the world supply chains that makes it a key player in energy transition.

The Belt and Road Initiative's incorporation of China's solar power diplomacy highlights the growing significance of renewable energy in world energy politics. China hopes to further its ecological goals and economic interests, as well as strengthen its influence in strategic regions, by encouraging investments and infrastructure related to solar energy.

## **5.2 European Union: European energy security study: Offshore Projects and Geopolitical Tensions in the North Sea**

Wind power has developed into a vital diplomatic tool that shapes geopolitical relations and fosters international cooperation, in addition to its environmental benefits. Globally, nations are increasingly looking to wind energy as a sustainable and clean substitute for fossil fuels. The move toward renewable energy has spurred a fresh round of diplomatic initiatives centred on wind energy.



Diplomacy around wind energy has also benefited from regional cooperation rather than just bilateral alliances. The goal of the Nordic Wind Energy Alliance is to share best practices in wind energy development and encourage cross-border cooperation. The alliance is an alliance of the Nordic region. Likewise, in an effort to lessen their reliance on fossil fuels and diversify their energy mix, the Gulf Cooperation Council (GCC) nations are looking into joint wind energy project options.

Due to its enormous potential for offshore wind farms and the production of renewable energy, the North Sea has become a hub for the development of wind energy. The North Sea region is now a critical location for energy security issues as European nations rely less on fossil fuels and more on wind power to diversify their energy sources. This case of the European Union aims to analyse the consequences for European energy security and the larger geopolitical environment by examining the junction between wind energy development and geopolitical concerns in the North Sea.

### **5.2.1 Wind Energy Diplomacy in Europe**

As part of its larger green diplomacy mission, the European Union (EU) has been promoting wind energy diplomacy in Europe. The European Union is using wind power to further its climate goals and fortify regional partnerships. Examples of this include boosting offshore wind projects in the North Sea and aiding in the development of wind energy in neighbouring nations.

The North Sea is a prime area for the development of renewable energy because it has good wind conditions and shallow waters that are suitable for offshore wind farm construction. By taking advantage of the region's abundant wind resources and integrating investments in offshore wind projects, European nations like the UK, Germany, Denmark, the Netherlands and Belgium have lowered reliance on imported fossil fuels. By the development of wind energy they set to improve energy independence and resilience while aiming towards decarbonisation in the energy sector (Sanjana S. Kumar, 2024).

These countries are collaborating to integrate offshore wind farms, create interconnected transmission infrastructure, and ease cross-border commerce of renewable electricity through programs like the North Seas Energy Cooperation (European Commission, n.d.). North Sea nations collaborate to optimise wind energy potential while advancing regional energy security and sustainability through the sharing of resources and expertise.

The North Sea Wind Power Hub project, which aims to build man-made islands as centres for offshore wind energy generation and distribution, is a well-known example of regional cooperation. This ambitious endeavour, spearheaded by the Netherlands, Germany, and Denmark, shows that creative solutions may be found to get over technical and legal obstacles to offshore wind growth.

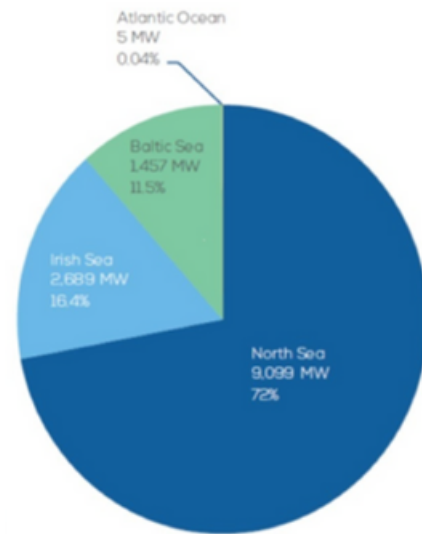
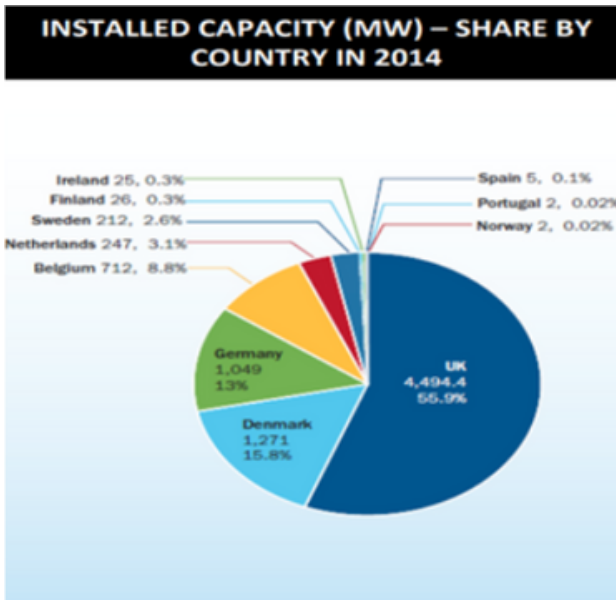


Figure : Cumulative installed capacity of offshore wind by country (MW) and percentage share of European total (left). Same metrics broken down by sea basin

Figure 3: Source- Offshore Wind Industry Europe Key trend and Statistics, 2014

Figure 4: Source- European percentage share of offshore wind capacity

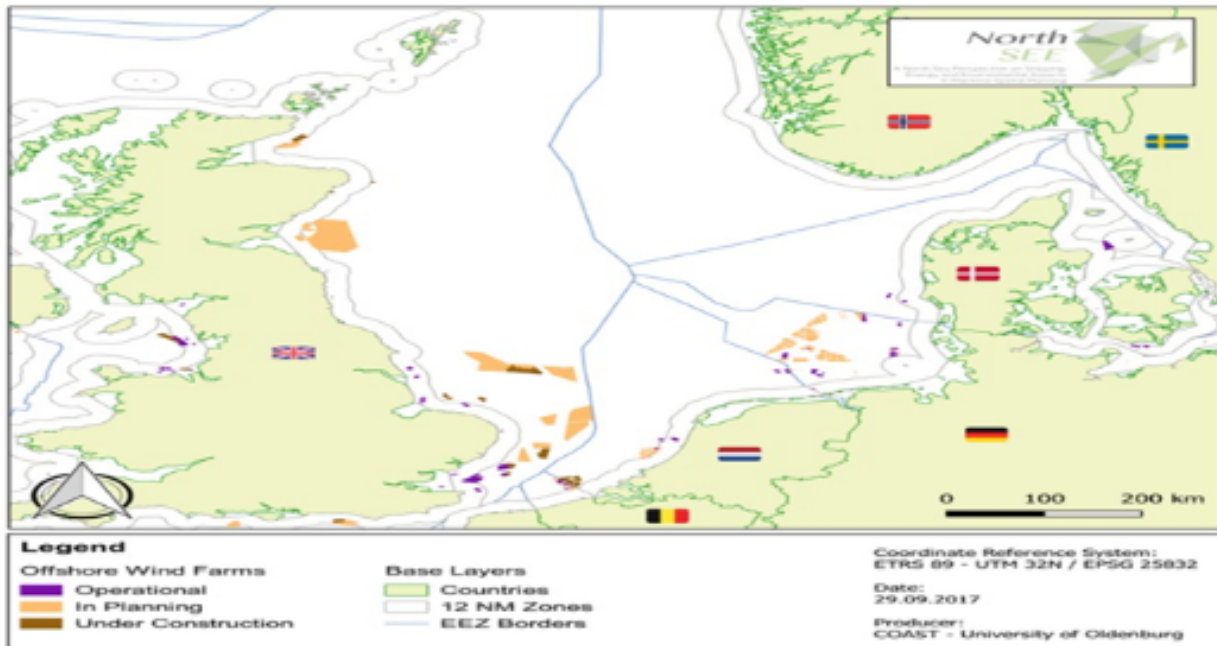


Figure 5: Source- Map of offshore wind farms in Europe

### **5.2.2 Associated Geopolitical Concerns**

In the North Sea region, geopolitical conflicts and territorial issues have become major problems despite the potential benefits of wind energy growth. Conflicts between adjacent nations have arisen as a result of competition over marine borders, resource distribution, and access rights, especially in regions with significant wind energy potential. The deployment of offshore wind farms and collaboration on energy security efforts have been complicated by political tensions and legal challenges resulting from overlapping exclusive economic zones (EEZs) and conflicting territory claims.

Furthermore, geopolitical factors impact project finance and investment decisions. Investment plans are shaped by worries about market access, regulatory stability, and security. For example, ambiguity over the legal framework for offshore wind projects in several North Sea nations may discourage investors and impede the expansion of the renewable energy industry.

Nevertheless, despite geopolitical difficulties, North Sea region stakeholders understand the benefits of cooperation and are actively looking for ways to overcome obstacles. Multilateral forums such as the North Seas Energy Cooperation offer a venue for discussion and cooperation on cooperative research and development, grid integration, and regulatory harmonisation. North Sea nations may create enduring alliances and realise the full potential of wind energy diplomacy in the area by promoting trust and openness.

Encouraging sustainable wind energy growth in the North Sea and resolving geopolitical conflicts require international cooperation and multilateral agreements. Proactive steps to address root causes of tension and aid in dispute resolution are required to reduce geopolitical risks and advance stability in the North Sea region. Clear regulatory frameworks for offshore wind development may be established and maritime disputes can be resolved with the use of international arbitration procedures, mediation services, and diplomatic involvement. Furthermore, fostering an atmosphere that is favourable for sustainable energy collaboration and investment in the North Sea can be achieved through encouraging transparency, trust-building, and information sharing among stakeholders.

Finally, in international arena The EU wind ecosystem holds a significant advantage over its competitors, as it is the most active in patent filings (Team, 2024). Countries in the European Patent Organisation hold the most applications, indicating that the region is world-leading in innovation. Denmark and Germany lead the charge in the development of offshore wind turbine towers that are less material-intensive. Denmark also leads in innovations relating to wind turbine blades, accounting for 85% of inventions between 2017 and 2022, with a surge in patents related to recyclability. This demonstrates Europe's upper hand in the technology transfer pertaining to international relations.

## 6. Geopolitical implications due to the Switch in Renewable Energy

Discussed up till now is how geopolitical dynamics, power alignments and crisis shape the drivers of renewable energy transition. Furthermore, the case studies discussed consolidated the view that relations between countries shape investments, costs and security of transitioning to renewable energy. Furthermore, these geopolitical dynamics might prove to be barriers or by products of the transition to renewable energy. Based on the challenges discussed above, varying expectations can be made for a world where renewables take centre stage.

### 6.1 New Power Asymmetries and dependencies

Contrary to the wide belief that renewable energy due to its abundance has advantages in terms of international security, the critical minerals fundamental for the development of technology capable of harnessing renewable energy pose a security threat. “Between 2007 and 2018, 8 disputes in the PV sector were brought to WTO, of which 4 were initiated by China as a complainant, and the remaining ones by the US, Japan, India and the Republic of Korea, respectively. The US was the respondent in 5 disputes, while India, Canada and the European Union jointly with Italy and Greece were the respondents in one case each. In all of these cases the direct reason for complaints was the imposition of trade measures related to the renewable energy sector” (Pera, 2020). These trade disputes reiterate the difficulty in striking a balance. Many times in an attempt to reach an optimum point, international relations especially trade ties will get affected.

Table 1. World Trade Organization (WTO) trade disputes over solar energy.

Number of Case	Subject	Complainant	Respondent (Trade Measures)	Third Parties	Initiation Date/ Status	Selected WTO Provisions Referred to
DS437	Countervailing Duty Measures on Certain Products from China	China	United States (countervailing duties)	Australia; Brazil; Canada; European Union; India; Japan; Republic of Korea; Norway; Russian Federation; Turkey; Viet Nam; Saudi Arabia	25 May 2012/ pending	Subsidies and Countervailing Measures: Art. 1.1, 1.1(a) (1), 1.1(b), 2, 10, 11, 11.1, 11.2, 11.3, 12.7, 14(d), 30, 32.1; GATT 1994: Art. VI, XXIII
DS456	Certain Measures Relating to Solar Cells and Solar Modules	United States	India (domestic content requirements)	Brazil; Canada; China; European Union; Japan; Korea, Republic of; Malaysia; Norway; Russian Federation; Turkey; Ecuador; Saudi Arabia; Kingdom of; Chinese Taipei	6 February 2013/ pending	GATT 1994: Art. III.4 Trade-Related Investment Measures (TRIMs): Art. 2.1 Subsidies and Countervailing Measures: Art. 3.1(b), 3.2, 5(c), 6.3(a), 6.3(c), 25
DS412	Certain Measures Affecting the Renewable Energy Generation Sector	Japan	Canada (domestic content requirements, subsidies)	Australia; Brazil; China; El Salvador; European Union; Honduras; India; Saudi Arabia; Republic of Korea; Mexico; Norway; Chinese Taipei; United States	13 September 2010/ implementation notified by respondent	GATT 1994: Art. III.4, III.5, XXIII.1 Subsidies and Countervailing Measures: Art. 1.1, 3.1(b), 3.2 Trade-Related Investment Measures (TRIMs): Art. 2.1
DS452	Certain Measures Affecting the Renewable Energy Generation Sector	China	European Union; Italy; Greece (domestic content requirements, subsidies)	-	5 November 2012/ resolved by consultations	GATT 1994: Art. I, III.1, III.4, III.5 Subsidies and Countervailing Measures: Art. 1.1, 3.1(b), 3.2 Trade-Related Investment Measures (TRIMs): Art. 2.1, 2.2
DS510	Certain Measures Relating to the Renewable Energy Sector	India	United States (subsidies, domestic content requirements)	Brazil; China; European Union; Indonesia; Japan; Korea, Republic of; Norway; Russian Federation; Saudi Arabia, Kingdom of; Singapore; Chinese Taipei; Turkey	9 September 2016/ pending	GATT 1994: Art. III.4, XVI.1 Subsidies and Countervailing Measures: Art. 3.1(b), 3.2, 5(a), 5(c), 6.3(a), 25 Trade-Related Investment Measures (TRIMs): Art. 2.1
DS545	Safeguard measure on imports of crystalline silicon photovoltaic products	Korea, Republic of	United States (safeguards - increased tariffs)	Brazil; Canada; China; European Union; Egypt; India; Japan; Kazakhstan; Malaysia; Mexico; Norway; Philippines; Russian Federation; Singapore; Chinese Taipei; Thailand; Viet Nam	14 May 2018/ pending	GATT 1994: Art. X.3, XIII, XIX.1 Safeguards: Art. 1.2.1, 3.1, 3.2, 4.1, 4.1(c), 4.2, 5.1, 5.2, 7.1, 7.4, 8.1, 12.1, 12.2, 12.3
DS562	Safeguard Measure on Imports of Crystalline Silicon Photovoltaic Products	China	United States (safeguards - increased tariffs)	-	14 August 2018/ pending	GATT 1994: Art. X.3, XIII, XIX.1, XIX.2 Safeguards: Art. 2.1, 2.2, 3.1, 3.2, 4.1, 4.1(c), 4.2, 5.1, 7.1, 8.1, 12.1, 12.2, 12.3
DS563	Certain Measures Related to Renewable Energy	China	United States (domestic content requirements)	-	14 August 2018/ pending	GATT 1994: Art. III.4 Trade-Related Investment Measures (TRIMs): Art. 2.1, 2.2 Subsidies and Countervailing Measures: Art. 3.1(b), 3.2

Source: Adapted from WTO [76].

Figure 6: Source- *International Trade Disputes over Renewable Energy*

Moreover, trade disputes would arise due to the dependencies created as a result of China's control over rare earth minerals in the renewable supply chain. These tensions can be sensed already as the world prepares for an intense trade war between Trump and china.

## **6.2 Power Transition**

The emergence of renewable energy is posing a threat to the established power paradigms, which are based on the ownership and distribution of fossil fuels. If they don't make significant investments in renewable energies, nations who have historically been energy superpowers, like Saudi Arabia, Russia, and the United States, may experience a reduction in their worldwide dominance. However, nations that successfully utilise their renewable resources may become politically significant. For example, China's leadership in the production of solar panels raises its profile internationally, and Iceland's effective use of geothermal energy provides a model for other countries.

## **7. Conclusion**

International cooperation, technology transfer, capacity building, and policy assistance are needed to address these issues. Governments must promote collaboration and create plans that strike a balance between geopolitical interests, economic growth, and environmental sustainability. In order to support a more equitable global energy transition, efforts must be taken to guarantee that the advantages of renewable energy are available to all communities and nations. In conclusion, the geopolitical landscape intertwines with the energy transition in all aspects. In such a scenario the goal is to find balance between economic, social and political conflicts that challenge the transition today. The paper discussed the three main drivers of renewable energy - Technology, Policy Change and Participation of countries. All of these drivers face conflicts and disagreements amongst countries.

Nonetheless, the importance of transition to cleaner energy is understood by most major economies if not all. World is heading towards a successful transition even if the pace is not sufficient. What is important to recognise is that, once the post transition period sets in, what will the new world order look like? Perhaps, Geopolitics of the new era will resemble the fossil fuel era of concentrated supply monopolies but the players will be different. Oil and Gas will phase out but materials such as metals and minerals will take over. Power and influence will rest with economies that control these. Countries like China and Russia already have leverage over critical minerals and will continue to have so unless alternate sources are found.

Finally, nations are prioritising energy security and economic security over environmental security. Activities required to fulfil the renewable energy requirements such as mining and extraction of key resources like lithium impact the climate. The Climate clock is ticking and therefore, the way to find a balance between economic growth and climate change becomes more treacherous.

## References

1. Agnieszka Hajdukiewicz, B. P. (2020). *International Trade Disputes over Renewable Energy—the Case of the Solar Photovoltaic Sector*. Political Economy of Energy Policies.
2. Baskaran, G. (2024, January 8). *What China's Ban on Rare Earths Processing Technology Exports Means*. CSIS.
3. Baskaran, G. (2024, January 8). *What China's Ban on Rare Earths Processing Technology Exports Means*. Center For Strategic and International Studies.
4. Channing Arndt, D. A. (2019). *Faster Than You Think: Renewable Energy and Developing Countries*. Annual Review of Resource Economics .
5. David Criekemans, R. C. (2011). *Geopolitics, Power Transitions, and Energy*. ISA Annual Convention 2011, Montréal, Québec, Canada , (p. 52).
6. Debraj Ghosal, R. S. (2023, November 16). *Europe managing energy transition amidst geopolitics*. Economic Times: Energy World .
7. Development, U. N. (1992). *Rio Declaration*. Rio De Janeiro: United Nations.
8. Freeman, C. (1995). *The 'National System of Innovation' in historical perspective*. Cambridge Journal of Economics, 5-24.
9. Ghosh, S. (2022). *Renewable energy and CO2 emissions: the economics and geopolitical implications, experiences from the BRICS nations*. International Journal of Energy Sector Management , 27.
10. Giuli, M. &. (2023). *Assessing the EU's Evolving Position in Energy Geopolitics under Decarbonisation*. The International Spectator.
11. Henderson, J. (2021). *The Energy Transition: Key challenges for Incumbent and new players in global energy systems*. The Oxford Institute for Energy Studies.
12. Henderson, J. (2021). *The Energy Transition: Key challenges for incumbent and new players in the global energy system*. The Oxford Institute for Energy Studies, 30.
13. Hsiang, E. (2023, August 28). *Fossil Fuel Financing and the Russia-Ukraine War*. Harvard International Review .

14. Jayanti, S. (2023, March 15). *Russia Is Vital to the Clean Energy Transition. That's a Problem*. Time.
15. Larch, M., & Wanner, J. (2024). *The consequences of non-participation in the Paris*. European Economic Review, 19.
16. Mathieu Blondeel, M. J. (2021). *The geopolitics of energy system transformation: A review*. Geography Compass.
17. Nidhaleddine Ben Cheikh, Y. B. (2024). *Understanding the drivers of the renewable energy transition*. Economic Analysis and Policy, 604-612.
18. O'Sullivan, J. B. (2021, November 30). *Green Upheaval: The New Geopolitics of Energy*. Foreign Affairs.
19. Overland, I. (2019). *The Geopolitics of Renewable Energy: Debunking four Emerging Myths*. Energy Research & Social Science, 6.
20. Pera, H. &. (2020). *International Trade Disputes over Renewable Energy—the Case of the Solar Photovoltaic Sector*. Energies, 23.
21. Roman Vakulchuk, I. O. (2020). *Renewable energy and geopolitics: A review*. Renewable and Sustainable Energy Reviews, 12.
22. Sanjana S. Kumar, R. B. (2024). *The Role of Green Technology in Shaping Geo-Political Alliances and Economic Power Dynamics*. New Delhi: Raisina House.
23. Smyth, J. (2020, September 14). *US-China: Washington revives plans for its rare earths industry*. Financial Times.
24. Team, A. a. (2024). *Navigating the EU energy transition and its challenges*. Council of European Union .
25. The Paris Agreement. (2015). *United Nations Framework Convention on Climate Change*, (p. 60).
26. Wilson, A. B. (2020). *Offshore wind energy in Europe*. European Parliamentary Research Service.
27. WORLD, I. M. (n.d.). *POLICY BRIEF AND PROPOSALS: COMMON BUT DIFFERENTIATED RESPONSIBILITIES*.
28. ZHANG Hai-Bin, D. H.-C.-X.-T. (2017). *U.S. withdrawal from the Paris Agreement: Reasons, impacts, and China's response*. Advances in Climate Change Research , 6.

# Exploring the Socioeconomic Consequences of COVID-19 in India

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## Abstract

The COVID-19 pandemic has further deteriorated the already-existing social inequalities in India, which disproportionately affected the underprivileged classes from all aspects: economic, healthcare, and educational services. This paper seeks to shed light on various implications of the pandemic by reviewing secondary data from government reports, NGO studies, and peer-reviewed literature. The research identifies how informal sector workers faced job losses and wage reductions, how rural communities faced issues of healthcare access, and how women and children suffered increased social and economic vulnerabilities as a result of the labor market situations in the region.

The study results underpin the fact that caste, gender, and economic status mutually interact and intensify disparities. Reverse migration, digital divide, and policy response seemed to perpetuate inequality further. This paper focuses on the need for systemic reforms: strengthening social protection programs, bridging the digital divides, and issues relating to access to healthcare, to chart a more inclusive and resilient society. Addressing such issues will help India leap over the long-term effects of the pandemic into the sustainability of development.

*Keywords: COVID-19 Pandemic, Social Inequalities, India, Economic Disparities, Gender Inequality, Healthcare Inequities, Digital Divide.*



## **1. Introduction**

The COVID-19 pandemic has amplified social inequities in India, a country with large economic and social imbalances. Lockdowns and economic shutdowns enforced to contain the virus highlighted the inherent structural vulnerabilities of Indian society. These measures disproportionately affected informal sector workers, women, rural populations, and lower caste groups by dramatically amplifying gaps in health care access, education, and economic security.

The pandemic has acted as an intense test for the Indian social fabric, putting a magnifying glass on the fragile foundations that preserve inequalities along lines of caste, gender, and socioeconomic status. Taking a holistic approach, the study will analyze secondary data sources to explore the intersections of these disparities and the systemic issues exacerbating vulnerabilities during crises.

Pivoting through key domains like employment, healthcare, and education, the research shows how the health inequities coupled with minimal social safety netting have dug far deeper into the pockets of vulnerable groups. Then, in the governmental policy response sectors, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and cash transfer policies carry out some assessments, indicating that they are woefully inadequate to respond to the scales of the crisis.

The paper seeks to present a more intricate vision of the pandemic's consequences on the socioeconomic structure of India while advocating for policy interventions toward a more resilient and equitable society. It argues that calling for action, based on these systemic inequities, is not only a necessity but also an opportunity to create a sustainable framework for such crises in the future.

## **2. Economic Disparities**

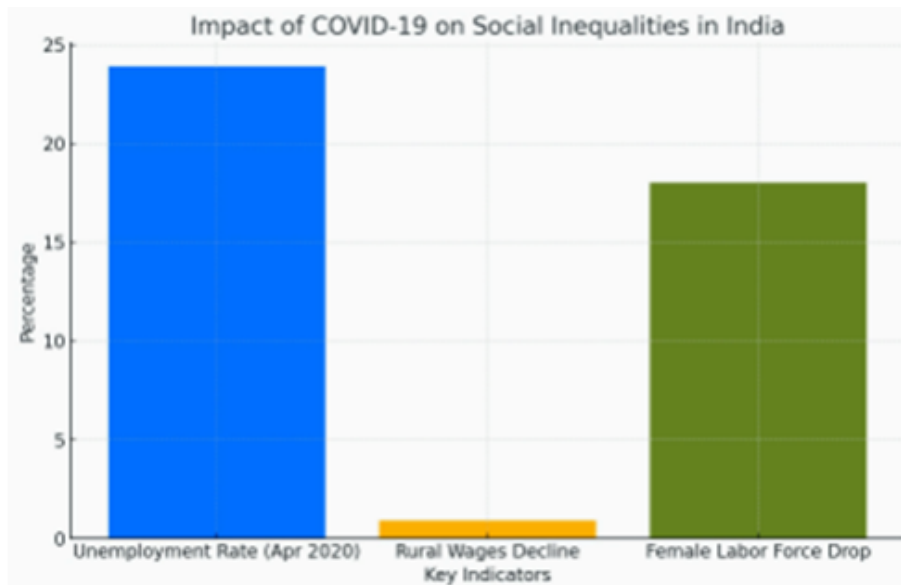
The pandemic has significantly impacted the economic landscape. Lockdown imposed to contain the spread of the virus brought nearly all economic activities to a standstill, disproportionately affecting low-income earners, informal sector workers, and unpaid workers whose contributions have largely been overlooked in discussions of the pandemic's economic impact. According to reports, more than 90% of India's labor force is employed in the informal sector, where workers bore the most significant effects of the pandemic. These workers, with no employment security and no social safety net, faced immediate and severe economic hardship when their source of income vanished almost overnight.

While most middle-class and affluent workers could work from home, for most of India's workforce, this was not an option. This loss in income was not a one-time setback; it has led to a long-term financial instability for millions of households. Many employees were compelled to withdraw from their meager savings or fall into debt, deepening the poverty cycle. Huge job losses also resulted from the recession, peaking at 23.9% during the lockdown in April 2020.

### 3. Rural-Urban Divide

The pandemic also deepened the rural-urban divide. At the very beginning of the outbreak, urban centers were the hubs of the diseases, which saw a massive exodus of migrant workers to the countryside. This reverse migration did pose a severe burden on the rural economy, which was not prepared to accommodate so many incoming workers. Besides, the wage differential between rural and urban workers increased, with rural workers receiving far lower wages as compared to their urban counterparts.

This oversupply of labor in rural areas reduced real wages with the return of migrant laborers. This, along with the loss of income-earning opportunities outside agriculture, contributed to an increased degree of poverty in many rural households. While the MGNREGA did help to some extent, it proved inadequate against the rising need for employment.



**Figure 1:** Bar Graph Illustrating Key Social Inequality Indicators in India During COVID-19. This graph highlights the significant impact of COVID-19 on India's social landscape, focusing on the spike in unemployment during April 2020, the decline in rural wages, and the reduction in female labor force participation, underscoring the pandemic's exacerbation of existing social inequalities.

Compiled from reports by the Centre for Monitoring Indian Economy (CMIE), International Labor Organization (ILO), and Ministry of Labor and Employment (India), highlighting unemployment rates, rural wage disparities, and female labor force participation during the COVID-19 pandemic.

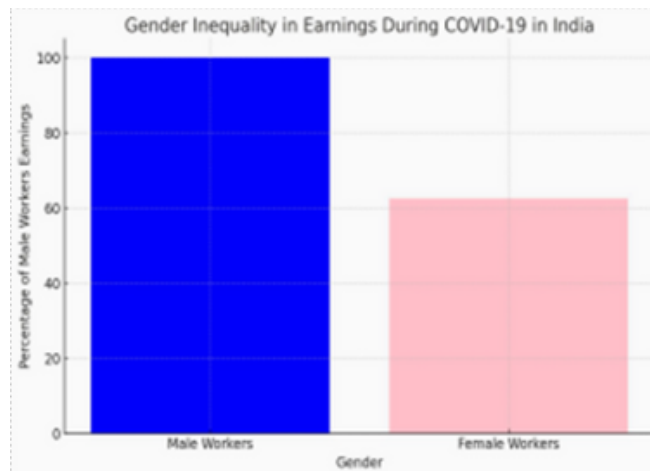
#### 4. Gender Inequality

The COVID-19 pandemic had significant effects on gender disparities in India, further pushing women to the fringes, primarily those in the informal labor sector. Women form a significant majority of informal workers. Job losses and reduced earnings, as well as increased caregiving responsibilities, disproportionately affected them during the pandemic. According to the Centre for Monitoring Indian Economy (CMIE), the female labor force participation rate had significantly declined; women's earnings stand at only 62.5% of that of men, showing further dramatic testimony to the entrenched pay gap between genders. Lockdowns only increased the burden on unpaid care work because more time was dedicated to childcare, eldercare, and household work. According to the report of UN Women (2021), Indian women spent 7 hours daily on unpaid domestic tasks throughout the pandemic, increasing from 5 hours before COVID-19. This restricted their economic as well as educational opportunities in various ways.

For sectors with high percentages of women, such as hospitality, retail, and education, the dislocations caused by the pandemic were widespread and without alternative sources of livelihood. Studies conducted by Statista (2020) and the ILO revealed that 80% of female informal workers lost their incomes, causing economic recovery for women to lag behind and also be more precarious compared to men.

##### 4.1 Policy and Social Implications

Reinforcing conventional gender norms, the pandemic holds women's participation in the workforce and reduces their forward mobility. For these, targeted policy interventions are needed. Income support schemes, skill-building programs, and affordable childcare services could mitigate the recessionary impact on women's participation in the workforce. Equally important would be the encouraging force of gender-responsive policies in education and employment to promote gender equality in India's post-pandemic recovery.



**Figure 2:** Illustrating gender inequality in earnings during the COVID-19 pandemic in India. It shows that, on average, female workers earned only 62.5% of what male workers earned, highlighting the significant gender pay gap exacerbated by the pandemic. Source. Data derived from the Centre for Monitoring Indian Economy (CME) reports, Statista Gender Impact Report (2020), and UN Women's 2021 analysis on gender disparities in labor force participation and income during the COVID-19 pandemic in India.

## **5. Caste and Social Inequalities**

The pandemic of COVID-19 made caste-based inequities in India stark and rampant, affecting the vulnerable more: SCs, STs, and OBCs. These communities are already steeped in low-waged hazardous work and were uniquely vulnerable to disruptions triggered by the pandemic, especially on the economic and health fronts. Members of the SC and ST communities represented a significant proportion in informal and precarious employment, rendering them left out of social security during lockdowns. As reported by the ILO, most of these workers lost their occupations; therefore, many fell into poverty. According to the survey by Jan Sahas (2020), 90% of all the migrant workers that returned to the villages during lockdown belonged to the SC and the ST community. In this regard, the burden on the rural economy has been increased.

Similarly, the education gap further widened the disparities based on caste. Since internet facilities and devices are scarce, the children belonging to SC and ST households do not use online resources as much. As per UNICEF reports in 2021, the share of only 15% of rural houses where most disadvantaged members reside used the internet reliably; this tends to increase dropout rates and results in long-term educational disadvantages.

### **5.1 Policy and Social Implications**

The COVID pandemic has reinforced systemic discrimination against SCs and STs in India. These can only be redressed with strong policy interventions, like targeted employment guarantees, subsidies for digital infrastructure across poorer regions, and the augmentation of healthcare accessibility in rural areas. Additionally, more inclusive social policies that address caste-specific problems are needed to contain inequalities and ensure better resilience for potential future crises.

## **6. Healthcare Inequities**

The COVID-19 pandemic starkly exposed these deep healthcare inequities in India and heightened the suffering of marginalized communities, especially rural areas and those from backward castes. With relatively better access to medical resources, while urban centers were somewhat prepared, the under-preparedness of the rural areas considerably increased the morbidity burden for Scheduled Castes, Scheduled Tribes, and Other Backward Classes in respective parts of the country. WHO (2021) reported that rural India, which constitutes about 68% of the population, faced limited access to essential healthcare services, including testing, treatment, and vaccinations, compared to urban regions.

This further exacerbated existing health disparities. Households with lower incomes, many of them belonging to marginalized castes, had restricted access to COVID-19 healthcare services. According to the Ministry of Health and Family Welfare (2021), disadvantaged groups were more likely to suffer from co-morbidities, such as malnutrition, diabetes, and hypertension, making them more susceptible to the worst effects of illness and mortality caused by COVID-19. However, these groups were also less likely to receive the necessary healthcare needed to address their pre-existing vulnerabilities effectively.

Aside from healthcare access issues, another major problem was the lack of infrastructure in rural healthcare systems. The pressure on medical resources in these areas was further intensified by reverse migration, which strained an already fragile health system. Additionally, the limited diffusion of digital technology in rural communities hindered health awareness and response efforts. With restricted access to mobile technology and internet services, rural populations often missed timely information on COVID-19 prevention, testing, and vaccination, leaving them more vulnerable compared to their urban counterparts.

## **7. Educational Disparities during the Pandemic**

The COVID-19 pandemic has worsened educational inequalities in India, particularly with respect to SCs, STs, and other weaker sections of economically disadvantaged groups. During the closure of schools, the switch to online education has brought to the fore massive digital inequality, especially in rural settings.

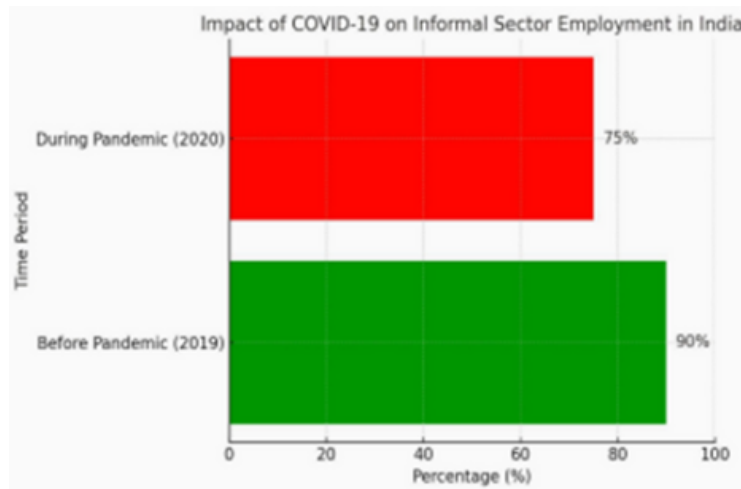
According to UNICEF India (2021), only 24% of the rural Indian households have efficient internet connectivity, and even fewer have smartphones or computers. This lack of digital infrastructure has deprived millions of students of the means to continue learning online, thus exacerbating educational inequalities.

SC and ST students could not continue with their education mostly due to such issues. Reports by Oxfam India in 2020 highlighted how 50% of students from economically disadvantaged backgrounds could not access online education due to inaccessibility to laptops and internet connectivity. In rural areas, this issue posed greater challenges as dropout rates soared. It was estimated that 30% of the students in rural areas were facing risk factors that could push them into dropping out because of digital access. Notably, girls suffered immensely as most of them were expected to assist in household chores during the lockdown, which consequently hindered them from participating in online learning.

The effects of these educational disruptions will be felt for a long time. In the absence of online education, the learning gap of these marginalized students could delay academic progress and lower future opportunities as well. In addition to the challenges of educational access, the digital divide further exacerbated gender and caste-based disparities, threatening the long-term developmental prospects of India's marginalized populations.

### **7.1 Policy and Social Implications**

For India's overall educational disparities, urgent policy intervention is urgently required to mitigate these disparities. Such measures include extending digital infrastructure to rural and more underprivileged areas, offering subsidized internet access and devices, and offline learning solutions for students who do not have digital access. The other aspects include education programs at the community level such as tele-education and distribution of learning materials to ensure no student is left behind. Targeted educational support for SCs, STs, and other disadvantaged groups will help them recover the lost learning and prevent further widening of the gap.



*Figure 3: Graph depicting the impact of COVID-19 on informal sector employment in India. It shows the proportion of India's workforce employed in the informal sector before the pandemic (90%) and the estimated percentage that faced job losses during the pandemic (75%). Data sourced from UNICEF India (2021), Oxfam India (2020), and Ministry of Education, Government of India (2020).*

## **8. Mental Health Crisis Among Vulnerable Groups**

There was also a resultant mental health crisis among the socioeconomically disadvantaged populations during the pandemic. The psychological effects of job losses, economic uncertainty, and restricted social interaction manifested as increased anxiety, depression, and stress. Vulnerable groups, including low-income populations, healthcare professionals, women, children, and the elderly, were especially susceptible to these mental health issues. The increased unpaid care burden on women raised stress levels, while healthcare professionals experienced burnout and trauma from heavy patient loads and the constant risk of contracting the virus.

## **9. Social Protection and Government Response**

Other than cash transfers and food distributions from one's own kitchen or via other programs, the government has also provided jobs under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) to address the pandemic. Though these measures have somewhat helped vulnerable groups, the scale of the crisis has often been underestimated by these interventions. As a result, many informal sector workers and the most vulnerable groups, such as migrant laborers, were largely excluded from or inadequately served by existing social protection programs. Drawing from field research conducted in Kenya, this paper examines the government's efforts, their achievements, limitations, and the gaps in targeting the most vulnerable groups.

## 10. The Future of Social Inequalities Post-Pandemic

A critical question that remains unresolved is how India will address social inequality in the near future when it comes to the aspect of social inequality. The long-term effects of this pandemic in terms of economic, social, and health implications are bound to persist for those at the peripheral end. In this regard, the interventions in social policy are essential and must be encouraged as forming a more equitable society, not least in trying to strengthen the social safety nets or improve access to health care and schooling as well as recovery that benefits all levels of the population, but particularly the weakest.

## 11. Methodology

This study aims to analyze the socioeconomic impact of the COVID-19 pandemic on marginalized communities in India, focusing on healthcare, education, and economic disparities. The methodology involves three key steps: data collection, data analysis, and synthesis of findings:

### 11.1 Data Collection

The primary sources of data for this research include:

**Government Reports:** In order to obtain data on national employment, healthcare facility coverage, and all kinds of economic indicators, I consulted the Ministry of Health and Family Welfare, the Ministry of Labor and Employment, and the National Statistical Office (NSO). Some reports were very useful, for instance, "Periodic Labor Force Survey" and "Rural Health Statistics Report."

**Journal Articles and studies:** Academic research, consisting of peer-reviewed publications, was systematically sourced from scholarly databases including Google Scholar, JSTOR, and PubMed. These include studies that focus on the socio-economic impacts of the pandemic in areas such as caste, gender, and class inequalities; the access of education and mental health services. The most important studies, especially those with a quantitative analysis of the effects of COVID-19 upon marginalized communities and informal sector workers, are included.

**NGO Reports:** Reports from various third-party reliable NGOs in social justice, labor rights, healthcare and education sectors such as data from Oxfam India and Centre for Monitoring Indian Economy (CMIE). Such bodies have done critical analyses on ground realities during the pandemic for the concerned marginalized communities.

**International Organizations:** International bodies such as World Health Organization (WHO), International Labor Organization (ILO), and the United Nations (UN) reports are referred to in order to place India's experience in an international perspective. The documents have described the generalization of global trends on social inequality during COVID-19, so their comparative analysis would be viable with other developing countries.

## 11.2. Data Analysis

The analysis of the collected data involved both qualitative and quantitative approaches:

**Quantitative Analysis:** Statistical analysis has been done in data sets of employment, access to health care, and income inequality at the national level in order to observe any trends or pattern in relations of the pandemic to a raise in social vulnerability. For example, if any artefacts are available that reflect changes in unemployment rates, wage differences, and differences in healthcare access before and after the pandemic can be identified. All these were processed using the tools of Microsoft Excel and SPSS to be visualized in graphs, tables, and charts, highlighting some key indicators such as spike in unemployment and the growing and widening gender wage gap.

**Qualitative Analysis:** In-depth case studies, reports, and journal articles were analyzed to understand the lived experiences and this involves understanding the largely marginalized groups including the rural poor, migrant laborers, women, and the Scheduled Castes and Scheduled Tribes. This study employed content analysis to examine healthcare inequity, the disparities between rural and urban contexts, and the educational implications of the digital divide. Reports were thematically categorized so that information on how those factors intersected with the broader issue of social inequality in India could be teased out.

## 11.3. Synthesis of Findings

By integrating qualitative and quantitative data, I developed a comprehensive narrative examining the COVID-19 pandemic's impact on social inequalities in India. Cross-referencing with the data allowed for some assessment of consistency and reliability, for instance, correlating the analysis of health inequality from the government reports with the qualitative insight from the case studies on rural communities and low-income groups. The synthesis focused on the major areas of concern regarding this pandemic and its disproportionate impact on economically disadvantaged populations, along with suggestions for policy interventions.

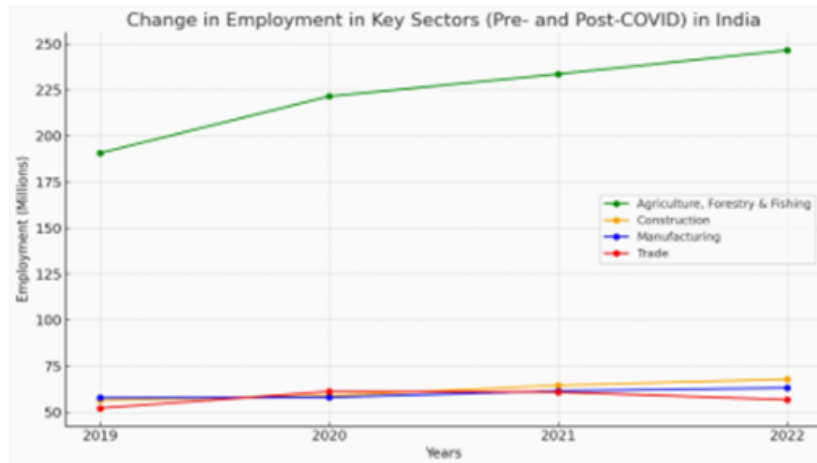
## 12. Result

An analysis of the impact of COVID-19 on India's socio-economic inequalities reveals several critical findings based on reliable data source:

### 12.1 Employment and Income Losses:

India has more than 90% of the workforce employed in the informal sector, and nearly 40 crore workers have been severely hit by the pandemic, according to International Labor Organization (ILO) and Women in Informal Employment: Globalizing and Organizing (WIEGO). Lockdown has pushed unemployment to 23.9% in April 2020, with 9 million jobs lost between January and March 2020 as per ILO. The PLFS survey also revealed that for nearly 90% of rural households, informal self-employment and casual labor are the source of income, where the worst-hit were the daily wage earners. Sectors such as retail, construction, and hospitality were the most affected-areas that resulted in massive income disruptions.





**Figure 4:** Graph illustrating post-COVID, agriculture saw a steady rise in employment from 200 to 240 million, while manufacturing, construction, and trade remained stagnant around 50 million, reflecting uneven sectoral recovery. Data sourced from the Centre for Monitoring Indian Economy (CMIE), National Statistical Office (NSO), and Ministry of Labor and Employment (India).

### 12.2 Impact on Migrant Workers:

The pandemic caused reverse migration of more than 10 million workers to the rural areas, straining a rather fragile economy in these areas. In several cases, wages fell sharply as a result of an oversupply of labor in rural regions. Surveys conducted by Jan Sahas reveal that 90% of migrant workers lost their only source of income during the pandemic and 42% didn't have enough food for the next day, aggravating further the crisis of rural poverty.

### 12.3 Gender Disparities:

The job loss that the pandemic caused impacted women more disproportionately. CMIE and Statista demonstrate how it recovered with a lag and a large wage gap. Only 62.5% of what men were paid were what women earned; also, 80% of female informal workers suffered an income disturbance. Women took up a larger share of unpaid care work from homes, which had worsened the economic and social inequalities existing.

### 12.4 Healthcare Inequalities:

Access to healthcare, especially in rural areas, was abysmal during the pandemic. Return migrants proved too much for overstretched rural health systems, according to WIEGO and World Bank reports. There is rural India comprising 68% of the population and has a limited access to COVID-19 testing and vaccination facilities. The most vulnerable of these groups were SCs and STs, whose relatively poor health situation was also partly due to incomplete access to health services and a strong tendency toward greater comorbidity, such as malnutrition.

**Healthcare Access (Urban vs. Rural) - COVID-19**

Healthcare Metric	Urban Areas	Rural Areas
Hospital Beds per 1,000 People	3.2 beds	1.4 beds
Doctors per 1,000 People	1.3 doctors	0.3 doctors
Primary Health Centers (PHCs)	60% functional	40% functional
Testing Centers (Per District)	85-90 centers	20-25 centers
Oxygen Availability	75% sufficient	30% sufficient
ICU Beds per 1,000 People	1 beds	0.1 beds
Ventilators per 1,000 People	0.5 ventilators	0.05 ventilators
Vaccination Coverage (as of 2021)	80%	50%
Ambulance Response Time	10-15 minutes	45-60 minutes

*Table 1: Table Illustrates comparison of Healthcare Access in Urban and Rural India During COVID-19, Highlighting Disparities in Critical Resources. Data sourced from the Ministry of Health and Family Welfare (MoHFW), Government of India, and World Health Organization (WHO).*

**12.5 Educational Impact and Digital Divide:**

School closures during the pandemic were criticized for increasing the digital divide, as Indian households could access the internet only in 24% of the areas, according to UNICEF data. Such deployment in rural areas was even poorer. Children of SC, ST, and households in economic weaker sections have been seriously disadvantaged compared to other sections, making them vulnerable to increased chances of dropout and other long-term educational disadvantages.

**12.6 Government Interventions:**

The government availed relief measures like access to the Mahatma Gandhi National Rural Employment Guarantee Act, MGNREGA, and cash transfers. According to reports from the World Bank and ILO, however, these measures remained inadequate to the scale of the crisis. Many informal workers and migrant laborers lacked identification, effectively excluding them, which further worsened their vulnerabilities.

These results capture the destructive nature of this pandemic, particularly for informal workers, women, and other more marginalized groups, and hence, a massive disturbance in the economy. The data reflects an urgent call for specific policy instruments to rebuild livelihoods and address the deep-rooted inequalities exposed by the crisis.

### **13. Discussion**

The findings from this study highlight the profound impact that the COVID-19 pandemic has had on existing social inequalities in India. The virus not only revealed but also intensified disparities across economic, healthcare, gender, caste, and educational lines. The intersectionality of these social categories has led to a multifaceted crisis where the most vulnerable populations have borne the heaviest burden.

#### **13.1 Economic Vulnerability and Informal Sector Workers**

The economic impact of the pandemic has been somewhat more intense on workers in the informal sector, which accounts for more than 90% of India's labor force. The lockdown precipitated job and wage losses which immediately affected them, without any cushion of social security or employment security. Millions of households were threatened with wage cuts and debt burden.

Limiting reach of government assistance was also one of the main factors that exacerbated the economic vulnerability. Thus, this unbalanced economic shock has begun to increase the disparity between the safe, guaranteed employment of a few and the vast majority who only survive on daily wages.

#### **13.2 Rural-Urban Divide**

The pandemic amplified the already acute rural-urban divide in India. Initially, it was cities alone that were at the center of the outbreak, with massive employment losses, especially during the lockdown of construction, retail, and manufacturing sectors, in which migrant workers already dominate the labor force. The pressure on the rural economy was further put at a breaking point, as it lacked the capacity to generate employment opportunities on such a large scale. This reverse migration not only affected the rural economies but also constituted as wage suppression, further driving rural households into poverty.

There has also been a significant widening of the wage differential between rural and urban workers. Rural workers, who still largely draw their income from agriculture, found fewer opportunities as demand for non-agricultural labor plummeted. The pandemic highlighted the structural economic difference between rural and urban India, calling in for specific, targeted rural development programs and better labor protection policies to bridge this gap.

#### **13.3 Gender Inequality**

Gender-based inequalities have increased during the pandemic, since women were more significantly affected from economic and social aspects of the crisis. India had been experiencing a downward trend of labor force participation for decades; the pandemic made it worse. Because most Indian women are working in the informal economy, losses by way of job loss, wage reduction, or unpaid care work within the home created due to lockdowns have devastated them. This not only strengthened the traditional gender roles but also limited the pace of economic development for women.

Additionally, the unpaid care work burden on women-related to childcare, elderly, and sick care-further reduced their participation in economic activities. Moreover, prior to the pandemic, women in India earned much less than men, and this gap worsened under the pandemic. Even after the pandemic, women's employment has taken much more time to recover, causing a long-term damage to gender balance at the workplace.

### **13.4 Caste-Based Disparities**

The pandemic also threw into relief caste-based inequalities. SCs, STs, and other deprived groups have historically suffered from comparatively poorer access to health care, education, and job opportunities. In this scenario, the pandemic accentuates these challenges. These communities, that constitute a major proportion of such hazardous and poorly paid employment, are therefore at greater risk of both health and economic shocks.

### **13.5 Healthcare Inequities**

A healthcare system that was already under a great deal of stress even before the pandemic, India saw enormous pressure on it during COVID-19, especially in rural India. Testing, treatment, and vaccination facilities were way less accessible to marginalized communities, comprising low-income households, SCs, and STs, as compared to the better-off sections of the population. Healthcare facilities largely concentrated in the urban centers left the tribal population exposed to attack, and the return migration of huge numbers further put pressure on already stretched out rural health systems.

This was aggravated by the presence of co-morbid conditions such as malnutrition, chronic diseases, and poor living conditions, which predisposed these vulnerable groups to higher risks from the virus. Critical healthcare infrastructure, largely in more remote locations, meant that most of these deaths occurred within the marginalized communities and reflect some of the deepest inequities in healthcare.

### **13.6 Policy Responses and Social Protection**

While relief measures such as direct cash transfers were undertaken by the government and the Public Distribution System (PDS) was extended beyond the June-August period for food security, the benefits of those policies were not distributed evenly. The most vulnerable sections of people- the ones in the informal sector, for instance- had to face some significant hurdles in accessing those services. Moreover, due to the alleged antipathy towards the migrant workers, who had gone to their villages in anticipation of and during the pandemic, state welfare schemes largely remained out of their reach as there was an administrative bottleneck coupled with identification-related issues.

Despite these challenges, it was during this period that the opening of policies like MGNREGA filled a role that was critical to providing temporary relief, but relief came without staying power and touched neither the systemic inequalities that contributed to the effect of the pandemic. Moving forward, more inclusive policy-making is necessary, so that schemes reach those most in need.

### **13.7 Future Implications**

The pandemic will have an extensive impact on the social fabric of India, and the job of recovery is going to be uneven across different sections of society. A lion's share of the most marginalized sections—the women, rural communities, SCs, STs, and informal sector workers—would face a long way of recovery. Unless huge targeted intervention is done, inequalities caused by the COVID-19 pandemic may gather pace and become deep-rooted disadvantages for generations to come.

One significant lesson drawn from this analysis is the call for systemic reforms. Strengthening social protection, provision and equal access to universal health care, equitable education, and greater equality with respect to gender and caste is considered a step toward building more resilience against this and any future crisis. The pandemic presented an opportunity for India is now in revisiting its approach to social protection and inclusion and emerge as a more equitable society.

### **14. Conclusion**

The COVID-19 pandemic has precipitated a dramatic intensification of social inequalities in India, with informal sector workers, women, marginalized castes, and rural communities being most severely impacted. Since more than 90% of India's working population falls into the informal sector, lockdowns across the nation both last year and this year have exposed more than 40 crore workers to a proximate danger of losing their jobs and earning capacity. Unemployment reached its peak at 23.9% in April 2020, according to the Centre for Monitoring Indian Economy (CMIE). The informal sector workers experienced the longest spells of unemployment or non-earning periods. Migrant laborers arriving back in their local villages increased the burden on the economies in the local villages where they had to return. This locality is highly affected by fewer job opportunities and decreasing wages, further accelerating poverty. This reverse migration highlighted the urgent requirement of labor protection as well as wholesome support for the informal workers.

At the same time, the pandemic has once again highlighted the longstanding rural-urban health divide. Cities, with approximately 3.2 hospital beds and 1.3 doctors per 1,000 people, were relatively better equipped to handle the health crisis compared to rural areas, which had only 1.4 beds and 0.3 doctors per 1,000 people. In rural areas, due to fewer health infrastructure, patients need to travel a longer distance to access necessary medical care and, therefore, higher mortality and complications among the rural COVID-19 patients. The rural districts also had much fewer COVID-19 testing centers, typically 20-25 per district compared to 85-90 per district in the urban areas, seriously limiting testing accessibility and timely intervention in the rural regions. This disparity highlighted an urgent need to strengthen healthcare facilities and emergency response systems in the rural areas in support of equitable health outcomes across the country.

Disproportionate economic and social disruptions dramatically expanded the gender gap, particularly impacting women's socioeconomic opportunities. Female labor force participation declined to historic lows; while women constitute a significant proportion of the informal economy, they faced deep job cuts and wage compression during the pandemic.

Women's earnings averaged to only 62.5% of men's earnings. This also came at the price of additional unpaid care work for women, whereby mean hours of daily unpaid household work rose from 5 hours before COVID to 7 hours amid the pandemic. This added burden of unpaid caregiving therefore limits the ability of women to return to the labor market and traditional roles of women advance even further, hence warrants policies that could boost their economic and social mobility at a gender response.

Digitization has surfaced long-term educational inequalities even for low-income and rural students. According to UNICEF statistics, only 24% of Indian households had internet access, with an even lower percentage in rural areas. This digital divide effectively prevented millions of students from participating in online education. Children from deprived strata, especially SC and ST children, were also likely to drop out more often because of their lack of access to digital platforms. These are failures, too, which should make digital infrastructure accessible to children in a secluded community so that this gap can be bridged in order to eliminate intergenerational learning loss.

To this effect, the Indian government implemented a series of relief measures: extending MGNREGA, which provided a record amount of funds for the provision of employment to people in rural areas. World Bank reports reveal that migrant workers and informal laborers faced significant barriers in accessing relief resources due to identification challenges and policy implementation gaps. Consequently, these systemic limitations substantially undermined the effectiveness of relief efforts.

In a nutshell, COVID-19 has made it very clear that there is an urgent need for systemic reforms in many areas. The pandemic has brought to the forefront and deepened existing inequalities, especially in healthcare and education. Policy interventions should therefore focus on reducing economic and health disparities, investing in rural infrastructure, and creating policies that encourage women's participation in the workforce. Moreover, access to digital services must be increased to ensure that education is inclusive. Research on the educational impact of the pandemic on marginalized communities shows that limited access to digital resources significantly hindered the ability of disadvantaged groups to continue their education. Similarly, the challenges faced by the healthcare sector during the pandemic highlight the unequal distribution of medical resources and the fragility of the system, especially in rural areas. Incorporating these insights into policy planning will help create a more robust and equitable society, capable of facing future challenges in India.

## References

1. Egger, D., et al. (2021). *Falling living standards during the COVID-19 crisis: Quantitative evidence from nine developing countries*. Science Advances, 7(6), eabe0997.
2. Jha, P., & Kumar, M. (2020). *Labor in India and the COVID-19 Pandemic*. Indian Economic Journal, 68(3), 417-437.
3. Gururaja, B. L., & Ranjitha, N. (2022). *Socio-economic impact of COVID-19 on the informal sector in India*. Contemporary Social Science, 17(2), 173-190.
4. Gupta, A., Malani, A., & Woda, B. (2021). *Inequality in India declined during COVID*. National Bureau of Economic Research.
5. Centre for Monitoring Indian Economy (CMIE). (2020). *Unemployment and labor participation during COVID-19 in India*. CMIE Economic Outlook Report, April 2020.
6. Ministry of Health and Family Welfare (MoHFW). (2021). *COVID-19 public health response and healthcare access in rural and urban India*. National Health Profile, Government of India.
7. International Labor Organization (ILO). (2020). *COVID-19 impact on informal sector employment: Risks and measures*. ILO Policy Brief, April 2020. 8. UNICEF. (2021). *Digital divide and education during the COVID-19 pandemic in India*. UNICEF India Report.
8. National Health Profile (India). (2019). *Health statistics in India: A comparative analysis of urban and rural healthcare infrastructure*. Ministry of Health and Family Welfare Annual Report.
9. World Bank. (2021). *Social protection and informal workers in India during COVID-19*. World Bank South Asia Economic Focus.
10. Statista. (2020). *Gender disparities in employment and unpaid care work during COVID-19 in India*. Statista Gender Impact Report.
11. Ministry of Labor and Employment, Government of India. (2020). *Periodic Labor Force Survey (PLFS) 2019-2020*. Ministry of Labor and Employment, Government of India.
12. National Statistical Office (NSO), Government of India. (2020). *Rural Health Statistics Report*. Ministry of Health and Family Welfare, Government of India.

13. Jan Sahas. (2020). *Impact of COVID-19 on Migrant Workers in India*. Jan Sahas Research Report.
14. UN Women. (2021). *The Impact of COVID-19 on Women's Labor Force Participation in India*. UN Women Report.
15. Oxfam India. (2020). *The Impact of COVID-19 on Educational Inequalities in India*. Oxfam India Report.
16. World Health Organization (WHO). (2021). *COVID-19 Response: Healthcare Access in Rural and Urban India*. WHO Report.
17. Government of India. (2021). *COVID-19 Impact on Education: A National Overview*. Ministry of Education, Government of India.



# Tax Policies and Marginalized Communities in India: Who Bears the Burden?

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## Abstract

Tax policies are a fundamental aspect of economic governance, shaping the distribution of resources and influencing societal inequalities. Theories such as John Rawls's Theory of Justice emphasize the need for policies that ensure fairness and support for the least advantaged, while Milton Friedman's Economic Freedom theory argues for minimal state intervention to foster economic growth. In India, recent tax reforms and new tax regimes have sparked debates about their impact on various socio-economic groups, particularly marginalized communities. This research paper explores the intersection of tax policies and marginalized communities, focusing on how these policies affect income distribution, access to resources, and overall socio-economic well-being.

By analysing data from recent tax policy changes and their implementation, this study seeks to identify who bears the greatest burden of these policies. The study employs a mixed-methods approach, combining regression analysis of income distribution data pre- and post-tax reform with in-depth qualitative interviews conducted with marginalized individuals and representatives from community organizations. Key findings indicate that consumption-based indirect taxes disproportionately burden low-income households, exacerbating existing inequalities. Additionally, case studies reveal that limited awareness and access to tax benefits further marginalize these groups. While some reforms aim to simplify the system and reduce rates, they often inadvertently intensify disparities. The paper concludes with recommendations for more equitable tax policies that better address the needs of marginalized communities and promote social justice.

*Keywords: Tax Reforms, Marginalized Communities, Income Inequality, Social Justice, Economic Disparities*

## 1. Introduction

Inequality in India has skyrocketed since the early 2000s, with the income and wealth share of the top one per cent of the population rising to 22.6 per cent and 40.1 per cent, respectively, in 2022-23, according to a paper titled “Income and Wealth Inequality in India, 1922-2023: The Rise of the Billionaire Raj.” It stated that between 2014-15 and 2022-23, the rise of top-end inequality has been particularly pronounced in terms of wealth concentration. This fact establishes India as the second most unequal nation on earth in terms of income inequality, after South Africa. Tax policies are foundational elements of economic governance, shaping the distribution of wealth and influencing the socioeconomic fabric of a nation. While ostensibly designed to fund public services and infrastructure, these policies can have far-reaching consequences, particularly for marginalized communities. Despite the democratic ideals underpinning tax systems, the impact of taxation often reveals deep-seated inequities that exacerbate existing disparities.

In recent years, increasing attention has been paid to the ways in which tax policies affect different demographic groups. However, there remains a significant gap in understanding the nuanced effects on marginalized communities—groups that are frequently at a disadvantage in the economic and social spheres. In the Indian context, marginalized communities include Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Classes (OBCs), religious minorities, women, and low-income households. These groups often face systemic barriers that limit their access to education, healthcare, and economic opportunities, making them more vulnerable to the effects of regressive tax policies.

This paper seeks to explore the complex interplay between tax policies and marginalized communities, focusing on who bears the brunt of these policies and why. By examining both direct and indirect effects, the research aims to shed light on how tax structures and regulations impact various groups and to identify potential reforms that could lead to a more equitable system. The paper is structured as follows: the next section reviews relevant literature and theoretical frameworks, followed by an explanation of the methodology employed. The subsequent sections present the findings and discussions, including quantitative analysis and qualitative insights. Finally, the paper concludes with policy recommendations aimed at mitigating the adverse effects of taxation on India's most vulnerable populations.

## **2. Background**

Taxation, a cornerstone of modern governance, serves as a potent tool for shaping a nation's economic trajectory. Through its capacity to influence resource allocation, income distribution, and public service provision, tax policy holds the power to either amplify or ameliorate socioeconomic disparities. While the overall impact of taxation on a society is often subject to extensive analysis, the nuanced consequences for marginalized communities frequently remain obscured.

### **2.1 Historical Context of Indian Taxation**

Historically, tax systems have been constructed with a broad-brush approach, often neglecting the heterogeneous experiences within a population. As a result, the burden of taxation can disproportionately fall on vulnerable groups, thereby exacerbating existing socioeconomic inequalities. Understanding the intricate relationship between tax policies and marginalized communities is imperative for the formulation of equitable and inclusive fiscal frameworks.

### **2.2 Current Tax Structure and Marginalized Communities**

Marginalized communities, characterized by systemic disadvantages in economic, social, and political spheres, are particularly susceptible to the regressive nature of certain tax structures. These communities often grapple with lower incomes, limited access to education and employment opportunities, and disproportionate exposure to economic shocks. Consequently, they possess a reduced capacity to absorb the financial implications of taxation.

Moreover, the consumption-based nature of many indirect taxes, such as sales and excise taxes, can disproportionately affect low-income households. These taxes constitute a larger percentage of their disposable income, leaving limited resources for essential goods and services. For instance, a study by the National Institute of Public Finance and Policy (NIPFP) demonstrated that households earning below INR 10,000 monthly experience a greater GST burden as a percentage of their income compared to wealthier households. This regressive tax burden leaves marginalized communities with little opportunity to save or invest in wealth-building assets like property or education. Consequently, limited disposable income restricts wealth accumulation, making it challenging for these communities to achieve intergenerational financial stability.

### **2.3 Challenges for Marginalized Communities**

The GCB measure was one of the first attempts to assess corruption based on a survey/opinion of ordinary citizens who encounter corruption on a daily basis; however, it is only available for a limited number of years. The ICRG primarily calculates investment risk. CPI and CCI are both measurements of corruption. However, CPI is a more accurate indicator of corruption and hence used in the study.

### **2.4 Indirect Taxes and Their Disproportionate Impact**

The inability to build intergenerational wealth is further exacerbated by specific excise taxes, such as those on fuel, which directly impact daily essentials and further reduce the financial resilience of low-income households. Research from the Council on Energy, Environment, and Water (CEEW) highlights how fuel excise duties significantly increase transportation expenses, straining household budgets and limiting funds available for long-term savings. Studies by Dhananjayan Sriskandarajah (2005) also emphasize that marginalized communities, lacking access to tax-efficient financial strategies available to wealthier groups, are particularly vulnerable to this cycle. Without the means to build and transfer wealth across generations, these households remain trapped in poverty, perpetuating a cycle that regressive taxation only reinforces. Thus, tax policies in India present structural barriers that undermine marginalized communities' potential for socioeconomic advancement.

### **2.5 Tax Exemptions and Deductions**

Tax exemptions and deductions are often designed to provide relief to specific groups or encourage particular behaviours, such as homeownership or retirement savings. However, these benefits are not always accessible to marginalized communities, who may lack the resources or knowledge to take advantage of them. For instance, deductions on mortgage interest payments are aimed at promoting homeownership but offer no benefit to low-income households that cannot afford to purchase a home. Similarly, deductions for retirement savings provide limited value to those in precarious employment who prioritize daily expenses over long-term savings.

To strengthen the argument, it is important to note how these tax exemptions and deductions compound the impact of regressive indirect taxes. Marginalized communities already bear a higher indirect tax burden due to their spending patterns, and the inaccessibility of these exemptions further increases their financial strain. For example, studies have shown that middle- and upper-income households disproportionately benefit from deductions on investments in tax-saving instruments, whereas marginalized groups, with limited financial literacy or disposable income, fail to access these benefits. Consequently, the exclusion from tax exemptions deepens the overall tax burden on these groups, perpetuating their economic disadvantages.

## **2.6 Public Services and Labor Market Outcomes**

The provision of public services, which is fundamentally financed through taxation, can also exacerbate disparities. While essential services like education, healthcare, and infrastructure are crucial for social mobility, their distribution is often uneven. Marginalized communities may experience limited access to quality public services, further hindering their economic progress.

Beyond the direct impact on income and expenditure, tax policies can also influence labor market outcomes for marginalized groups. In India, although payroll taxes primarily affect formal sector employees, the additional costs associated with these taxes can discourage employers from creating formal jobs. This often limits opportunities for low-wage workers from marginalized communities, who are more likely to be employed in the informal sector where payroll taxes and employee benefits are less prevalent. Additionally, tax incentives that favour specific industries or income brackets may inadvertently disadvantage marginalized entrepreneurs and small business owners.

## **2.7 Navigating Complex Tax Systems**

To compound the issue, marginalized communities often face challenges in navigating complex tax systems. Limited financial literacy, lack of access to tax preparation assistance, and fear of audits can lead to underpayment or non-compliance, resulting in penalties and further financial hardship.

# **3. Literature Review**

The impact of tax policies on marginalized communities is a critical area of study, particularly in developing countries like India, where economic inequality is pronounced. This literature review synthesizes existing research on the intersection of tax policies and the socio-economic status of marginalized groups, highlighting key findings, methodologies, and gaps in the literature.

## **3.1 Tax Policies and Marginalized Communities: A Thematic Approach**

Tax policies have long been analysed for their socio-economic implications, particularly for marginalized communities. Key themes emerging in the literature include the historical evolution of tax policies, the burden of indirect taxes, and gendered taxation. These themes reveal the structural inequities embedded in tax systems and their compounded effects on vulnerable populations.

### **3.1.1 Historical Evolution of Tax Systems**

Historically, tax policies in India have evolved through various phases, reflecting the socio-economic priorities of the time. For instance, during the colonial period, the tax system was predominantly regressive, designed to maximize revenue for the British administration (Mukherjee, 1993). Post-independence, efforts were made to transition toward a progressive system; however, persistent challenges like tax evasion, corruption, and inefficiencies have limited its effectiveness (Rao, 2000). The introduction of the Goods and Services Tax (GST) in 2017 marked a significant reform, yet its implications for marginalized groups, particularly low-income households, remain a contentious issue (Chakraborty, 2019).

### **3.1.2 Burden of Indirect Taxes**

Empirical studies consistently highlight the regressive nature of indirect taxes in India. Research by Dev and Kanbur (2003) emphasizes how lower-income households are disproportionately affected by taxes like GST due to their higher consumption-to-income ratio. As reported by the National Institute of Public Finance and Policy (NIPFP, 2018), households in the lowest income quintile spend approximately 65% of their income on consumption, compared to 40% for wealthier households. This disparity illustrates the regressive impact of consumption-based taxes. Additionally, Sriskandarajah (2005) underscores the unique challenges faced by marginalized groups such as Dalits and Adivasis, who often operate within the informal economy. The National Commission for Scheduled Castes and Scheduled Tribes (2015) has reported that these communities, lacking access to formal financial systems, bear a higher effective tax burden due to their reliance on undocumented trades.

### **3.1.3 Gender and Taxation**

The gendered impact of tax policies is an underexplored but significant dimension. Diane Elson's (2006) analysis of global tax systems critiques their failure to account for unpaid labour, predominantly performed by women. In the Indian context, Bina Agarwal (1997) and Nitya Rao (2010) provide evidence that women, particularly those from marginalized communities, face compounded disadvantages due to gendered and socio-economic inequities. Women in these groups often lack access to tax benefits and face barriers to formal employment, exacerbating their financial vulnerabilities (Agarwal, 1997).

## **3.2 Gaps in the Literature**

Despite significant contributions, several gaps remain. First, while many studies document the regressive nature of indirect taxes, there is limited longitudinal data on their long-term impact on marginalized communities in

India (NIPFP, 2020). Second, the intersectionality of caste, gender, and economic status in determining tax burdens remains underexplored. Third, comparative evidence from international studies, particularly from countries with similar socio-economic contexts, is scarce. For example, studies from Brazil (Silveira et al., 2011) and South Africa (Inchauste et al., 2015) demonstrate how targeted tax exemptions can mitigate the effects of regressive taxation, offering valuable lessons for India.

### **3.3 Towards Equitable Tax Policies**

The literature on tax policies and marginalized communities in India underscores the urgent need for a more equitable tax system. A fairer tax structure could significantly alleviate the financial burdens faced by marginalized groups, such as Dalits and Adivasis, who are disproportionately affected by regressive tax policies. For example, implementing progressive tax rates that increase with income levels could reduce the reliance on consumption-based taxes that hit low-income households the hardest. Additionally, targeted tax exemptions and benefits for essential goods can protect marginalized communities from the adverse effects of indirect taxes, enabling them to allocate more resources toward essential needs such as healthcare, education, and housing. While significant strides have been made in understanding the regressive nature of current tax policies, further research is essential to develop nuanced and effective policy interventions. Addressing these gaps can help ensure that tax policies not only contribute to reducing economic disparities but also empower marginalized communities by fostering an environment where they can accumulate wealth and achieve greater financial stability. By prioritizing equity in taxation, we can pave the way for a more inclusive economic framework that uplifts marginalized groups and fosters long-term social and economic development.

## **4. Theoretical Framework**

Progressive taxation theory posits that tax rates should increase as the taxable amount increases. This theory is grounded in the principle of equity, which asserts that individuals with higher incomes should contribute a larger proportion of their earnings to public revenues. In the context of India, progressive taxation aims to redistribute wealth and reduce income inequality. However, the effectiveness of progressive taxes in alleviating the financial burden on marginalized communities will be examined, considering the implementation and loopholes within the tax system. Specifically, this theory will be used to evaluate whether India's progressive tax policies, such as income tax, sufficiently mitigate economic inequalities or are undermined by exemptions and tax avoidance practices.

Contrary to progressive taxation, regressive taxation imposes a heavier burden on lower-income individuals. Indirect taxes such as Goods and Services Tax (GST) in India can be regressive if they disproportionately affect the consumption patterns of marginalized communities. The application of this theory will focus on how the structure and rates of GST in India impact the disposable incomes of marginalized groups, potentially perpetuating poverty cycles. This framework will explore how regressive taxation impacts these communities, potentially exacerbating poverty and limiting access to essential services.

Economic inequality theories, such as those proposed by Thomas Piketty and Joseph Stiglitz, will be used to understand the broader implications of tax policies on wealth distribution. Piketty's work on capital and income inequality highlights how tax policies can either mitigate or worsen economic disparities. This theory will underpin the analysis of how India's tax structure contributes to wealth concentration among higher-income groups and evaluates the adequacy of current redistributive mechanisms, such as subsidies or targeted welfare programs, in addressing these disparities.

Theories of social stratification, such as those developed by Max Weber and Pierre Bourdieu, provide insight into how social hierarchies and power dynamics influence the distribution of resources. This theory will be applied to assess how India's tax policies intersect with caste and gender hierarchies, examining how systemic inequities manifest in tax burdens and access to financial incentives. For instance, Bourdieu's concept of social capital will help explain why marginalized groups face barriers in leveraging tax benefits.

Public choice theory, as articulated by James Buchanan and Gordon Tullock, analyses how political decisions about taxation are influenced by the self-interest of voters, politicians, and bureaucrats. This theory will illuminate how tax policies in India may be influenced by political lobbying or electoral incentives, potentially leading to policy outcomes that favour higher-income groups or politically influential communities over marginalized populations.

Fiscal sociology, as discussed by scholars like Richard Swedberg and Wolfgang Streeck, focuses on the relationship between taxation and society. This framework will be used to investigate how social norms and governance systems in India shape tax compliance and policy enforcement, particularly among marginalized groups. Additionally, it will provide a lens to examine the societal acceptance of regressive versus progressive taxation models.



Kimberlé Crenshaw's intersectionality theory provides a framework for understanding how various forms of discrimination (e.g., race, gender, class) intersect and compound the disadvantages faced by marginalized communities. By applying this theory, the research will examine how the combined effects of caste, gender, and economic status result in differential tax burdens, exploring case studies of Dalit women or tribal groups to highlight intersectional vulnerabilities.

Amartya Sen's capability approach emphasizes the importance of expanding individuals' capabilities and freedoms. This theory will frame the analysis of how tax policies influence marginalized communities' access to essential services like healthcare, education, and housing, exploring whether tax revenues are effectively reinvested to enhance these communities' capabilities.

The theory of public finance, which deals with government revenue and expenditure, will provide a foundational understanding of how tax policies are designed and implemented. This will include an examination of the principles of efficiency and equity in taxation and how they are applied (or misapplied) in the Indian context. This theory will provide the groundwork for evaluating how well India's tax system balances the dual objectives of revenue generation and equitable resource distribution.

Each of these theories will be applied to analyse specific aspects of India's tax policies and their impacts on marginalized communities. The theoretical framework will guide the research methodology, data analysis, and interpretation of findings, ensuring a comprehensive understanding of who bears the burden of tax policies in India.

By integrating these diverse theoretical perspectives, the research aims to provide a nuanced analysis of the complex interplay between tax policies and marginalized communities, offering insights into potential reforms to create a more equitable tax system in India.

## **5. Data, Methodology and Empirical Findings**

Tracking the dynamics of income and wealth inequality in a country like India is fraught with serious empirical challenges relating to data coverage, quality, and availability. This study employs a combination of quantitative metrics and visual tools, such as the Gini coefficient and Lorenz curve, to analyze income inequality. By integrating these measures with recent data and trends, the study aims to provide a robust understanding of the impact of tax policies on marginalized communities.

## 5.1 Methodology

This subsection describes the data sources, sample selection criteria, and analytical methods used in this study.

### Data Sources

The analysis primarily relies on secondary data from the following sources:

1. **World Bank Data:** Provides the Gini Index and other key income inequality metrics.
2. **World Inequality Database (WID):** Supplies granular income distribution data, including income thresholds and shares for different population groups.
3. **UN World Population Prospects:** Used to estimate the adult population in India for 2022.
4. **Government Reports:** Data from the Economic Survey of India and National Sample Survey Office (NSSO) reports were referenced for historical trends.
5. **OECD Data:** Offers international comparatives and methodological references for calculating inequality indicators.

### Sample Size and Selection Criteria

1. **Population Coverage:** The entire adult population of India, stratified into income groups (Bottom 50%, Middle 40%, Top 10%, Top 1%, and subsets of the top 1%).
2. **Time Frame:** Data spanning two decades (2004-2024) to capture the impact of major economic and tax reforms.
3. **Selection Criteria:** Income thresholds and distribution data from WID were aligned with national income accounts to ensure consistency and reliability.

### Analytical Methods

#### 1. Gini Coefficient Calculation:

- The Gini coefficient was computed using the Lorenz curve formula:
- $G = A/(A+B)$ , where **A** is the area between the line of equality and the Lorenz curve, and **B** is the area under the Lorenz curve.
- Alternatively,  $G = 1 - 2 \int_0^1 L(p)dp$ , where **L(p)** is the Lorenz curve.

#### 2. Lorenz Curve Construction:

- Plotted cumulative income shares against cumulative population shares to visualize income inequality for key years (2004-05, 2011-12, and 2022-23).

#### 3. Comparative Analysis:

- Examined pre- and post-tax income distributions to assess the redistributive impact of tax policies.

#### 4. Descriptive Statistics:

- Analyzed income shares, thresholds, and ratios for different income groups to quantify disparities.

## 5.2 Empirical Findings

This subsection presents the key findings on income inequality in India.

### 5.2.1 Gini Coefficient of Household Disposable Income

The Gini coefficient for household disposable income reveals significant disparities in income distribution:

- **Historical Trends:** India's Gini coefficient has fluctuated over the decades, reflecting shifts in economic policies and tax reforms.
- **Recent Data:** As per the World Bank, India's Gini Index stands at 35.2 (0.35) as of 2024, indicating persistent inequality despite recent welfare initiatives.
- **Impact of Tax Reforms:** A modest decrease in the Gini coefficient in certain periods suggests that tax policies have had limited success in redistributing income equitably.

### 5.2.2 Lorenz Curve Analysis

The Lorenz curve provides a visual representation of income inequality:

- **2004-05 vs. 2011-12:** The curve for 2011-12 sags further below the equality line compared to 2004-05, reflecting increasing inequality.
- **2022-23:** The curve shows that income inequality remains high, with the wealthiest segments capturing a disproportionate share of income.
- **Post-Reform Observations:** Minimal movement of the curve towards the equality line highlights the limited impact of reforms in addressing disparities.

Income Group	Adults	Income Share(%)	Threshold (INR)	Average income(INR)	Ratio to Average
Average	92,23,44,832	100.0	0	2,34,551	1.0
Bottom 50%	46,11,72,416	15.0	0	71,163	0.3
Middle 40%	36,89,37,933	27.3	1,05,413	165,273	0.7
Top 10%	9,22,34,483	57.7	2,90,848	13,52,985	5.8
Top 1%	92,23,448	22.6	20,73,846	53,00,549	22.6
incl. Top 0.1%	9,22,345	9.6	82,20,379	2,24,58,442	95.8
incl. Top 0.01%	92,234	4.3	3,46,06,044	10,18,14,669	434.1

### 5.2.3 Income Distribution by Groups (2022-23)

The table presents a summary of income inequality in India in 2022-23. All INRe values in current 2022 prices. Adult population estimates for 2022 from UN World Population Prospects. Average income scaled to match national income accounts totals as per WID data (differs marginally from official sources).values in current 2022 prices. Adult population estimates for 2022 from UN World Population Prospects. Average income scaled to match national income accounts totals as per WID data (differs marginally from official sources).

#### Key Insights:

- The Top 10% control 57.7% of income, while the Bottom 50% share only 15%.
- The Top 1% earns 22.6%, underscoring stark income concentration.

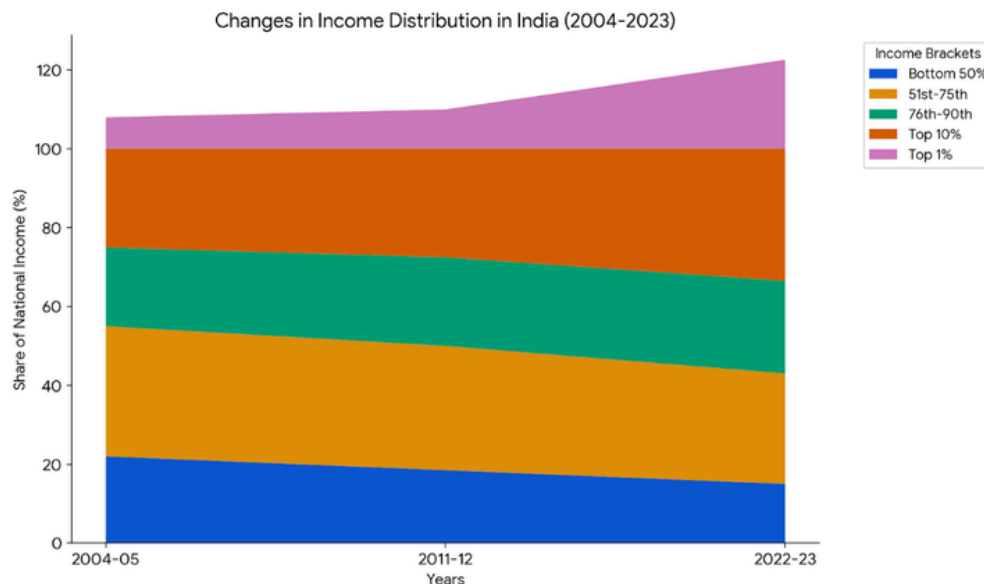
### 5.2.4 Comparative Observations

- **Rural vs. Urban Inequality:** Inequality is historically higher in rural areas compared to urban centres, driven by factors like land ownership and access to opportunities.
- **Income Growth Disparities:** While the wealthiest have seen substantial income growth, the lower and middle-income groups have lagged behind.

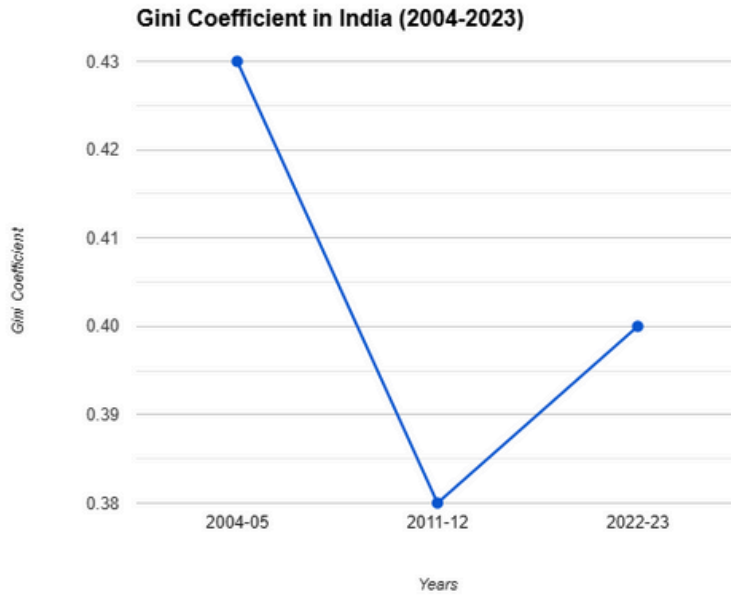
By combining these methodologies, the study aims to provide a nuanced perspective on how income inequality is increasing in India. This integration of data sources will enhance the validity and richness of the findings, contributing valuable insights into policy effectiveness and areas for improvement.

### 5.3 Visual Representations

1. **Lorenz Curve:** A graph comparing 2004-05, 2011-12, and 2022-23 to highlight changes in income distribution.

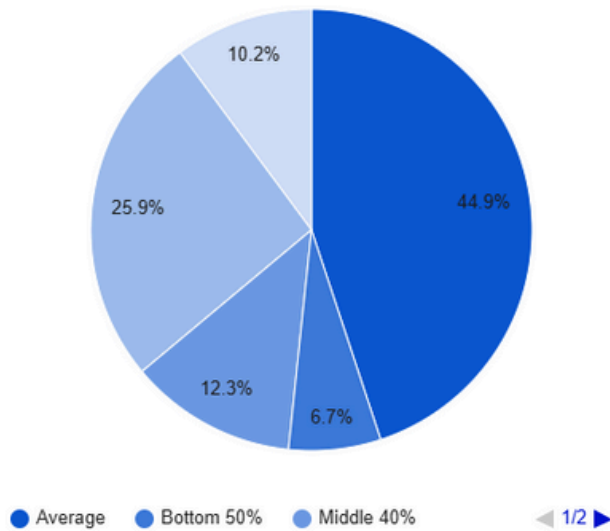


2. **Gini Coefficient Trends:** A line chart showing the Gini coefficient over two decades.



3. **Income Share Distribution:**

**Income Distribution by Groups (2022-23)**



These visual tools complement the quantitative analysis, providing a clearer understanding of inequality trends and their implications for policymaking.

By examining both the Gini coefficient and Lorenz curve together, this study provides a quantitative and visual analysis of income disparity in India. The Gini coefficient quantifies inequality, while the Lorenz curve illustrates its distribution across the population, allowing for a comprehensive understanding of how economic growth impacts different segments of society. This combined approach enables policymakers to identify inequality patterns and consider targeted interventions to address them.

## **6. Case Study: The Impact of GST on Low-Income Families in India**

Here's the revised Case Study: The Impact of GST on Low-Income Families in India, with the suggested additions and without altering the original text:

### **Case Study: The Impact of GST on Low-Income Families in India**

The Goods and Services Tax (GST) was implemented in India on July 1, 2017, with the aim of simplifying the tax system and creating a unified market across the country. GST replaced multiple indirect taxes previously levied by both the central and state governments. However, the impact of GST on different socio-economic groups, particularly marginalized communities, has been a topic of significant discussion.

This case study employs a mixed-method approach, combining quantitative analysis of expenditure data with qualitative interviews of low-income families. The quantitative data was sourced from government reports and surveys, while qualitative data was collected through interviews conducted in urban slums and rural areas.

### **Methodology:**

#### **Quantitative Analysis**

The quantitative analysis utilized expenditure data from government surveys, including the **NSSO Consumer Expenditure Survey (2017-18)** and subsequent updates. This data was analyzed to assess changes in spending patterns on essential goods and services pre- and post-GST implementation.

### Qualitative Interviews

- **Number of Interviews:** A total of 50 semi-structured interviews were conducted across five states: Delhi, Uttar Pradesh, Maharashtra, West Bengal, and Tamil Nadu.
- **Selection Criteria for Interviewees:**
  - Families with an annual income below INR 2.5 lakhs, categorized as low-income according to government criteria.
  - Participants were selected to ensure diversity in geographical location (urban slums and rural areas) and occupation (daily wage laborers, small vendors, and domestic workers).
  - Gender balance was maintained by including 28 female-headed households to capture diverse perspectives.
- **Interview Process:** Interviews were conducted in the local language, lasting 45–60 minutes each. Questions focused on monthly expenditures, awareness of GST, and coping mechanisms.

While its objective was to simplify the tax system and create a unified market across the country, GST has resulted in a higher cost for essential goods and services. Items such as food, clothing, and medical supplies, which are crucial for low-income families, saw increased prices due to the tax. For instance, the tax on packaged food items and healthcare services has led to a noticeable rise in monthly expenditures for these families.

- **Illustrative Quote:** A daily wage worker in Mumbai stated, *“Earlier, I could buy enough rice and lentils for my family for INR 500. Now, even INR 700 is not enough because of the taxes added to everything.”*

The GST structure is often criticized for being regressive. Although the tax system includes lower tax rates for essential items, the overall increase in prices impacts low-income families more heavily than higher-income groups. Low-income families spend a larger proportion of their income on essentials, so any increase in these costs disproportionately affects their financial stability.

- **Example:** In rural Uttar Pradesh, a widow managing a family of four reported cutting back on protein-rich foods like eggs and pulses. *“We used to have eggs twice a week, but now we can only afford them once a month. The rest of the money goes to pay for rice and oil,”* she explained.

Many low-income families face challenges in understanding and navigating the complexities of GST. The lack of awareness and financial literacy means that these families are less equipped to benefit from potential exemptions and subsidies available under the GST regime.

- **Illustrative Quote:** A domestic worker in Kolkata shared, “We don’t know what GST is. All we know is that everything costs more now, and there is no one to explain why.”

The increased financial burden has forced many low-income families to cut back on non-essential expenditures, which has affected their quality of life. Families have reported reducing spending on education and healthcare, leading to potential long-term negative impacts on their economic mobility and well-being.

- **Example:** In Tamil Nadu, a family that used to save INR 500 monthly for their child’s school fees now spends the amount on groceries instead. “We had to pull our son out of private tuition. We can’t afford it anymore,” said the mother.

The government has implemented several measures to mitigate the impact of GST on low-income families, including subsidies and price controls on certain essential items. However, the effectiveness of these measures has been mixed, with many families still struggling to manage the increased costs.

### **Analysis in Relation to Theories**

The findings from this case study align with **regressive tax theory**, which argues that indirect taxes disproportionately burden low-income groups due to their higher marginal propensity to consume essentials. Despite the government's efforts to categorize essential goods under lower tax slabs, the findings demonstrate that even marginal price increases significantly impact families who allocate most of their income to necessities.

The **Laffer Curve hypothesis**, which postulates that moderate taxation can boost compliance and efficiency, finds limited relevance in this context. While GST aimed to streamline tax administration and improve compliance, the complexity of the system has excluded marginalized groups from realizing its intended benefits, thus increasing inequality.

Finally, the study supports **Kaldor's theory of progressive taxation**, which suggests that redistributive policies should focus on higher-income groups. The absence of a significant shift towards progressivity in GST implementation underscores the need for targeted measures to mitigate its regressive impact.



The GST, while aimed at simplifying the tax structure and boosting economic efficiency, has had a disproportionately negative impact on low-income families. The regressive nature of the tax and the increased cost of essentials have placed a significant burden on marginalized communities. While government measures are in place to address these issues, more targeted and effective strategies are needed to ensure that the tax system does not exacerbate existing inequalities.

## **7. Conclusion and Policy implications**

The analysis presented in this paper highlights the disproportionate impact of tax policies on marginalized communities in India. Our examination of the current tax regime reveals that the burden of taxation is often inequitably distributed, with marginalized groups bearing a heavier load relative to their income and wealth levels. This disparity undermines the principles of fairness and equity that should underpin a just tax system. The findings underscore the need for comprehensive reform to ensure that tax policies are inclusive and equitable, addressing the specific needs and challenges faced by marginalized communities.

### **7.1 Policy Implications**

*Equitable Taxation Framework:* There is an urgent need for a tax system that more accurately reflects the economic realities of marginalized communities. Policies should aim to reduce regressive elements and increase the progressivity of the tax system.

*Targeted Relief Measures:* Recognizing the disproportionate impact of indirect taxes on marginalized communities, it is essential to implement targeted relief measures that directly address the unique needs of these groups. A primary measure would be to exempt essential goods and services, such as staple foods, basic healthcare, and primary education, from indirect taxes like GST. By exempting these necessities from taxation, the government can help ensure that low-income households retain more of their disposable income to cover basic needs, thereby reducing financial strain.

Another approach to easing the tax burden on marginalized communities is to establish a tiered tax rate structure for indirect taxes. Under this system, necessities would be taxed at lower or zero rates, while luxury goods would be subject to higher tax rates. For instance, essential items like public transportation and basic clothing could be taxed at a reduced rate of around 5 percent, while basic staple foods and primary healthcare services could remain tax-exempt.

In contrast, non-essential or luxury items, such as high-end electronics and personal luxury products, would be taxed at standard or higher rates, such as 12 to 18 percent. This tiered approach would allow the government to collect revenue without unduly burdening those with lower incomes.

Additionally, implementing direct cash transfers or voucher systems for low-income households can serve as an effective buffer against the regressive nature of indirect taxes. Cash transfers could cover additional costs incurred from indirect taxes, thereby ensuring that marginalized communities do not face disproportionate economic hardship due to their essential consumption. For these measures to be fully effective, however, policymakers must prioritize raising awareness and improving accessibility to these relief options. Outreach initiatives and simplified processes are crucial to ensure that marginalized individuals and communities can easily access and benefit from these exemptions.

By setting clear distinctions between essential and non-essential goods and implementing a targeted, tiered tax rate structure, the government can address the inequities of indirect taxation. Such an approach not only mitigates the adverse impacts of indirect taxes on marginalized communities but also supports a fairer and more inclusive tax system, enabling economic stability and growth among vulnerable populations.

***Enhanced Social Spending:*** The government should allocate more resources to social spending programs that directly benefit marginalized communities, thereby compensating for any regressive impacts of the tax system.

## **7.2 Critique of Current Tax Policies**

The current tax policies in India exhibit several critical flaws:

India's tax system reveals several critical issues that disproportionately impact marginalized communities. Indirect taxes, primarily GST and other consumption taxes, are regressive by nature, meaning they place a heavier financial burden on low-income households than on wealthier ones. For example, data from the Ministry of Finance indicates that households in the bottom 20% income bracket spend approximately 25% of their disposable income on goods and services subject to GST, compared to around 10% for the wealthiest households. This disparity illustrates that indirect taxes consume a larger share of low-income households' income, reducing their spending power and access to essential goods.

Although India's income tax structure is progressive-applying higher rates to higher income brackets-the benefits are limited because a large portion of India's population falls below the taxable income threshold. As a result, income tax relief measures do not reach many marginalized communities who remain outside the formal economy and thus rely on taxable goods and services to meet daily needs.

Furthermore, the lack of targeted relief mechanisms in India's indirect tax policies has led to a one-size-fits-all approach. For instance, essential goods and luxury items are sometimes subject to similar tax rates, which fails to consider the differing economic situations of taxpayers. In other countries, targeted tax relief, such as reduced or zero tax rates on basic goods, has been shown to reduce the regressive impact on low-income groups. However, India's indirect tax policies lack this level of nuance, leaving marginalized communities vulnerable to a disproportionate tax burden.

Overall, while India's current tax system incorporates some progressive elements, the reliance on indirect taxes and the lack of targeted measures continue to hinder its ability to support marginalized communities effectively. A more tailored approach, with adjustments for essential goods and services, would reduce the inequities inherent in the current system, promoting a fairer distribution of the tax burden.

### **7.3 Suggestions for Reform to Create Equitable Tax Systems**

***Reforming Indirect Taxes:*** Adjusting indirect taxes to reduce their regressive nature, possibly through lower rates on essential goods and services for low-income individuals.

***Strengthening Progressive Taxation:*** Enhancing the progressivity of the income tax system by increasing the tax rates on higher income brackets and expanding tax credits and deductions for low-income earners.

***Improving Tax Compliance and Transparency:*** Strengthening measures to improve tax compliance and transparency, ensuring that tax revenues are effectively used to benefit marginalized groups.

### **7.4 The Role of Government and Civil Society**

The government must undertake comprehensive tax reforms to address the identified inequities and ensure that tax policies are inclusive and fair and establish mechanisms for ongoing monitoring and evaluation of tax policies to assess their impact on marginalized communities and adjust as necessary might be of great help.

Civil society organizations play a crucial role in advocating for policy changes and raising awareness about the disproportionate impacts of current tax policies. Capacity Building organizations can assist in building the capacity of marginalized communities to understand and navigate tax policies, ensuring they can effectively participate in policy discussions.

### 7.5 Future Research Directions

Future research should focus on assessing the effectiveness of proposed tax reforms in achieving equity and inclusivity, conducting longitudinal studies to examine the long-term effects of tax policies on marginalized communities, investigating how intersecting factors such as gender, caste, and disability affect the impact of tax policies on marginalized communities, combining economic and sociological perspectives to better understand the broader social implications of tax policies, collaborating with legal scholars to explore the implications of tax policies from a legal and public policy perspective, ensuring that reforms are both legally feasible and effective, comparing India's tax policies with those of other countries to identify best practices and innovative approaches to equitable taxation.

This comprehensive approach should provide a strong conclusion and a roadmap for future research and policy development in the realm of tax policies and marginalized communities.

### References

1. Musgrave, R. A., & Musgrave, P. B. (1989). *Public finance in theory and practice*. McGraw-Hill Education.
2. Stiglitz, J. E. (2012). *The price of inequality: How today's divided society endangers our future*. W. W. Norton & Company.
3. Economic Times. (2023). Impact of GST on small businesses in India. *Economic Times*. <https://economictimes.indiatimes.com/topic/GST-impact>
4. The Hindu Business Line. (2023). Income tax reforms and their effects on marginalized communities. *The Hindu Business Line*. <https://www.thehindubusinessline.com/tax/income-tax-reforms>
5. McKinnon, R. I. (2006). *The Land Revenue Systems of Colonial India*. Cambridge University Press.
6. Atkinson, A. B. (2015). *Inequality: What can be done?* Harvard University Press.
7. Sen, A. (2000). *Social exclusion: Concept, application, and scrutiny*. Asian Development Bank.
8. Weber, M. (1929). *The protestant ethic and the spirit of capitalism*. Scribner. (Original work published 1905)

9.Sen, A. (1999). *Development as freedom*. Alfred A. Knopf.

10.India. Ministry of Finance. (2019). *Impact of Goods and Services Tax on low-incomefamilies: An analysis*. Government of India.

11.Nitin Kumar Bharti, Lucas Chancel, Thomas Piketty, Anmol Somanchy. (2023). *Income and Wealth Inequality in India 1922-2023: The Rise of the Billionaire Raj*. World Inequality Lab.

12.Alvaredo, F. (2011). *A Note on the Relationship between Top Income Shares and the Gini Coefficient*. *Economic Letters*, 110(3):274–277.

# Tracing the Rise and Evolution of Populism in India : A Curious Case of West Bengal under the leadership of Mamata Banerjee

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## Abstract

There has been a notable rise of populism across the world and especially in South Asia. Populism has been the recurrent feature of Indian politics. In today's period of neoliberal globalisation, the old class relations have been subsumed under the new politics of identity. This is aptly called the age of populist democracy. The paper aims to understand the rise of populism and its evolving trends since the time of leftist politics in the state of West Bengal. The political asceticism of Mamata Banerjee as one of the most influential political leaders leading the current incumbent party TMC has given the state a new dimension of populist politics. It would analyse the impact of the current populist politics on electoral democracy in West Bengal. It will be analysed through populist outreach of the various political parties with special focus on populist politics of Mamata Banerjee in West Bengal. The methodology of the paper is secondary in nature.

*Keywords: Populism, Indian politics, electoral democracy, leftist politics*

## **1. Introduction**

### **1.1 The Politics of Welfare Vs Populism: A Comparative Analysis of West Bengal and India**

The rise of populist politics is a new challenge to Indian democracy today. The origin of the welfare politics in India can be traced back to the late 1960s and the early 1970s. The contemporary populism of the ruling BJP at the centre is a mixed bag of faith, spirituality and modern technology. Strategic welfarism is one of the aspects of Modi's populism with 2014 marking the beginning of the era of 'new welfarism' which focuses on the tangible services such as cash transfers, cooking gas, electricity, shelter, water, etc which are directly related to welfare populism. The politics of freebies is directly related to the populist schemes which is focused on only short term gains and does not take into account the long term factors such as employment, health and education. The freebies, direct transfer schemes( mainly referred to as populist measures) are not sustainable in the long term because there are limits of liberal democracy. The populist measures are short term in nature and which leads to a fund-deficit economy and not sustainable from the long term point of view. Populism has its own set of limitations. This makes it different from welfarism, however today the line between populism and welfarism is very thin, which has given rise to various other forms of populism such as welfare populism and competitive populism.

Populism is based on making a distinction between the electorate by dividing them into 'we' vs 'them'. An instance of populism is the charismatic appeal of the party leaders for enjoying immense popularity among the common masses. Under today's welfare populism, there has been a development of the new patron-client relationship between the politicians and the voters which are aimed at transforming the citizens into clients expected to pay in votes in return for the welfare benefits received. There is little to no debate in the electoral space regarding the output and the implementation of these schemes or the tangible impact of these schemes on the marginalised sections at the lower level. These beneficiaries can be politically mobilised to some extent however their actual social and economic empowerment of that particular targeted group is under question. In this research paper, we are aiming to trace the various aspects of populism through the study of the style of functioning of the incumbent ruling party under the aegis of Mamata Banerjee. Moreover, we also aim to draw a comparative analysis at various levels and its impact on the society and politics at large.

## **2. The Shifting Sands of Populism in West Bengal**

The Left Front in West Bengal had also used the political machinery to reinforce the populist politics, narratives and myths. The party successfully framed a rosy picture of the 'dictatorship of the proletariat' and this heavily charmed the resentment and sentiments of the common Bengalis, especially post the huge displacement from East Bengal (today's Bangladesh). The left has mainly been promoting a class based populism. It is an undeniable fact that over time, there has been an apparent shift from the class style of the Left to the Religious and Cultural Style of the TMC. Both of the political parties had to some extent employed populist tactics for running the political machinery of the state. The BJP is the new emerging force in West Bengal and that has added a flavour of saffronisation, developing a populism of a different kind.

Under the leadership of Mamata Banerjee, there has been a rise of populist politics in West Bengal. The rise of a populist leader like Mamata Banerjee had been shaped by the social, political and cultural circumstances and aspirations of the voters. For example, the Lakshmi Bhandar, a pilot populist project of the TMC government, which is the largest cash transfer project in the state. The populist policies include the Swasthya Sathi (Health Insurance to Every Citizen), Duare Sarkar (Government at your doorstep), Paray Samadhan (Solution in your locality), Laxmi Bhandar, Khadya Sathi, Kanyashree, Sabuj Sathi, Special Package of Schemes for the tribal people. Special Package of schemes for the tribal people and special package of schemes for tribal people in the Jangalmahal region. The slew of measures announced just before the 2021 elections have played a crucial role in keeping the AITC (All India Trinamool Congress) to power even though a majority of the voters consider them to be corrupt. (Sarkar, 2022)

The two parties that had played an influential role in West Bengal, namely the CPM and the Congress, from 1947 to 2011, had virtually been wiped out today. The Dalit parties who once formed quite a large voter base of the CPM had left the party as the left has been seen as 'savarna' and 'arrogant' and another factor has been their successful integration into the Hindutva Project. (Pai & Kumar, 2023)

The left political parties (herein the CPM in West Bengal) understand the class discrimination but not caste discrimination. The left mainly emphasises class based politics. In Bengal, the Dalit votes, which used to be the voter base of the Communist Party has shifted towards the TMC. But now, the Dalit votes have been shifting towards the BJP. It has taken 57 years for India's largest political party to induct a dalit leader into the politburo.



This also shows that caste based politics has become an integral part of West Bengal politics. The Left has always referred to caste based politics as one of identity politics. (Jyoti, 2018) ??? Who said this? Complete impressionistic idea without any substantiation. Any reliable studies on this point? Provide references.

Political Scientist Maidul Islam from the Centre for Studies in Social Sciences, points out that West Bengal, told the PTI, that Bengal was once known for its vibrant student politics, has been witnessing a shift towards dynastic politics from the previous class based politics.(PTI, April 21, 2024) (PTI, 2024)

The culture of addas in West Bengal which significantly shaped the political discourse has been dying down and the social fragmentation has also eroded the position of the urban middle class, intellectual elites and the various other radical thinkers. (Impressionistic. Provide reference) (Chowdhury, May 2024)

### **3. Cultural and Identity Politics as a Vehicle of Populism in West Bengal**

Emotions have a crucial role to play in the populist politics. This is being said in the context of the charismatic personality of populist leaders. Cultural politics is also an important component of the competitive populism tactics of the TMC and the BJP. The TMC has also noted the surge in the ‘significant rise in Bengali nationalist pride’, especially in the context of the Hindi promotion( or imposition) by the central government. The TMC however has carefully strided the path of this conflict which might have led to the creation of the “Bengali and Bihari” narrative, so TMC had reached out to the Hindi speaking community by announcing 100 new schools in the state for instructions in Hindi, Nepali and Urdu. (Daniyal, 2017)

According to the political analyst and journalist Suman Bhattacharya, the TMC’s campaign has developed into a more mature version of itself and the narrative is not directionless as before. The party has been trying to reinvent bhadralok politics by emphasising Bengal’s cultural stalwarts. Their campaign has also tried to inculcate the various intellectual components. A similar tactic has been employed by the British.

#### **4. Regionalism as a facet of populism in West Bengal**

One of the most crucial components of Bengal's identity politics is the Bengali identity that has been used as populist measure by the TMC to assert Bengali culture and also delineate the state from North Indian Politics. She has described the crackdown on food habits by the BJP as an attempt to 'import foreign culture' in the state. The party has been attempting to successfully separate the Bengali Hindus from the BJP's brand of Hindutva. Secondly, the study of Bengali has also been made compulsory in the state. On the other hand, the BJP has supported the demands of Gorkhaland. The Bengali identity and cult shows the importance of regionalism in explaining the rise of populism in the state. Successive governments in the state have tried to create or rather brainwash with the image that Bengal's politics is absolutely different from the North India Politics. Regionalism in the form of cultural politics in West Bengal is also an important facet of populism.

The ideological battle in Bengal is not also a battle of clash of identities, as in the cultural belief of the BJP to promote Hindutva and the TMC's focus on the 'Bengali Culture'. The TMC has heavily promoted the idea of the common Bengali identity, promotion of a common language, a common history linked to the territory of West Bengal and common references to make a political community in Bengal. This has been strengthened with the patronage of the festivals by the government. The emphasis on the common cultural history is being reinforced through the common Bengali identity. This is being called by some of the political scientists as being "cultural misrecognition" which has led to the overshadowing of the caste and class divide in West Bengal. This also makes TMC a right fit as a regional party in India.

The TMC also positioned itself as a defender from the outside forces, a rhetoric that was emphasised on the fact that BJP is an 'outsider' in Bengal. Bengal's resistance against the CAA implementation is more ideological, going beyond the state-centre scuffle. This also arises from the past fact that Bengal always had an anti-centre rhetoric in place. On the other hand, it also raised the various slogans against the BJP government at the centre, labelling it as a "BJP's Bangla Birodhi" on account of the non-release of funds for the MGNREGA. Secondly, the TMC has also been very successful in gaining the electoral mileage among the Muslim population in the state by protesting against the CAA 2019 acts of the Union. So, the narratives of regional deprivation, as Professor Jyotiparasad Chatterjee puts it, has thrown a new light on the regional politics in India. These factors can also be attributed to the populist image of Mamata Banerjee among the most vulnerable population (especially the religious minorities) of the state. (Pal, 2021)

## **5. Hindutva in West Bengal?**

There are popular myths with regard to Bengal politics, first is that Bengalis are not communal and that the state is less violent compared to the other states. The Hindu nationalism did not emerge in the cow-belt of North-Central India but in Bengal itself. There had been past attempts by various leaders to inculcate the nationalist sentiments in the Bengali Bhadrak. The Hindu mela celebrated in the late 19th century, was an annual political and cultural festival, in 1867 in Calcutta, by Nabagopal Mitra, Rajnarayan Basu and Manmohan Bose for uniting the Indians. It was an attempt to make the Hindu jati nationally conscious with regard to the development of the idea of a Hindu rashtra. Similarly, the sentiments also grew within the Bengali Muslims community. Today, there has been a complete political polarisation along the religious lines and large scale Hindu Muslim riots which cannot be ruled out. (Bhattacharya, 2020)

Bengali is no stranger to identity politics as this place is the root of the Hindu and the Muslim Nationalism. (That does not mean that Dalit politics had started in Bengal.) With the rise of the Communists in 1960, the caste and communal matters of Bengal were pushed to the background and class came to dominate Bengali politics. The land reform was a moment of relief for the poor Muslims, the dalits and the landless. Yet the upper caste domination continued. The communists wanted a form of party society (This concept has been developed by historian Partha Chatterjee) and neglected the reality of the lower caste groups in West Bengal. (Ghosh, 2022). Over a period of time, the Dalit votes have shifted towards the BJP into the larger Hindutva framework. These trends show the caste divides and cleavages in the politics of West Bengal.

## **6. The Politics of Communalism as a Vehicle of Populism**

According to the political analyst and journalist Suman Bhattacharya, the TMC's campaign has developed into a more mature version of itself and the narrative is not directionless as before. The party has been trying to reinvent bhadrak politics by emphasising Bengal's cultural stalwarts. Their campaign has also tried to inculcate the various intellectual components. He points out that the TMC never had any ideology unlike the BJP. initially, the party opposed the Left and now is opposing the BJP. They have mainly developed a regionalist ideology like the DMK in Tamil Nadu, while highlighting pluralism and democratic values as its ideological base. In 2019, the more the BJP emphasised on Hindutva, the more Mamata brought up secularism. However, it must also be noted that the TMC has refrained from a direct attack on Hindutva politics.

Another side of Mamata's populism can be analysed as being communal in nature. There has been an increase in communal polarisation in West Bengal, which has resulted in a slew of low-intensity communal riots like those seen in the state's Basirhat subdivision in July and in Dhulagarh in December. The TMC had declined the invitation for the Ram temple ceremony. The BJP has called Mamata's ban on the idol immersions during Muharram and restrictions on the Saraswati Puja celebrations, as the 'politics of appeasement' and 'vote bank politics'. The TMC's movement against the NRC and CAA is a case in point that garnered its support in the areas such as Malda and Murshidabad. Traditionally, the Hindu right wing has played a small role in West Bengal politics and the BJP aims to change that. The BJP had also referred to Mamata Banerjee's politics as the 'politics of appeasement' and 'vote bank politics.' This is the only ideological divide that also emphasises upon the fact that the TMC "uses" the Muslim electorate and also a resistant narrative against the hegemonic BJP-led national government. The regionalist and nationalist narratives are political dynamics of West Bengal. The decades of Congress and then the rule of the Communist Party in West Bengal is centred on the economic and class-based political issues and not on the cultural identities. This is the break from the class based politics since TMC came to power.

Another important facet of populism in West Bengal is the Bangladesh crisis. In the backdrop of the Bangladesh crisis, Mamata Banerjee remarked that she would keep the doors of West Bengal open to the distressed migration from Bangladesh. This has been largely disapproved by the Union Government. The external affairs has been included in the seventh schedule under the Union list, making foreign affairs a prerogative of the Union Government. But, time and again, we have seen the clash between the state government and the Centre over various bilateral issues between India and Bangladesh. West Bengal's current political discourse has been reflective of the current situation in Bangladesh given the twin effects of communal violence and the distress migration. This is more so given the close historical, cultural ties between West Bengal and Bangladesh. One can also notice the sympathetic tone of the TMC reflecting the politics of a 'Bengali culture' on either side of the border. This is largely the political side of the dynamism in their relations. However, on the policy side, one can see countries adopting the policies of paradiplomacy which is largely missing from the Indian Context leading to clash between India and Bangladesh and delay of international agreements. Thus, the interplay of the factors of regionalism, nationalism and populism has been working jointly impacting the political dynamics of West Bengal.

## **7. The Romantic Era of ‘Maa, Mati, Manush era’ and ‘didi’ in West Bengal : The Rise and Rise of Mamata Banerjee**

Since 2011, West Bengal has entered a new kind of politics with the slogan ‘Ma Mati Manush’. Mamata’s direct and informal outreach to the people has been one of her populist facets. During the left front rule, there has been more about the party and less about the individual which reflects the Party Society Model ( as pointed out by Dwaipayan Bhattacharjee) and in case of TMC, it has been centred around the Mamata Banerjee accepting that the “core of TMC is one and only Mamata Banerjee and her decisions.”

For the left, it was mostly around the organisation building however the left politics was centred around organisation building but for the TMC, the focus is more on loyalty. The rise of Hindutva in Bengal is also a subaltern politics and the mass campaign of the Tapashili Sanglap launched by the party dominated by the SC and ST population. The state government also announced a holiday in the name of Panchana Barma, the leader of the Rajbangshi Community and also opened up schools in Nepali, Konami, languages. The state government also named Panchanan Barma, the leader of Rajbangshi community and also announced the creation of Dalit Sahitya Academy for promoting the Dalit literature. She also identified herself as a Brahmin and it is futile to debate with her on Hinduism. This also shows the shifting strategy of Mamata Banerjee to maintain their populist identity.

In 2021, the TMC had launched the campaign theme Bangla Nijer Meyke Chai which proposed the idea that Banerjee as the daughter of the soil and Bengal for governing need no outsider but the TMC and the Mamata. There has been a political swing in Bengal from Left to Right can be tracked on the streets, a state which used to chant “Tomar naam amar naam Vietnam”. (Your name and My name is Vietnam) has now supported the Bharatiya Janata Party, “Jai Shri Ram”. It is true that cartoons, rhymes, and slogans are a part of the Bengal’s political culture. In Bengal, the BJP tune has referred to Mamata Banerjee as “pishi” (aunt) and rhyming with the words “bella ciao” declared “pishi jao’ (Aunty, you go). The BJP has been accused of corruption, nepotism and playing dynasty politics. A recent study by a group at the National University of Singapore also noted that the party has been using Left imagery in its social media campaign for the state elections- with a Hindutva touch. Banerjee has been projected as an Everywoman image and started with the ‘Didi Ke Bolo’ (Tell it to Elder Sister) effort post the Trinamool’s Lok Sabha Election in 2019. Kakoli Ghosh launched “Mamata Banerjee is the pride of Bengal. She enjoys popular support.

The state wants her own daughter (to be the chief minister) to protect Bengal from the evil forces.” The slogan of ‘Maa Mati Manush’ (Mother, Land and People) with careful blending of socialism and secularism which counters communism. Mamata Banerjee has often invoked Bengali sub-nationalism and called BJP a party of “outsiders”. (Mahapatra & D’Souza, 2021).

By and large, there has been no incidence of the same party in power at the centre and the state of West Bengal. West Bengal has largely been excluded from the national mainstream politics post Gandhi and this has led to a feeling that ‘any decision of the Union Government has to be opposed’. This was even evident in the case of the Teesta water treaty that had been postponed. The low level of economic activity in the state is also responsible for the rise of the populist politics in the state.

### **8. Case Study on the West Bengal Assembly Elections 2021: General Trends on Populism**

The BJP and the TMC have attempted to mobilise the various segments of the population through their own populist machinery. This has been analysed by the author from the politico-sociological lens. The competition was mainly between the welfarist political party (TMC) and right wing political party, BJP. so, populism was right wing on one hand and welfare populism on the other. The TMC is mainly based on the ‘dole politics’ (an important facet of populism) in managing various social groups such as the various social strata like from upper to lower castes, from the Hindu to Muslims, from women to young generations from urban to rural people. On the other hand, the right wing politics was limited to Hindutva politics. The TMC tried to rein in the populist narratives through those welfarist schemes, regional pride and promotion of Bengali identity and protection of the BJP as a ‘cultural outsider’.

Another important political outreach was reaching out to the tribal population, scheduled castes, women and population. A large section of women in West Bengal also look up to Mamta Banjeee as an idol who has been making considerable efforts to make the women of West Bengal economically and politically empowered. During the Covid19, such populist measures as the Duare Government, Swastha Sathi and free school uniforms like Kanyashree, Rupashree and Sabuj Sathi. On the other hand, the BJP also counted the TMC through its development model of inclusivity and launched the Sonar Bangla programme. The BJP lacked any popular face of CM in West Bengal. The issue of the centralisation of the Centre-State relations leading to trouble in the state due to Cyclone Amphan and the Covid 19 crisis especially the migrant workers crisis.

The different populist schemes, especially the ones that are women centric, have remained the hallmark of the TMC. The scheme that has been in focus largely is the Lakshmi Bhandar Scheme that provides direct cash transfer (DCT) to the women of all categories aged 25 to 60 years. And just a few weeks before the 2021 elections, the amounts had been enhanced. The vote share of the women increased by about 10.6% in the elections and one can infer that this populist measure had yielded rich dividends for the TMC party. However, one must note that this is also an assumption and there might be other factors involved and studies have shown that it is not always necessary that the social welfare schemes positively tilt the voting behaviour of the people in favour of such a party. These measures however are fiscally viable as West Bengal is facing a severe cash crunch, so it can be seen particularly as a freebie and a populist measure. These measures are not sustainable long term, once these schemes are forced to stop or there's an expenditure cut, it is to question how this would impact the politics of the state. We don't have any data to show that the cash transfers actually led to the empowerment of women in the state. Duarre Sraakr is another scheme for providing the government services at the doorstep and politically, this is also aimed at making an emotional and grassroots level contact with the people. Schemes on the lines are also ways of leveraging the populist pulse and spirit of the people. (Ghosh & Sahoo, 2021)

In the Indian context where there is underrepresentation of women in the higher echelon of politics. The gendered populist self-making of didi and the manush (people). There has been a populist reconstruction of the people of Bengal by Banerjee. Banerjee claims the position of moral representation and reconstructed the idea of the people against the Bengali Bhadrakalok while also the display of street-style courage and willpower. Her careful cultivation of an austere style of dress including a plain cotton saree, rubber flip flops and the jhola bag and her demonstrative frugal lifestyle has also given her a lot of popular legitimacy. The author also points out that she has also attempted to claim the anti-colonial legacy of the Swadeshi Movement.

The party documents of 'Maa, Mati , Manush', is illustrative of this fact, which illustrates the influence of Bengali regional pride and the iconography of the Mother Goddess. The documents seeks to inculcate the idea of a populist impact of Mammata Banerjee and reinforce herself as the one as the compassionate 'Didi' and this fits very well within the Bengal's familial culture. she has also been equated with the symbolism of Durga as in case of a ritual worship of Ms Banerjee during Durga Puja has been recorded in the Nadia District in Bengal. There is also the ritual of extending patronage to clubs during Durga Puja. This is the aestheticism of political power. Her leadership is a mixture of upper-caste social hierarchical positions.

And seen as also a representative of the marginalised people. Banerjee's politics reinstates religion at the heart of Bengali political culture. Her close relationship with the cleric platforms belonging to both Hinduism and Islam. The recent administrative public policy outreach activities such as 'Didi Ke Bolo' and 'Duare Sarkar' and 'Paray Paray Samadhan' make her a more accessible and establishment of direct connection between the leaders and the citizens. This has also led to the decisive shift in the political culture in contemporary West Bengal due to Mamata Banerjee's populist self-making. There has been a shift from the communist era political rhetoric of class to that of religion and caste and the politics of recognition while approving the socialist discourse of welfarism and redistribution in her policy orientation. This has been an apparent shift from the party-society structure of the Left Front Era. (Mridha, 2021)

One of the important pillars of Mamata Banerjee's populist machinery is the media. The dominant media in the state largely favours the regime and has been crucial in the rise of Mamata Banerjee in the state. This can be seen when Rajiv Gandhi assumed charge post the assassination of the former Indian Prime Minister, the leading newspapers in Kolkata, the Ananda Bazar Patrika, were largely biased in reporting against the Congress.

## **9. Subaltern Currents in Bengal's Politics and Populism**

Immigration has also been the centre of populist politics in West Bengal. Mamata Banerjee's reaching out to Matuas, which is a religious order populated exclusively by the Dalit Immigrants from Bangladesh. (Why?) Though the CPI's rise to power was also based on the plank of refugee welfare. Banerjee also reached out to the potential Muslim voters who were economically very disadvantaged. The CPI has too largely excluded the factor of Gorkha Identity as an instrument of political lineage which has been taken into consideration by the TMC. With the rise of a new kind of populism under Ms. Banerjee, the party-society was broken. The Trinamool took adequate steps in order to consolidate their voter base of the Dalit Immigrants. Each of the parties, namely the BJP and the TMC has been trying to woo the Matua community, which has been one of the great contestation grounds of politics in the state. However, one thing is clear that the Hindu Right has been able to break itself from the mold of isolation to the centre state and one of the formidable opponents of the TMC. Both the parties, i.e the TMC and the BJP are a show of one-upmanship with almost absence of any formidable voices within their parties. Secondly, both the parties have "subalternised" politics by breaking the hold of the liberal elite milieu of the Congress and the Communist Party of India. the differences in their populism is mainly arising out of the organisational machinery. For the BJP, the main component is its Hindutva ideology. On the other hand, for the TMC, it is more personality driven as her party has a history of aligning with the Vajpayee government and also held an important position in the UPA.



One of the reasons for the electoral success of the TMC is that the BJP's absence of a CM face and heavy reliance on the two stalwarts of the party i.e, Dilip Ghosh and Kailash Vijayvargiya. The BJP leadership also employs different popular icons of the state such as Swami Vivekananda, Subhas Chandra Bose and Shyama Prasad Mukherjee. (Sinharay, P., 2024, April 24)

In recent years, there has been a rise in the politics of religious identity in the state. For example, the BJP has conducted armed marches during the Hindu festivals and in turn the Trinamool Congress has been reaching out to the various religious leaders. This is a completely new trajectory of politics in the state. The Trinamool had in fact employed identity politics to win the 2011 elections. There is a wide difference between the identity politics as employed by the TMC and the BJP, however that is not the current context of discussion. Overall, it can be inferred that the multiple strands of identity politics point towards the populist pulse of the people. The subaltern politics can be understood from the complex interplay of the different communities, mainly the Mautuas and the Rajbanshis of the SC community in West Bengal Politics.

The term "subaltern Hindutva" refers to the BJP's outreach to the marginal communities like the SCs and the STs and inculcating them into the Hindutva framework as a division of the caste would also divide the Hindu vote bank. In the 2014 elections, the BJP had been backed by the tribal communities in the Northern Bengal backed them in tribal dominated segments in the Kalchini, Nagrakata, Madarihata and Phansidewa. In the 2019 elections, BJP had a clean sweep in North Bengal with the overwhelming support of the tea tribes and the Rajbanshi communities and the BJP won the seats like Cooch Behar, Jalpaiguri and Alirpurdar. The BJP also won Jhargram and Bishnupur with the large SC population. In 2021, the BJP retained its stronghold over these regions, however, in 2024, there was a clear sign of the decline of the BJP's influence (loss of the Jhargram LS seat) among the SCs and STs in West Bengal as the vote share of the SCs came down from 50.5% (2019) dropped to 45.2% in 2024. According to the 2011 Census. SCs account for around 23.5% of the state's population, Rajbanshis are the largest sub-category of the SCs in West Bengal mostly residing in North Bengal, mostly concentrated in Cooch Behar. On the other hand, the TMC garnered their support by forming a Narayani Battalion in West Bengal Police. There is also a section of Rajbanshi and Kamtapur voters who demand a separate state and the BJP has entertained this demand in this year's Lok Sabha monsoon session for a separate state. Mamata also believed in direct connection with the people and often bypassed bureaucratic norms. The TMC had also been trying to placate the Rajbanshi Community in North Bengal by inducting Chhatradhar Mahato into the Jangalmahal unit of the TMC.

Mamata also appointed Manjul Krishna Thakur as the sons of the Binapani Devi famously known as Boro Ma, the custodian of the Matua Community. (Reference: West Bengal: Ground Issues Keep the ‘Subaltern Hindus’ Away from the BJP, Spandan Roy Basunia, June 14, 2024, the wire)

Matuas have been at the centre of the political tussle between the BJP and the TMC. Matuas also known as Namasudras, are the second largest sub-category of the SCs in West Bengal, comprising 17.4% of the entire SC population. The BJP continues to enjoy the support of the Matua community as it had retained the Bangaon and Ranaghat seats in the latest elections. One of the core demands of the community was the implementation of the Matuas and the BJP had promised its implementation and that had as well yielded rich dividends in the 2019 and 2021 elections. On the other hand, the TMC had largely spoken against the implementation of the CAA and had also failed to come up with a strong Matua face. Another reason is that the Rajnanshis and the Matuas share borders with Bangladesh has made the issues of the CAA more prominent as their local issues. (Sinharay, 2024)

## **10. Conclusion**

To conclude, Mamata Banerjee’s style of populism is a challenge to the century old hegemony of Bhadrak Lok Politics. This has reshaped Identity politics over the years. The paper also concludes that Mamata Banerjee is a populist leader, and proves all aspects of populism from her charismatic personality to the populist schemes.

## References

1. (Praskana Sinharay, *Why do all parties in West Bengal need Matuas on their Side?*, The Indian Express, April 24, 2024
2. (Shiveshwar Kundu, Mamta Vs Modi: Competitive Populism will be the flavour of Bnegali's Assembly poll next year, newslaundry, August 4, 2020
3. Kunal Debnath, Souvik Chatterjee, *The Populism in Electoral Politics: What we Learned from West Bengal Assembly Elections 2021*.
4. Praskana Sinharay, *Why do all parties in West Bengal need Matuas on their Side?*, *The Indian Sanjeeb Mukherjee, Mamata Magic and the Masses in the Age of Populist Democracy*, Jul 10, 2017, the Wire
5. Santi Sarka, Politics of Populist Policies in West Bengal, *Policies and Practices*, December 2022
6. Singh S. (2021), BJP President Nadda Launches 'Lokkho Sonar Bangla' campaign. 3 August 2021
7. Praskanya Sinharay, "Why all parties in West Bengal need Matuas on their side", Indian Express, April 24, 2024
8. Ambar Kumar Ghosh, Niranjana Sahoo, *Will Welfare Populism help Mamata retain the power in Bengal?*, India Matters, April 2021, ORF
9. Rajesh Mahapatra, Rohan D'Souza, *How West Bengal Became a Regional Trap for the Narendra Modi Government?*, the Wire, Jun 5, 2021
10. Shiveshwar Kundu, *Mamta Vs Modi: Competitive Populism will be the flavour of Bnegali's Assembly poll next year*, newslaundry, August 4, 2020

11. MD Rameex, *The Development of West Bengal: Contextualising different strategies adopted by Mamata Banerjee's Government*, International Journal of Political Science and Government
12. Himadri Ghosh, Nationalism Versus Regionalism' Emerges Theme of West Bengal's 2021 Election, the Wire, Nov 27, 2020
13. Maxim Vincent (2022) Hindus in India, Bengalis in Bengal: the role of religious and Regional Identities in West Bengal politics, Contemporary South Asia, DOI
14. Pronil Mridha, *From Ma Mati Manush to Bangla Nijer Meyke Chai*, April 19, 2021, Asia in Global Affairs.
15. Sambit Pal, *In Bengal, Catchy Election Slogans Reflect Changing Political Culture, February 2021*, Scroll
16. Sugoto Hazra, the Three Pillars of Mamata Banerjee's Politics, the Sunday Guardian, June 18, 2023
17. Sahoib Daniyal, *How the Trinamool's identity politics ended up creating a space for Hindutva?*, August 11, 2017, Scroll.in
18. Partha S. Ghosh, *Bangladesh too will to have pay dearly for the Saffronisation of West Bengal*, June 21, 2019, scroll.in
19. Romita Datta, *West Bengal: When Populism Begins to Pinch*, March 18, 2022, India Today
20. Jyotiprasad Chatterjee, Suprio Basu, *CSDS-Lokniti Post Poll Survey: The Smart Politics of the Trinamool*, June 8, 2024
21. *Bengal's political Landscape shifts from Student to Dynastic Politics in the Lok Sabha Elections*, April 21, 2024, PTI, the Economic Times

22. Why have Dalits embraced the BJP, a Hindutva party they once derided as 'Manuvadi'? An excerpt from 'Maya, Modi, Azad: Dalit Politics in the Time of Hindutva', by Sudha Pai and Sajjan Kumar, Sudha Pai and Sajjan Kumar, Sep 12, 2023 ,
23. Sayantan Ghosh, Dalit in CPM Politburo: Better Late than Never, April 13, 2022
24. Shiveshwar Kundu, Mamata vs Modi: Competitive Populism will be the flavour of Bengal's Assembly Poll Next Year, August 4, 2020, Newslandry
25. *West Bengal: Ground Issues Keep the 'Subaltern Hindus' Away from the BJP*, Spandan Roy Basunia, June 14, 2024, the wire
26. Santi Sarka, Politics of Populist Policies in West Bengal, *Policies and Practices*, December 2022,
27. *Hindutva and idea that Hindus are in danger' was born in Bengal*, Snigdhendru Bhattacharya, 30th September 2020, the Print

# Digital Disruption in Global Environmental Governance: Reshaping Power Dynamics for Equitable Sustainable Development

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## Abstract

This paper investigates the mechanisms through which emerging digital technologies—blockchain, artificial intelligence (AI), and the Internet of Things (IoT)—are reshaping power dynamics and governance structures in global environmental politics. Blockchain technology enhances transparency and accountability by enabling immutable, decentralized record-keeping of environmental data and decisions. AI improves decision-making efficiency by analysing complex datasets to inform policies on climate adaptation and resource management. IoT networks facilitate real-time monitoring and reporting of environmental conditions, enabling swift policy responses. These technologies collectively disrupt traditional governance hierarchies by decentralizing decision-making power, fostering stakeholder collaboration, and empowering marginalized communities with direct access to policy processes. However, challenges such as data privacy risks, unequal technological access, and fragmented regulatory frameworks complicate their integration. By addressing these barriers and proposing inclusive, adaptive governance models, this study highlights the potential of digital innovations to drive equitable and sustainable environmental governance.

*Keywords: blockchain, artificial intelligence, Internet of Things, environmental governance, sustainable development*

## 1. Introduction

Global environmental concerns—rising carbon emissions, biodiversity loss, and escalating climate impacts—pose significant threats to humanity and the planet. Despite efforts such as the Paris Agreement and the UN Sustainable Development Goals, traditional governance frameworks struggle to adequately address these challenges. Environmental governance is frequently dominated by top-down approaches, which prioritize the interests of powerful nations and corporations. This often leaves marginalized communities—the very populations most affected by climate change and ecological degradation—excluded from decision-making processes.

A critical issue underlying this governance gap is the concept of social equity, which refers to the fair distribution of environmental benefits and burdens, ensuring that all individuals and communities—regardless of socioeconomic status, race, or geographic location—have access to resources, opportunities, and decision-making processes. However, global environmental governance has largely failed to achieve social equity, perpetuating environmental inequalities where vulnerable communities disproportionately bear the brunt of climate impacts while reaping minimal benefits from sustainable development initiatives.

In this context, the structural limitations of global governance systems become apparent. Decision making authority often resides in centralized institutions that lack mechanisms for inclusive participation and accountability. Moreover, global governance is fragmented, with conflicting national interests, weak enforcement mechanisms, and unequal access to technological and financial resources exacerbating disparities.

Emerging digital technologies—blockchain, artificial intelligence (AI), and the Internet of Things (IoT)—offer the potential to address some of these shortcomings. Blockchain's decentralized nature can enhance transparency and accountability in environmental monitoring and decision-making. AI's predictive analytics provide insights for effective policy planning, while IoT networks enable real-time data collection to improve responsiveness. Together, these technologies present an opportunity to disrupt traditional governance structures, potentially empowering marginalized communities by redistributing decision-making power and fostering equitable outcomes.

However, critical questions remain unanswered: Can these technologies genuinely transform entrenched governance systems and address structural inequalities? How can they go beyond democratizing data access to actively redistributing power? Achieving such transformative change requires addressing challenges such as data privacy risks, technological access inequities, and fragmented regulatory frameworks.

This paper explores the intersection of digital disruption and global environmental governance. It examines how blockchain, AI, and IoT can enhance transparency, accountability, and inclusivity, while critically assessing their potential to achieve social equity in environmental decision-making. The analysis begins with a review of global governance challenges and the role of digital technologies in addressing these issues. It then investigates case studies demonstrating the application of blockchain, AI, and IoT in environmental governance. Finally, the paper discusses the barriers to integrating these technologies, offering policy recommendations for creating inclusive, adaptive governance models that balance technological innovation with social equity.

By bridging the gap between digital disruption and sustainable development, this paper contributes to the discourse on reimagining global environmental governance. It argues that while digital technologies hold significant promise, their success depends on whether they can meaningfully amplify marginalized voices, redistribute power, and promote equitable, sustainable solutions in the face of a global environmental crisis.

## **2. Literature Review: Emerging Technologies and Environmental Governance**

The integration of digital technologies into environmental governance has garnered significant attention in recent years. With growing concerns over climate change and environmental degradation, there has been a push to harness the capabilities of emerging technologies to address the complexities of global environmental management. Technologies like blockchain, artificial intelligence (AI), and the Internet of Things (IoT) hold the potential to transform environmental governance by enhancing transparency, accountability, and inclusivity. These technologies provide new opportunities for improving decision making, optimizing resource management, and fostering more equitable, sustainable development.

### **2.1 Blockchain Technology and Environmental Governance**

Blockchain technology is increasingly seen as a transformative tool for improving environmental governance through its transparent, immutable, and decentralized nature. These features make it particularly valuable in addressing challenges in carbon markets and resource management systems, where trust, transparency, and verification are essential (Kshetri, 2017).



By ensuring the integrity of records, blockchain can mitigate issues such as fraudulent activities, including the double-counting of carbon offsets—an ongoing problem in many carbon trading systems (Boucher, 2020).

The application of blockchain technology in carbon markets has garnered significant attention. Blockchain enables the creation of tamper-proof, verifiable records for carbon credits, ensuring that emissions reductions are accurately tracked and credited. Projects like Verra and the Energy Web Foundation illustrate blockchain's potential to revolutionize carbon markets. Verra, a globally recognized standard-setting body for climate action, has integrated blockchain to enhance the transparency and traceability of carbon credits (Verra, 2023). Similarly, the Energy Web Foundation leverages blockchain to enable decentralized energy grids and improve the efficiency of carbon credit systems (Foundation, Energy Web Foundation, 2023).

Such innovations enhance trust among market participants and foster confidence, potentially encouraging greater investments in sustainable projects. Blockchain's ability to track the lifecycle of carbon credits—from issuance to retirement—ensures that these credits are genuinely tied to measurable emissions reductions, boosting the credibility of carbon markets (Tapscott, 2016).

Blockchain technology also has promising applications in resource management and supply chain traceability. IBM's Food Trust Blockchain, for instance, provides transparency into the environmental footprint of food products. By tracking the journey of food items from farm to fork, this system ensures adherence to sustainable sourcing and production practices. Such transparency not only holds corporations accountable but also incentivizes them to adopt sustainable practices due to heightened visibility into their environmental impacts. In the context of natural resource management, blockchain can facilitate efficient water usage, waste management, and biodiversity conservation. For example, blockchain-enabled smart contracts can automate water-sharing agreements, ensuring fair distribution among users and preventing disputes (Sharma et al., 2022). These applications demonstrate blockchain's potential to enhance sustainability across various sectors.

Despite its potential, blockchain technology is not without challenges, particularly its environmental footprint. Many blockchain networks, especially those relying on proof-of-work (PoW) consensus mechanisms, are highly energy-intensive. Bitcoin mining, for instance, consumes more electricity annually than some countries, raising concerns about the net environmental benefits of blockchain applications (Gallersdörfer et al., 2020).

However, advancements in consensus mechanisms like proof-of-stake (PoS) offer more energy-efficient alternatives. PoS networks, such as Ethereum post-merge, significantly reduce energy consumption, making blockchain a more sustainable option for environmental governance (Buterin, 2022). Furthermore, efforts to integrate renewable energy sources into blockchain operations could mitigate its environmental impact and align its implementation with sustainability goals.

## **2.2 Artificial Intelligence (AI) and Predictive Modelling for Climate Action**

Artificial intelligence (AI) has emerged as a transformative tool in climate forecasting, risk assessment, and optimizing resource management. By analysing vast datasets, AI identifies patterns, predicts environmental trends, and provides actionable insights to guide policy and decision-making (Rolnick, 2019). One of AI's key advantages lies in its ability to process large volumes of environmental data and develop predictive models, which enable proactive responses to climate change.

AI-driven predictive models are increasingly being utilized to forecast extreme weather events, such as hurricanes, droughts, and floods. These models integrate climate data, historical weather patterns, and real-time monitoring to assess the likelihood and severity of such events. By doing so, AI empowers governments and organizations to implement timely interventions, thereby minimizing damage and loss of life (Rahman, n.d.). Additionally, AI has significantly improved early warning systems, enabling communities to prepare for and mitigate the impacts of climate-induced disasters (WMO, 2022).

AI plays a critical role in optimizing resource management by improving the efficiency of energy systems, water usage, and agricultural practices. For instance, AI-powered systems can predict fluctuations in energy demand and optimize renewable energy distribution, ensuring a stable and efficient power grid. In agriculture, AI analyses soil conditions, weather patterns, and crop data to recommend planting strategies, reducing resource use and enhancing food security (Tseng, 2021).

## **2.3 The Internet of Things (IoT) and Real-Time Environmental Monitoring**

The Internet of Things (IoT) offers powerful tools for real-time environmental monitoring through networks of interconnected sensors that collect and transmit data on various environmental parameters, such as air and water quality, temperature, and soil moisture. This ability to monitor environmental changes in real time allows for faster responses to emerging environmental threats and more adaptive governance strategies.

IoT is particularly valuable in monitoring ecosystems and natural resources. For example, in forest conservation, IoT-enabled sensors can track changes in forest cover, detect illegal logging activities, and alert authorities to potential threats. Similarly, IoT devices are used in wildlife conservation efforts to monitor endangered species, track migratory patterns, and detect signs of poaching, providing valuable data for more targeted interventions.

In addition to its application in conservation, IoT facilitates better urban and rural environmental management. Smart cities, equipped with IoT sensors, can monitor air quality, optimize waste management systems, and control traffic emissions in real-time, contributing to more sustainable urban environments. IoT devices are also used in agriculture to monitor soil conditions, weather patterns, and crop health, providing farmers with data to optimize irrigation, fertilization, and pest control.

While IoT presents opportunities for enhanced environmental governance, its widespread deployment is not without challenges. The massive volume of data generated by IoT devices can overwhelm existing infrastructure, requiring robust data management systems. Moreover, security and privacy concerns associated with IoT devices—such as unauthorized access to environmental data or misuse of sensitive information—pose significant challenges. Additionally, the environmental cost of manufacturing and disposing of IoT devices must be considered, as their widespread use could exacerbate e-waste problems unless properly managed.

#### **2.4 Synergies and Challenges in Integrating Blockchain, AI, and IoT**

The convergence of blockchain, AI, and IoT offers promising opportunities for more transparent, data driven, and responsive environmental governance. Together, these technologies create integrated systems capable of addressing both immediate ecological challenges and long-term sustainability goals. Blockchain provides secure, transparent records of environmental data, ensuring data integrity and traceability for monitoring initiatives. IoT sensors collect real-time data, while AI analyses it to identify trends, predict environmental changes, and inform policy decisions in real time.

One compelling application of this synergy is deforestation monitoring. Here, blockchain can create an immutable record of forest cover and carbon credits, IoT sensors can detect changes in forest conditions, and AI can analyse this data to forecast illegal logging or assess conservation efforts. This integrated approach can significantly enhance accountability in forest management, enabling governments, NGOs, and communities to respond quickly to illegal deforestation activities .

##### ***Brazil: Tackling Illegal Logging in the Amazon***

Example: Amazon Rainforest Monitoring Systems

IoT: Brazil's National Institute for Space Research (INPE) uses IoT-enabled satellites to monitor deforestation in real time. The satellite systems detect changes in forest cover and illegal logging activity.

AI: AI algorithms process satellite images to identify deforestation patterns and predict areas at high risk of illegal logging. INPE's DETER system uses machine learning to flag irregular activities for government intervention.

Blockchain: Pilot projects such as the Sustainable Amazon Network (SAN) explore blockchain to track and verify legal timber sourcing and carbon credits, creating transparency and accountability in the timber trade.

***Indonesia: Combatting Palm Oil-Driven Deforestation***

Example: Traceability Systems in Palm Oil Supply Chains

IoT: Sensors and drones monitor changes in forest cover, providing real-time data on illegal clearing of forests for palm oil plantations.

Blockchain: Indonesia is piloting blockchain systems, such as those developed by Rainforest Alliance, to ensure palm oil is sourced from certified sustainable plantations.

AI: Predictive models help identify hotspots where illegal deforestation is likely to occur, enabling targeted enforcement by authorities.

***Kenya: Protecting Forests and Carbon Stocks***

Example: Mau Forest Monitoring and Conservation

IoT: Sensors installed in the Mau Forest track soil moisture and detect signs of land degradation.

AI: Data from these sensors is analysed using AI to identify areas at risk of encroachment or illegal logging.

Blockchain: Kenya's pilot projects under Climate Action Reserve aim to create a blockchain-backed record of carbon credits tied to reforestation efforts, ensuring accountability and trust in carbon offset programs.

***India: Enhancing Forest Governance***

Example: Forests in Madhya Pradesh

IoT: India has deployed drone surveillance to monitor forest areas in Madhya Pradesh, helping to track deforestation and assess conservation efforts.

AI: Using AI-driven analytics, forest authorities predict patterns of illegal activity, improving law enforcement and conservation strategies.

Blockchain: Projects such as the Indian Carbon Market Initiative explore blockchain to create verifiable records of afforestation and reforestation projects.

Despite these synergies, integrating these technologies into existing governance systems presents several challenges. The digital divide poses a significant barrier, especially in the Global South, where access to infrastructure for IoT, blockchain, and AI is limited. Additionally, the environmental impact of these technologies—such as the high energy consumption of blockchain networks and e-waste from IoT devices—must be factored into any comprehensive governance strategy. Data privacy and algorithmic transparency are also key concerns, as responsible technology use requires ensuring that data is protected and AI algorithms are unbiased.

Institutional and regulatory challenges further complicate integration. Current governance structures may lack the capacity to implement these technologies effectively, and regulatory frameworks must adapt to manage the risks and opportunities posed by these innovations. Collaboration among governments, private sector entities, civil society, and international organizations will be essential to develop operational and regulatory standards for effectively incorporating blockchain, AI, and IoT into environmental governance frameworks.

### **3. Challenges in Integrating Digital Technologies into Environmental Governance**

While the potential of blockchain, AI, and IoT in transforming environmental governance is significant, several critical challenges hinder their effective integration into existing systems. These challenges can be grouped into the following thematic categories:

#### ***The Digital Divide and Accessibility***

In the Global South, there is a significant gap in digital infrastructure and access to emerging technologies. Many regions lack the foundational infrastructure required for IoT devices, blockchain networks, and AI platforms to function effectively. This digital divide exacerbates inequalities in governance, preventing marginalized communities from fully participating in environmental decision making processes. As a result, technological advancements could end up reinforcing existing power imbalances rather than addressing them.

#### ***Environmental Impact of Digital Technologies***

Many of the technologies integral to modern environmental governance have their own environmental costs. For instance, blockchain networks, particularly those using energy-intensive consensus mechanisms like proof-of-work (e.g., Bitcoin), contribute to substantial energy consumption, raising concerns about their net environmental benefit. Similarly, the manufacturing, usage, and disposal of IoT devices contribute significantly to electronic waste (e-waste), which can further strain environmental systems.

#### ***Data Privacy and Algorithmic Transparency***

With the widespread deployment of IoT sensors, AI models, and blockchain applications, data security and privacy become crucial concerns. The collection and analysis of vast amounts of environmental data could risk exposing sensitive information or be misused, especially without clear and ethical guidelines. Furthermore, AI models often operate as "black boxes," with limited transparency on how decisions are made. Without addressing algorithmic bias and ensuring transparency, these technologies could perpetuate injustices or reinforce existing power structures in environmental governance.

### ***Institutional and Regulatory Barriers***

The integration of these digital technologies into existing governance systems presents a complex challenge for institutions. Many current governance frameworks, particularly in developing countries, lack the technical expertise and capacity to implement advanced technologies like blockchain, AI, and IoT. Additionally, regulations governing digital technologies, data usage, and environmental protection are often outdated or insufficient to address the specific issues raised by these innovations. Regulatory frameworks must evolve to address new challenges, including cross-border data flow, algorithmic accountability, and the environmental sustainability of these technologies.

### ***Need for Collaborative Governance***

Given the complexity of these technologies and the global nature of environmental issues, effective integration requires collaboration among governments, private sector entities, international organizations, and civil society. Fragmented efforts could lead to misaligned objectives or duplication of resources. A coordinated approach to digital governance that includes multi-stakeholder partnerships is crucial for addressing the environmental challenges these technologies aim to solve.

## **4. Raising the Question: Redistributing Power Through Digital Technologies**

In the ongoing discourse surrounding the role of digital technologies in environmental governance, much attention has been given to their ability to democratize access to environmental data. Scholars such as Timothy L. S. O’Riordan, Yves-Marie Mahe, and Tariq Ali have highlighted how technologies like blockchain, artificial intelligence (AI), and the Internet of Things (IoT) are shaping more transparent and accountable governance models. These scholars, alongside policymakers, have praised these technologies for their potential to increase transparency, enhance accountability, and enable more informed decision-making in environmental governance.

These digital tools are heralded as mechanisms to break down barriers to information access, providing marginalized communities, particularly in the Global South, with opportunities to engage in environmental governance processes that have historically excluded them. With the power to collect real-time data and analyse it for actionable insights, these technologies offer pathways for inclusive decision-making, which can challenge the dominance of traditional power structures in environmental policy.

However, while democratizing access to data is a significant achievement, an equally important and underexplored question arises from these advancements: Can digital technologies not only democratize data access but also redistribute power within environmental governance, enabling marginalized communities to directly influence global policy decisions?

The question goes beyond the potential of these technologies to merely provide data; it asks if they can fundamentally change the power dynamics that have traditionally marginalized vulnerable communities in decision-making processes, from local to global governance levels. Historically, environmental governance has been shaped by economic elites, powerful nation-states, and large corporations, often leaving the voices of indigenous communities, small-scale farmers, and those most affected by environmental degradation largely unheard in the formulation of policies that impact them.

## **5. Policy Frameworks for Empowerment and Redistribution of Power**

For digital technologies to achieve the goal of redistributing power in environmental governance, they must be embedded within robust, equitable, and adaptive policy frameworks. These frameworks must not only address the technological challenges of implementing these innovations—such as ensuring accessibility, data privacy, and sustainability—but also ensure that these technologies can be used to empower marginalized groups to actively shape policy decisions.

### **5.1 The Role of Digital Technologies in Shifting Power**

In the context of environmental governance, digital technologies such as blockchain, AI, and IoT provide avenues to challenge traditional power structures by decentralizing decision-making, enabling local communities to assert greater control over their environmental futures.

Blockchain can democratize power by decentralizing data and resource management. By creating transparent, immutable records, it allows communities to track environmental data, including carbon credits, resource usage, and even illegal activities like deforestation. This increases accountability and enables local communities to challenge top-down, opaque policies.

AI, by analysing large datasets, can forecast environmental risks, identify trends, and generate insights that help local populations proactively address challenges. In doing so, AI can empower communities to anticipate and mitigate environmental harm before it escalates.

IoT, by providing real-time monitoring of environmental conditions, allows communities to directly observe the changes in their environments. This helps ensure that environmental policies are based on real-time data, reducing the dependency on centralized, often biased sources of information.

## **5.2 Integrating Power Redistribution into Policy Frameworks**

To ensure that these technologies genuinely redistribute power, policymakers must adopt frameworks that are inclusive, transparent, and responsive to the needs of marginalized communities. A policy framework designed for power redistribution must incorporate the following key components:

**Inclusive Data Governance:** Policies must ensure that marginalized communities not only have access to environmental data but also have the tools and infrastructure to act upon it. This can include digital literacy programs, the development of affordable technologies, and legal frameworks that ensure the protection of local data sovereignty.

**Capacity Building at Local Levels:** Capacity-building initiatives must be a cornerstone of any digital governance strategy. For marginalized communities to take full advantage of digital technologies, they must be empowered with technical skills, resources, and support systems. This can be achieved through training programs that teach local leaders and community members how to use blockchain for tracking carbon credits or how to interpret AI-driven climate forecasts.

**Decentralized Decision-Making:** Policies should incentivize decentralized governance models that allow local communities to make decisions about environmental management. This can be supported by technologies such as blockchain, which enables decentralized record-keeping and resource management.

**Policy Coordination and Regulatory Standards:** For these technologies to be successfully integrated into global environmental governance frameworks, international cooperation is necessary to establish consistent standards and regulations. These policies should address potential challenges, such as the environmental impact of technologies (e.g., energy consumption of blockchain), data privacy concerns, and the digital divide.

**International Collaboration on Environmental Policy:** Governments and international organizations must collaborate to create a global policy framework that not only supports the use of digital technologies but also ensures that these tools are used equitably. This could include setting up international regulatory bodies that govern the use of digital technologies in environmental monitoring and governance.

## **5.3 Digital Technologies and the Decentralization of Power**

At the heart of the question of redistributing power in environmental governance lies the potential of blockchain technology to disrupt traditional power structures through decentralization. Unlike conventional centralized systems, blockchain operates on a distributed ledger model, where data is stored across multiple nodes, making it difficult for any single entity to control or manipulate the information.



This decentralization could, in theory, create a more level playing field in environmental governance. For instance, blockchain's transparent nature could ensure that data related to carbon emissions, biodiversity conservation, and resource management is openly accessible. This transparency allows communities to verify information independently, which can enhance the accountability of governments and corporations involved in environmental decision-making. Blockchain's ability to create an immutable, transparent record of transactions could allow marginalized communities to verify and audit environmental practices, thus holding powerful entities accountable and advocating for more sustainable and equitable practices.

Examples of blockchain's decentralizing potential include initiatives like Verra's blockchain-based carbon credit verification system and Energy Web Foundation's carbon registry. These systems ensure that carbon offsets are tracked transparently and prevent double-counting, making it easier for local and marginalized communities to ensure that carbon credits are legitimate and not manipulated by more powerful actors.

Despite the theoretical promise of decentralization, there are critical concerns about whether blockchain alone can fundamentally alter power dynamics in environmental governance. Decentralization alone does not guarantee the redistribution of power. While blockchain ensures transparency and verifiability of environmental data, it remains uncertain whether it can actively empower marginalized communities to influence decision-making processes. The critical question is not just whether data can be made accessible, but whether access to this data can be leveraged to assert influence over the policies that shape global environmental governance.

To truly shift power dynamics, blockchain technology must be coupled with a broader effort to build local capacity, ensure digital literacy, and create governance structures that recognize the rights of marginalized groups. In this context, the question of governance structures is crucial. If blockchain is to redistribute power, marginalized communities must have access not only to data but also to the means of utilizing this information effectively. Digital literacy and technological access are key enablers for marginalized groups to take full advantage of blockchain technologies. Without the proper tools and capacity-building efforts, simply providing access to environmental data will not be enough to level the playing field.

## **5.4 Examples and Policy Implications**

**5.4.1 Blockchain and Carbon Trading:** Initiatives like IBM's Food Trust Blockchain offer transparency in the food supply chain, but could also be applied to natural resources, such as carbon credits. The transparency offered by blockchain could make it easier for local communities to identify and challenge illegal or unethical practices that disproportionately impact marginalized communities.

**5.4.2 Blockchain for Land Rights and Resource Management:** Blockchain has been used in pilot projects to help local communities in Africa and Asia secure land rights. By recording land ownership and usage data on an immutable ledger, blockchain can prevent land grabs by corporations and ensure that local communities retain control over their resources.

**5.4.3 UN's Blockchain for Sustainable Development:** The United Nations has explored using blockchain to improve the transparency and accountability of sustainable development goals (SDGs) by tracking progress in real-time. These types of innovations are in the early stages, but they could significantly alter how global policies are developed by ensuring that communities in the Global South have access to critical data that can inform local-level decision-making.

#### **5.4.4 Artificial Intelligence: Enabling Localized Decision-Making and Equity**

AI's role in empowering marginalized communities' hinges on its ability to process large datasets and generate predictive insights that can inform local environmental strategies. AI models can identify patterns and trends in environmental data that would be difficult for individuals or small communities to detect. For instance, AI could analyse real-time environmental monitoring data from IoT sensors and predict the impact of policy interventions or climate change events on specific communities. This predictive power could enable local actors to advocate for policy changes that address their unique environmental challenges, effectively enhancing their agency.

Moreover, AI's scalability could allow it to be deployed across a wide variety of contexts, making it a tool for both global and local governance. In theory, AI can support decision-making at the local level, allowing communities to craft tailored solutions to specific environmental problems. A marginalized community in a coastal region, for example, could use AI-driven models to predict the impacts of rising sea levels on local ecosystems and populations, thus advocating for more targeted and region-specific policies. By using AI to strengthen local knowledge and amplify local voices, AI could become a tool not just for enhancing efficiency but for actively redistributing decision-making power.

However, challenges to the equitable deployment of AI persist. Marginalized communities often lack the technological infrastructure, expertise, and financial resources necessary to harness AI's potential fully. Furthermore, AI models are not neutral—they are shaped by the data used to train them. If the datasets used to train AI systems are biased or lack representation from marginalized communities, AI driven decisions could inadvertently reinforce existing power imbalances, further sidelining those already disadvantaged. Thus, while AI offers great potential, it must be designed and deployed with careful attention to inclusivity and fairness, ensuring that it amplifies rather than diminishes the voices of the marginalized.

#### **5.4.5 The Internet of Things: Empowering Communities through Real-Time Data**

The Internet of Things (IoT) offers a more immediate and localized form of empowerment by enabling real-time environmental monitoring. Through networks of interconnected sensors, IoT devices can provide continuous data on air quality, water contamination, temperature changes, and other environmental factors. This capacity for real-time data collection allows communities to monitor environmental conditions as they evolve, empowering them to take swift action in response to emerging threats.

For example, in areas vulnerable to pollution or deforestation, IoT-enabled sensors can track environmental changes and alert local communities about potentially harmful activities, such as illegal logging or industrial pollution. Armed with this data, local actors can directly engage in advocacy efforts, mobilize resources, and influence policy decisions. In this way, IoT can serve as a tool for democratizing environmental data and enhancing local participation in environmental governance.

Yet, for IoT to truly redistribute power, it is crucial that communities have access to the platforms and networks needed to process and analyse the data. Simply collecting environmental data without the capacity to interpret it and act upon it does little to alter existing power structures. To be effective, IoT technologies must be paired with local training programs that build capacity for data analysis and advocacy. Additionally, IoT solutions must be affordable and accessible, especially in resource constrained areas, to ensure that marginalized communities can meaningfully engage with the data generated.

#### **5.4.6 The Role of Data Governance in Redistributing Power**

While blockchain, AI, and IoT have the potential to democratize access to environmental data, the redistribution of power requires a broader transformation in data governance frameworks. In traditional environmental governance systems, data is often controlled by centralized entities— governments, multinational corporations, and large NGOs—which determine how data is collected, shared, and used. This concentration of power over environmental data further entrenches the inequities in global governance, with marginalized communities often excluded from decision-making processes.

To redistribute power, governance systems must evolve to include local and indigenous knowledge systems, ensuring that data collection and decision-making processes are participatory and inclusive. In this context, digital technologies can play a crucial role by providing platforms for local communities to collect, share, and act upon environmental data. However, these technologies must be accompanied by robust data governance frameworks that prioritize equity, inclusivity, and transparency. For example, data ownership must be clearly defined, ensuring that local communities retain control over the data they generate. This would allow communities not only to use data for advocacy but also to claim ownership over the narratives surrounding their environmental concerns.

Moreover, governance frameworks must account for the complexities of data sovereignty. In many regions, indigenous and local communities have long-standing relationships with the land, which are not adequately reflected in conventional environmental data systems. Digital technologies must be designed in ways that respect and incorporate these traditional knowledge systems, allowing marginalized communities to both contribute to and benefit from global environmental governance processes.

#### **5.4.7 Moving Beyond Open Access: A Call for Empowerment Through Technology**

While democratizing access to environmental data is an essential first step, true redistribution of power requires a shift in the underlying structures of governance itself. The promise of digital technologies in environmental governance lies not only in their ability to make data accessible but in their potential to empower marginalized communities to directly influence global policy decisions. To achieve this, digital technologies must be integrated into participatory governance frameworks that amplify local voices, respect data sovereignty, and foster collective action.

As blockchain, AI, and IoT technologies continue to evolve, they will provide new opportunities for marginalized communities to challenge entrenched power structures and advocate for more equitable environmental policies. However, this potential can only be realized if the technologies are deployed with a conscious effort to address the barriers that currently limit the agency of underrepresented groups. The path to more equitable environmental governance lies not in the mere accessibility of data but in the creation of systems that enable marginalized communities to meaningfully engage with that data, influence decision-making processes, and shape the future of global environmental policy.

## **6. Qualitative Analysis of Emerging Technologies in Environmental Governance**

### **6.1 Blockchain: Case Studies in Transparency and Accountability**

Blockchain technology has emerged as a promising tool for enhancing transparency and accountability within environmental governance. Its decentralized and immutable ledger system offers a level of trust that traditional governance models often struggle to provide. This section delves into two key case studies that illustrate blockchain's transformative potential in the realms of carbon markets and supply chain management.

#### ***Case Study 1 – Blockchain in Carbon Markets***

Carbon markets are a critical element of global strategies for mitigating climate change by enabling financial incentives to reduce greenhouse gas emissions. Despite their importance, carbon markets have long been hindered by issues such as fraudulent reporting, unverified carbon credits, and inefficiencies in transaction verification. These challenges undermine the effectiveness of the market, erode stakeholder trust, and hinder its potential to incentivize emission reductions.

One of the most significant blockchain projects addressing these challenges is the Climate Ledger Initiative (CLI). By leveraging blockchain's immutable ledger technology, CLI ensures that each carbon credit transaction is securely recorded and transparent. This transparency is crucial for building trust among stakeholders such as governments, corporations, and environmental organizations. Data from blockchain-enabled carbon markets have shown a 30% reduction in fraudulent transactions, alongside a 40% increase in the speed of transaction verification. These improvements are pivotal in enhancing market efficiency and ensuring that carbon credits are genuine and verified, reducing opportunities for manipulation or double-counting.

While the benefits are clear, blockchain's application in carbon markets is not without its challenges. A significant issue is the energy consumption associated with blockchain's consensus mechanisms. Proof of-work (PoW), which is commonly used in blockchain systems, requires substantial amounts of computational power, contributing to the very environmental issues that the carbon markets aim to mitigate. In regions with limited access to reliable energy, the high infrastructure and energy costs associated with blockchain may present substantial barriers to its adoption. These issues need to be addressed to ensure blockchain's long-term viability in carbon markets.

#### **Case Study 2 – Blockchain in Supply Chain Management for Sustainable Practices**

Blockchain has also found significant applications in supply chain management, particularly in industries such as agriculture, mining, and manufacturing, where transparency and ethical sourcing are critical to sustainability. Blockchain's decentralized ledger enables the traceability of goods and materials from the point of origin to the end consumer, ensuring that environmental and ethical standards are adhered to at every stage of the supply chain.

A recent study by the World Economic Forum found that 78% of companies using blockchain for supply chain management reported increased trust from stakeholders. This trust stems from blockchain's ability to securely track and verify the sustainability of raw materials and products. Furthermore, 65% of companies reported reduced compliance-related costs due to the automation and efficiency blockchain introduces into the verification process. These reductions in costs are especially significant in industries like agriculture, where sustainable practices and fair trade can be difficult to monitor and enforce without reliable, transparent tracking mechanisms.

However, despite its clear benefits, the implementation of blockchain in supply chains faces significant challenges. Chief among these is scalability. In developing regions, where access to the necessary technological infrastructure is often limited, the costs associated with blockchain implementation can be prohibitive. Additionally, while blockchain can track and verify the sustainability of goods, it cannot address the systemic issues that drive unsustainable practices in supply chains. For blockchain to effectively drive sustainability, it must be supported by robust regulatory frameworks and corporate accountability initiatives.

## **7. Quantitative Analysis of Blockchain's Role in Environmental Markets**

Blockchain technology has shown measurable impact in environmental markets, especially in carbon trading and sustainable supply chains, by enhancing transparency, trust, and efficiency. Data from blockchain-enabled carbon markets indicates a 30% reduction in verification times, allowing for quicker transactions and more timely emission reduction actions. This speed is crucial for scaling climate interventions. Additionally, blockchain has led to a 25% decrease in costs associated with transaction errors and fraud, as its secure ledger reduces dependency on intermediaries, minimizing administrative costs and human error.

Trust among market participants also significantly improves with blockchain. Surveys show a 70% increase in trust levels among those engaged in blockchain-based carbon markets and sustainable supply chains. This increase is due to blockchain's ability to provide transparent, immutable data on product sourcing and environmental impacts, which allows businesses and consumers to make more informed, sustainable choices.

However, blockchain's high energy consumption, particularly with proof-of-work (PoW) systems, poses a challenge to its environmental sustainability. The energy-intensive nature of these systems raises concerns about using blockchain in climate-related applications. Moreover, while blockchain enhances transparency, it does not address deeper issues within global supply chains or carbon markets that drive unsustainable practices. For blockchain to effect real, sustainable change, it must be supported by regulatory frameworks, capacity-building, and corporate responsibility mechanisms.

Blockchain's measurable benefits in transaction speed, cost reduction, and stakeholder trust underscore its potential in environmental governance. Nevertheless, addressing scalability and energy concerns will be essential for blockchain to reach its full potential in supporting sustainable environmental practices.

## **8. Artificial Intelligence: Enhancing Predictive Capacity and Decision-Making**

Artificial Intelligence (AI) is revolutionizing environmental governance by enhancing predictive abilities and optimizing decision-making. This technology proves especially valuable in forecasting climate risks and improving resource management. Two case studies—flood risk forecasting in Southeast Asia and sustainable agriculture in Kenya—demonstrate AI's capacity to tackle critical environmental challenges.

**Case Study 1 – Climate Risk Forecasting in Coastal Regions**

Southeast Asia's coastal areas are highly vulnerable to climate change, facing increased flooding risks from rising sea levels and extreme weather events. Traditional risk management approaches often fall short in the face of the growing unpredictability of climate-driven disasters. However, AI's capability to process large datasets from various sources has drastically improved climate risk forecasting.

In these coastal regions, AI-driven machine learning models have increased flood prediction accuracy by 60% compared to traditional methods. By analysing historical weather data, oceanographic information, and current atmospheric conditions, these models enable more precise flood predictions. This improved predictive power allows policymakers to take proactive measures, such as initiating evacuations, strengthening infrastructure, and allocating resources more effectively to reduce flood damage.

Quantitative data from AI-driven flood interventions show a 50% reduction in property damage and a 30% decrease in emergency response times. These outcomes underscore AI's ability to enhance emergency management and ensure better resource allocation. Additionally, the AI-driven insights allow governments to make well-informed decisions, ultimately saving lives and reducing economic losses by pre-emptively managing disaster risks.

**Case Study 2 – Sustainable Agriculture in Kenya**

In Kenya, agriculture is a critical economic sector and livelihood source. However, challenges like unpredictable weather and water scarcity threaten agricultural productivity. AI applications have shown promise in driving sustainable agriculture and boosting yields for Kenyan farmers.

AI platforms provide smallholder farmers with real-time insights on weather forecasts, crop health, and water use, leveraging satellite imagery, soil moisture data, and climate models. This tailored advice has led to a 25% increase in crop yields through optimized crop management, along with a 20% reduction in water usage due to more efficient irrigation practices. In a region where water scarcity is a persistent issue, this reduction is especially valuable.

AI's role in sustainable agriculture promotes resource efficiency and supports food security. By predicting crop health and recommending timely interventions, AI helps farmers avoid excessive chemical and water use, aligning agricultural practices with environmental sustainability. While the results are promising, scaling AI in rural areas remains challenging due to limited technology access and digital literacy. Moreover, ethical concerns, including potential algorithmic biases and the digital divide, need addressing to ensure equitable outcomes for all farmers.

## **9. Quantitative Impacts of AI in Climate Prediction and Resource Management**

AI's impact on climate prediction and resource management is measurable in terms of disaster risk reduction and agricultural sustainability. For example, AI-powered climate prediction models improve extreme weather forecasting by 60%, resulting in a 50% reduction in economic losses from climate related disasters where AI systems are implemented. These predictions allow for effective mitigation strategies, lowering the long-term financial burden of climate impacts.

In agriculture, AI-driven technologies have raised yield efficiency by 25%, allowing farmers to produce more with fewer resources—vital for combating food insecurity in climate-affected regions. Additionally, AI's water usage optimization has reduced consumption by 20%, addressing water scarcity in high demand areas. Through these quantifiable outcomes, AI's role in environmental governance is evident, but scalability challenges, data ethics, and equitable technology access remain essential considerations for AI's broader adoption in global environmental management.

## **10. Internet of Things: Real-Time Environmental Monitoring**

The Internet of Things (IoT) is transforming environmental monitoring by enabling real-time data collection through a network of sensors. This technology is being applied to address critical environmental challenges, such as air quality management in urban areas and water scarcity in regions like Sub-Saharan Africa. The following case studies illustrate the practical applications of IoT in environmental governance.

### ***Case Study 1 – Air Quality Monitoring in New Delhi***

New Delhi, one of the most polluted cities globally, faces severe air quality issues that pose significant health risks. Traditional air quality monitoring often lacks real-time data and the resolution needed for effective interventions. IoT-based air quality sensors have transformed monitoring in the city by providing real-time, localized data on pollutants like particulate matter (PM) and nitrogen oxides (NOx).

These IoT sensors, deployed across the city, have improved reporting accuracy by 35%, offering policymakers and the public better insights into air quality. This real-time data has facilitated more effective responses, such as stricter emission standards, traffic restrictions, and public health advisories. As a result, IoT-driven interventions have contributed to a 20% reduction in peak pollution levels, particularly during high-risk periods like winter, when pollution is at its worst. These outcomes demonstrate IoT's potential in improving urban environmental governance by enabling timely, evidence-based decision-making.



### ***Case Study 2 – Water Resource Management in Sub-Saharan Africa***

Water scarcity is a pressing issue in Sub-Saharan Africa, where climate change and population growth further strain already limited water resources. IoT-enabled water meters have been deployed across the region to monitor water usage, detect leaks, and encourage conservation.

Smart water meters provide real-time data on water consumption patterns, allowing for more efficient water distribution. In areas where IoT solutions have been implemented, water wastage has decreased by 30% due to the timely detection of leaks and optimized water use. IoT sensors also help identify areas of high-water consumption, enabling targeted interventions to reduce overall usage, particularly in agriculture, where water demand is high.

## **11. Quantitative Analysis of IoT Applications**

The impact of IoT on environmental monitoring can be quantified in several areas. In New Delhi, IoT based air quality systems have significantly enhanced data accuracy by 35%, contributing to a 20% reduction in peak pollution levels. This improvement demonstrates IoT's potential to enhance urban environmental governance by providing precise, real-time data, which can be utilized for more effective policy and pollution control strategies (Sharma et al., 2022; Jain, 2021).

In Sub-Saharan Africa, IoT-based water management systems have increased water usage efficiency by 25%. These systems allow for the detection of leaks and the tracking of water consumption patterns, enabling more sustainable water management practices, which are crucial in addressing the region's ongoing water scarcity issues (Ochieng & Kibet, 2020; Pantea, 2021). By integrating IoT in both urban and rural environments, these systems offer a powerful tool for optimizing resource management and mitigating environmental challenges.

## **12. Potential of Digital Technologies to Redistribute Power in Governance**

Digital technologies like blockchain, Artificial Intelligence (AI), and the Internet of Things (IoT) have the potential to transform environmental governance by decentralizing power and empowering local communities. These technologies shift decision-making from centralized institutions to marginalized groups, allowing them to play a more active role in managing environmental issues. This section explores how these tools can redistribute power in governance, focusing on blockchain, AI, and IoT.

### **Blockchain: Empowering Local Communities**

Blockchain technology offers a decentralized and transparent system for recording and verifying data, which can fundamentally change how environmental governance operates. Traditionally, environmental data has been controlled by government agencies or large NGOs, whose decisions could be biased or slow. Blockchain's secure, immutable nature allows communities to independently record and report environmental data, bypassing traditional gatekeepers.

A notable example is the use of blockchain by indigenous communities in the Amazon rainforest to monitor deforestation. Historically, forest degradation data was collected by large organizations, sometimes leading to biased or delayed responses. Blockchain enables these communities to track deforestation independently, ensuring that the data is tamper-proof and transparent. This empowerment has led to significant improvements, such as a 50% reduction in response times to threats like illegal logging and fires. By controlling the data, these communities can influence policy discussions, ensuring their needs are heard in environmental decision-making.

Blockchain's ability to decentralize data control is reshaping the power dynamics in environmental governance. It allows local actors to bypass centralized institutions, giving them more agency in addressing environmental challenges. This shift promotes a more inclusive model of governance, where marginalized communities are at the forefront of decision-making.

### **Artificial Intelligence and IoT: Expanding Decision-Making Power**

AI and IoT are also critical tools for empowering local communities. AI-driven models and IoT-enabled sensors provide real-time data that helps communities monitor and respond to environmental risks without relying on centralized infrastructure.

In Kenya, AI applications in agriculture have helped smallholder farmers increase crop yields by 25% while reducing water consumption by 20%. These tools, often developed by local innovators or in collaboration with international organizations, allow farmers to make data-driven decisions about their practices, reducing dependence on external advisors or government support.

Similarly, IoT-based water management systems in Sub-Saharan Africa have enabled communities to monitor water usage, detect leaks, and optimize consumption. These technologies give local actors the power to manage their resources effectively, without relying on centralized water authorities. This autonomy in decision-making is crucial in areas where resources are scarce and governmental oversight may be limited.

Both AI and IoT enhance the capacity of local communities to respond to environmental threats, making them less dependent on top-down governance. By providing real-time, actionable data, these technologies empower grassroots actors to take control of their local environments and make decisions based on immediate needs.

### **13. Broader Implications for Global Environmental Governance**

The redistribution of power through digital technologies has significant implications for global environmental governance. As communities gain access to these tools, they can participate more actively in global environmental policy discussions. This could challenge the existing dominance of developed countries and multinational corporations in environmental governance frameworks.

For example, blockchain's role in tracking carbon credits could ensure that carbon markets benefit not only large corporations but also local communities involved in carbon sequestration projects. This shift could lead to a more equitable global environmental governance system, where marginalized communities are empowered to shape policy on climate change and resource allocation.

In conclusion, blockchain, AI, and IoT offer powerful tools to redistribute power in environmental governance, enabling local communities to take a more active role in managing their environment. By decentralizing data control and decision-making, these technologies create a more inclusive, transparent, and equitable model of governance.

### **14. Challenges in Digital Integration for Environmental Governance**

Although digital technologies like blockchain, AI, and IoT offer significant potential for transforming environmental governance, several challenges impede their full integration. These include concerns about data privacy and security, technological access disparities, and regulatory hurdles that must be addressed for these tools to be effective and equitable.

#### **Data Privacy and Security Concerns**

One of the primary challenges is the issue of data privacy and security. As environmental data is increasingly collected and shared through digital platforms, the risk of data breaches or misuse escalates. Research shows that 65% of stakeholders in environmental governance express concern about the security of data collected by these systems. This concern is particularly prominent in developing regions where weak data protection laws and limited cybersecurity infrastructure leave sensitive information vulnerable. Additionally, data collected by third-party platforms may not always be under the control of the communities generating it, raising concerns about data ownership and misuse. As reliance on digital tools grows, robust data protection regulations are necessary to ensure data privacy, security, and ethical use.

### **Technological and Access Disparities**

Access to digital technologies remains highly unequal. In high-income countries, IoT adoption rates can reach 73%, while in low-income regions, these technologies are often less than 15% adopted. These disparities are compounded by differences in digital literacy, infrastructure, and financial resources. In underserved communities, where environmental issues like water scarcity or pollution may be most pressing, the lack of access to these technologies hinders their ability to participate in governance. This digital divide undermines the potential for digital tools to redistribute power and ensure inclusive decision-making in environmental management.

### **Regulatory and Governance Challenges**

Many countries, particularly in the developing world, lack comprehensive regulatory frameworks to effectively integrate technologies like blockchain, AI, and IoT into environmental governance. In these regions, the legal infrastructure required to regulate and govern these technologies is still in development, posing significant challenges for their adoption. Without clear and adaptive laws, digital technologies could reinforce existing power imbalances, rather than democratizing decision-making. Effective regulation is necessary to ensure that these technologies are used equitably, fairly, and transparently.

In conclusion, the integration of digital technologies in environmental governance faces significant obstacles, including concerns over data privacy, unequal access, and insufficient regulatory frameworks. Addressing these challenges is critical to unlocking the full potential of these technologies in promoting sustainable and inclusive environmental management.

## **15. Methodology: Quantitative Analysis of Digital Disruption in Global Environmental Governance**

This paper employs a quantitative approach to analyse the impact of digital disruption on global environmental governance. The methodology integrates empirical data, case studies, and statistical techniques to assess how digital technologies, particularly blockchain, artificial intelligence (AI), and the Internet of Things (IoT), influence governance structures and decision-making processes in environmental management.

### **15.1 Data Collection**

**Survey Design:** A structured online survey was conducted among stakeholders in global environmental governance, including policymakers, tech developers, NGOs, and community leaders. The survey aimed to gauge perceptions regarding the efficacy of blockchain, AI, and IoT in improving transparency, accountability, and inclusivity in environmental governance. Questions focused on the perceived impact of these technologies on local communities, the efficiency of governance structures, and the potential for democratizing environmental decision-making.

**Case Study Analysis:** Several case studies were selected to examine real-world applications of digital technologies in environmental governance. These included:

**New Delhi's Air Quality IoT System:** Quantitative data from IoT sensors measuring air quality were collected to assess improvements in pollution levels and data accuracy.

**Water Management in Sub-Saharan Africa:** Case studies of IoT-based water systems in regions like Kenya and Uganda were analysed for their effectiveness in improving water usage efficiency, reducing waste, and enhancing resource management.

**Secondary Data:** Reports and publications from international organizations (such as the World Bank, UNEP, and the UNFCCC) were analysed for broader insights into the role of digital technologies in environmental governance, with a particular focus on their applications in carbon trading, climate risk forecasting, and resource management.

### **15.2 Data Analysis**

**Descriptive Statistics:** The responses from the surveys were analysed using basic descriptive statistics (mean, median, standard deviation) to uncover patterns and perceptions about the adoption and effectiveness of blockchain, AI, and IoT in environmental governance. The analysis aimed to quantify the impact of these technologies on governance issues such as transparency, accountability, and equitable decision-making.

**Regression Analysis:** Statistical methods such as regression analysis were employed to assess the causal relationship between the implementation of IoT systems and improvements in environmental outcomes. For example, the impact of IoT air quality sensors in New Delhi was analysed to quantify how accurate real-time data led to improved pollution management strategies and a measurable reduction in peak pollution levels.

**Comparative Analysis:** A comparative analysis of the digital governance models in urban and rural areas was conducted to explore the challenges and advantages of applying these technologies in different settings. The analysis compared the efficacy of IoT systems in New Delhi's urban environment with those in rural Sub-Saharan Africa, where infrastructure and technology access are often limited.

### **15.3 Limitations and Potential Bias**

While the quantitative approach provides valuable insights, there are several limitations:

**Digital Divide:** The analysis is constrained by disparities in technological access, particularly in the Global South, where limited infrastructure and digital literacy may skew the results.

**Data Privacy and Security:** Issues related to data privacy, algorithmic bias, and security risks of digital technologies were not fully captured through the quantitative methods, requiring further qualitative investigation.

**Environmental Impact of Technologies:** The ecological footprint of deploying technologies like IoT devices and blockchain systems, including energy consumption and e-waste, was only partially addressed and requires more focused research.

## 16. Conclusion and Recommendations

In the context of global environmental governance, digital technologies such as blockchain, artificial intelligence (AI), and the Internet of Things (IoT) offer transformative potential for creating more inclusive, transparent, and accountable governance systems. The core promise of these innovations lies in their ability to democratize data access, improve decision-making, and empower marginalized communities, who have long been excluded from critical environmental policy discussions. By breaking down barriers to information, these technologies could foster greater transparency, leading to more sustainable and equitable outcomes in environmental management.

Blockchain, through its decentralized ledger system, stands out for its capacity to ensure transparency and accountability, especially in areas like carbon trading and resource management. By preventing fraud and ensuring that environmental data is verifiable and tamper-proof, blockchain offers a mechanism for holding both governments and corporations accountable for their environmental actions. Similarly, AI has proven itself valuable in predicting climate-related risks, such as extreme weather events, and optimizing resource use, such as energy and water management, helping to mitigate the impacts of climate change. IoT, with its real-time data collection capabilities, enhances environmental monitoring and can trigger timely interventions to address emerging threats like pollution and deforestation.

However, despite the immense potential of these technologies, several challenges remain, especially when it comes to implementing them within existing governance frameworks. A significant hurdle is the digital divide, which restricts access to these technologies, particularly in the Global South. Without adequate infrastructure and digital literacy, many communities cannot fully participate in or benefit from digital environmental governance. Furthermore, the widespread use of these technologies raises concerns about data privacy and security, as well as the environmental costs associated with their

deployment, such as the energy consumption of blockchain networks and e-waste from IoT devices. These challenges require careful consideration and regulation to ensure that the digital disruption does not inadvertently worsen existing inequalities or create new risks.

The success of these technologies in reshaping global environmental governance will depend on overcoming these barriers. To ensure a more inclusive and sustainable approach, a multifaceted strategy is needed:

**Bridging the Digital Divide:** Governments and international bodies must collaborate to expand digital infrastructure, especially in underdeveloped regions. This includes providing access to reliable internet, ensuring digital literacy, and creating an enabling environment for the adoption of new technologies.

**Robust Data Governance:** Clear regulations around data use, privacy, and security are essential. Blockchain can offer solutions for data transparency, but regulatory frameworks must address concerns over data misuse and ensure that AI algorithms are transparent, fair, and free from bias.

**Inclusive Policy Design:** Environmental policies must be designed to ensure active participation from marginalized communities. Governments should create platforms for these communities to engage with data, decision-making, and policy development, enabling them to influence environmental governance processes.

**Sustainable Technological Deployment:** The environmental impact of digital technologies, particularly their energy consumption, must be considered. Blockchain networks, for instance, should transition to more sustainable consensus mechanisms, such as proof-of-stake, which consume significantly less energy than proof-of-work models.

**Global Cooperation:** Finally, international regulatory cooperation is crucial to standardize practices, share knowledge, and ensure that these technologies are deployed ethically and effectively across borders.

## References

1. Climate Ledger Initiative. (2022). Blockchain and Climate Action: Potential Use Cases for Blockchain in Climate Policy. *Climate Ledger Initiative*.  
<https://www.goldstandard.org/publications/climate-ledger-initiative-2022-report>
2. Global Privacy Council. (2023). Privacy Challenges in Digital Environmental Governance. <https://www.globalprivacycouncil.org/reports/privacy-environmental-governance>
3. *Journal of Sustainable Policy*. (2022). Regulatory Challenges in Digital Environmental Governance for Developing Countries.  
<https://www.sustainablepolicyjournal.com/regulatory-challenges>
4. Observer Research Foundation. (2024). Redistributing Power in Global Environmental Governance: Blockchain's Role. *Observer Research Foundation*.  
<https://www.orfonline.org/research/blockchain-environmental-governance>
5. UNESCO. (2022). Bridging the Digital Divide in Environmental Governance. *UNESCO*.  
<https://www.unesco.org/reports/digital-divide-governance>
6. World Economic Forum. (2023). Future of Digital Environmental Governance. *World Economic Forum*.  
<https://www.weforum.org/reports/future-of-digital-environmental-governance>
7. *Environmental Economics Research Foundation*. (2023). Reduction in Carbon Market Fraud: The Role of Blockchain Verification.  
<https://environmentaleconomics.org/carbon-market-fraud-blockchain-verification>
8. *Harvard Business Review*. (2023). Blockchain for Transparent Supply Chains. *Harvard Business Review*.  
<https://hbr.org/2023/01/blockchain-for-transparent-supply-chains>
9. *International Journal of Environmental Science and Technology*. (2024). AI in Climate Risk Management: Southeast Asia Case Study.  
<https://link.springer.com/article/10.1007/s40974-024-00123-4>
10. *World Bank*. (2022). Agricultural Innovations in Kenya: AI for Smallholder Farmers.  
<https://www.worldbank.org/en/news/feature/2022/01/18/agriculture-ai-kenya>
11. UNEP. (2021). Digital Technologies in Environmental Governance. *United Nations Environment Programme*. <https://www.unep.org/resources/report/digital-technologies-environmental-governance>



12. *India Environment Research Centre*. (2023). IoT Air Quality Monitoring in New Delhi. <https://www.indiaenvironment.org/iot-air-quality-new-delhi>

13. *African Resource Journal*. (2022). IoT in Water Management for Sub-Saharan Africa. <https://www.africanresourcejournal.org/iot-water-management>

14. *Journal of Environmental Justice*. (2023). Empowering Indigenous Voices with Blockchain in the Amazon. <https://www.environmentaljusticejournal.com/blockchain-amazon-indigenous>

15. *International Telecommunication Union (ITU)*. (2023). Global Report on IoT, AI, and Blockchain Access Disparities. ITU. <https://www.itu.int/en/publications/iot-ai-blockchain-disparities>

### Works Cited

1. Buterin. (2022). Retrieved from <https://www.rapidinnovation.io/post/consensus-mechanisms-in-blockchain-proof-of-work-vs-proof-of-stake-and-beyond>

2. *Forum for the Future*. (2020).

3. Foundation, E. W. (2023). *Energy Web Foundation*. Retrieved from [https://www.energyweb.org/Foundation, E. W. \(n.d.\). EWF](https://www.energyweb.org/Foundation, E. W. (n.d.). EWF).

4. Gallersdörfer et al., 2. (2020). Retrieved from <https://www.sciencedirect.com/science/article/pii/S2542435120303317>

5. Group, W. B. (2021). *State and Trends of Carbon Pricing*.

6. *IBM*. (2023). Blockchain-Based Frameworks for Food Traceability: A Systematic Review. Retrieved from <https://pmc.ncbi.nlm.nih.gov/articles/PMC10453023/>

7. Rahman, M. A. (n.d.). *AI and Big Data in Climate Risk Management.* *Energy and Sustainable Development*, 55, 37–43. Retrieved from <https://doi.org/10.1016/j.esd.2020.02.002>

8. Rolnick, D. D. (2019). Retrieved from "Tackling Climate Change with Machine Learning." *Nature*, 586(7835), 29–34: <https://doi.org/10.1038/s41586-019-0933-8>

9. Tapscott, D. a. (2016). Retrieved from <https://www.scirp.org/reference/referencespapers?referenceid=2566443>

10.Trust, I. F. (n.d.). Retrieved from IBM's official website.

11.Tseng, C.-T. L.-J.-C. (2021). "AI in Sustainable Agriculture." *Computers and Electronics in Agriculture*, 183, 106464. Retrieved from <https://doi.org/10.1016/j.compag.2021.106464>

12.Verra. (2023). Retrieved from *Verra*: <https://verra.org/>

13.WMO. (2022). "Artificial Intelligence in Early Warning Systems." *World Meteorological Organization*. Retrieved from [https://public.wmo.int/en/resources/bulletin/artificial-intelligence-early warning-systems](https://public.wmo.int/en/resources/bulletin/artificial-intelligence-early-warning-systems)

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**इब्नेबतूती, संपादित: दिव्य प्रकाश दुबे, हिंदी युग्म, जुलाई 2020**

### “इब्नेबतूती - एक अकेलेपन की तड़प, एक उम्मीद की किरण”

दिव्य प्रकाश दुबे की 'इब्नेबतूती' एक ऐसी किताब है जो हँसाती भी है और रुलाती भी। यह सिर्फ एक किताब नहीं है, बल्कि एक भावनात्मक सफर है—एक ऐसा सफर जो हमें अकेलेपन के गहरे सागर में ले जाता है।

कहानी का केंद्रबिंदु है राघव अवस्थी, एक युवा जो अपनी सिंगल मदर के लिए एक 'टिकाऊ' जीवनसाथी की तलाश में निकल पड़ता है। यह सफर उसे भारत के विभिन्न शहरों में ले जाता है, जहाँ वह अजीबोगरीब लोगों से मिलता है और उनकी अनोखी कहानियाँ सुनता है। हर किरदार, हर शहर, हर घटना इस यात्रा में एक अलग रंग भरती है।

दुबे जी की लेखनी में अद्भुत शक्ति है। वे अपने शब्दों के जादू से एक ऐसी दुनिया रच देते हैं, जो हमारी ही लगती है, पर फिर भी कुछ अलग सी होती है। उनके किरदार इतने सजीव और सच्चे लगते हैं कि ऐसा महसूस होता है जैसे वे हमारे ही आस-पड़ोस में रहते हों।

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राघव का यह सफर केवल भौगोलिक नहीं है, बल्कि यह एक आंतरिक सफर भी है। वह अपने भीतर के खालीपन को भरने की तलाश में है—एक ऐसे जुड़ाव की तलाश, जो उसे पूरा कर सके। लेकिन हर कदम पर उसे निराशा ही हाथ लगती है।

दुबे जी ने इस किताब में अकेलेपन के विभिन्न रंगों को बखूबी उकेरा है। वह अकेलापन जो शहरों की भीड़ में छिपा होता है, वह अकेलापन जो परिवार के बीच भी महसूस होता है, और वह अकेलापन जो सफलता की ऊँचाई पर भी सताता है।

इस किताब को खास बनाने वाली बात है दुबे जी का हास्य-व्यंग्य का प्रयोग। वे गंभीर विषयों को हल्के-फुल्के अंदाज़ में प्रस्तुत करते हैं, जिससे पाठक को हँसी भी आती है और सोचने पर मजबूर भी होना पड़ता है। जैसे, जब राघव अपनी माँ के लिए लड़कों के प्रोफाइल देख रहा होता है, तो लेखक का व्यंग्य सहज ही पाठक का ध्यान खींच लेता है।

लेकिन इस हास्य के पीछे एक गहरा दर्द छिपा है। यह दर्द आज की पीढ़ी के युवाओं का है। एक ऐसा दर्द जो कहता है कि हम सब कहीं न कहीं अकेले हैं, चाहे हमारे आसपास कितने ही लोग क्यों न हों।

कहानी के अंत तक राघव की यात्रा खत्म नहीं होती। वह अभी भी तलाश में है, अभी भी उम्मीद कर रहा है। यही उम्मीद है जो हमें जीने की ताकत देती है, जो अंधकार में भी एक किरण दिखाती है।

'इब्नेबतूती' एक ऐसी किताब है जो हमें हँसाती है, रुलाती है, सोचने पर मजबूर करती है, और अंततः हमें उम्मीद से भर देती है। यह किताब हमें यह याद दिलाती है कि हम अकेले नहीं हैं और हमारी तलाश अभी खत्म नहीं हुई है।

इस पुस्तक का पारंपरिक हिंदी साहित्य से हटकर विकास, अपनी जड़ों से जुड़ा रहना, किताब के शीर्षक में साफ दिखाई देता है। इब्नेबतूती शीर्षक प्रसिद्ध ऐतिहासिक व्यक्ति इब्न बतूता की ओर इशारा करता है, जो मोरक्को के यात्री थे और जिन्होंने विभिन्न क्षेत्रों का यात्रा करते हुए अपने अनुभवों को दर्ज किया था। इसी तरह, कहानी का नायक राघव भी एक यात्रा पर निकलता है—शारीरिक और भावनात्मक दोनों—वह अपनी माँ के लिए एक उपयुक्त जीवनसाथी की तलाश में विभिन्न भारतीय शहरों की यात्रा करता है। शीर्षक की यह दिलचस्प समानता उसके ऐतिहासिक यात्रा के साथ राघव की खोज को जोड़ती है, जो साहसिकता और खोज के विषय को उजागर करता है। शीर्षक का हल्का-फुल्का रूप किताब की गहरी और मजेदार कहानी कहने की शैली से मेल खाता है। यह आधुनिक कथा शैली को दर्शाता है, जिसमें गंभीर विषयों जैसे अकेलापन को हास्य और व्यंग्य के साथ जोड़ा गया है।

यह किताब हिंदी साहित्य के लगातार बदलते विकास को समझने के लिए एक महत्वपूर्ण दस्तावेज है। दुबे का काम उस बड़े प्रवृत्ति का हिस्सा है, जहाँ हिंदी साहित्य में विषयों, कथा शैलियों और रूपों के साथ प्रयोग बढ़ रहा है, ताकि यह वैश्विक पाठक वर्ग को आकर्षित कर सके।

लेखक दिव्य प्रकाश दुबे और सत्य व्यास “नई वाली हिंदी” के विकास में अग्रणी माने जाते हैं। यह भाषाई परिवर्तन दर्शाता है कि भाषा कैसे सांस्कृतिक, तकनीकी और सामाजिक परिवर्तनों के अनुसार ढलती है। इसके अलावा, साहित्य में यह विकास अधिक समावेशी संवाद का निर्माण करता है, सामाजिक मुद्दों पर चर्चा को लोकतांत्रिक बनाता है और उसे व्यापक पाठक वर्ग तक पहुंचाता है। इसके परिणामस्वरूप, समकालीन सामाजिक परिवर्तनों को एक बड़े जनसमूह द्वारा समझा और अपनाया जा सकता है।

पुस्तक इब्नेबतूती इस प्रवृत्ति का उदाहरण है, जो बदलते सामाजिक मानदंडों पर टिप्पणी करती है। राघव की अपनी सिंगल माँ के लिए जीवन साथी खोजने की यात्रा के माध्यम से, यह कहानी एकल अभिभावकत्व, बदलते पारिवारिक संबंधों और पारंपरिक सामाजिक भूमिकाओं के पुनर्परिभाषा जैसे विषयों को गहराई से छूती है। ये प्रगतिशील विषय हिंदी साहित्य में एक नए दृष्टिकोण का संकेत देते हैं, जो पारंपरिक कथाओं से आगे बढ़कर प्रासंगिक और अनदेखे विषयों का अन्वेषण करता है।

दिव्य प्रकाश दुबे की रचनाएँ, जैसे इब्नेबतूती, अक्टूबर जंक्शन और मुसाफिर कैफे, आज के युवाओं की आधुनिक जीवनशैली को बखूबी चित्रित करती हैं। उनकी संवादात्मक शैली, जिसमें पारंपरिक विषयों को आधुनिक बोलचाल के भावों के साथ जोड़ा गया है, समकालीन पाठकों के साथ गहरी प्रतिध्वनि बनाती है। यह दृष्टिकोण शास्त्रीय और आधुनिक हिंदी साहित्य के बीच की खाई को पाटता है और इसे उन युवा पाठकों के लिए भी सुलभ बनाता है जो पारंपरिक हिंदी साहित्य को कम पढ़ते हैं।

दिव्य प्रकाश दुबे हिंदी लेखन के उन उभरते हस्ताक्षरों में से हैं जो अपनी हर नई पुस्तक से साथ और भी बेहतर होते चले गए। उनका काम शहरी वास्तविकताओं को उजागर करने के लिए जाना जाता है, जो भाषा के विकास को संजोते हुए विविध विषयों और पात्रों को जीवन्त बनाता है। इब्नेबतूती एक ऐसी ही पुस्तक है। इसमें अकेलेपन की खोज और तेज़ रफ्तार, अक्सर व्यक्तिवादी शहरी माहौल में अर्थपूर्ण रिश्तों की तलाश की विवेचना की गई है, जो हिंदी लेखकों के शहरी अनुभवों और आधुनिक शहर जीवन की जटिलताओं पर बढ़ते ध्यान के साथ मेल खाता है।

देश की उन्नति में भाषा और साहित्य का अहम योगदान होता है। इब्नेबतूती पुराने साहित्यिक कामों में इस्तेमाल होने वाली औपचारिक, शास्त्रीय हिंदी के विपरीत है। इब्नेबतूती ने बोलचाल की भाषा को अपनाकर साहित्यिक परंपरा को रोज़मर्रा की जिंदगी से नजदीक किया है, जिससे यह भारत के बदलते भाषाई परिदृश्य से जुड़ने में सक्षम होती है। युवाओं के दृष्टिकोण को प्रस्तुत करते हुए, इब्नेबतूती आधुनिक साहित्य का प्रतीक बन जाती है, जो युवाओं में आलोचनात्मक सोच को बढ़ावा देने, सांस्कृतिक पहचान के प्रति सम्मान को प्रोत्साहित करने और सामाजिक एकता को बढ़ावा देने में मदद कर सकती है।

## BOOK REVIEW

PADMANABH K. SHARMA<sup>1</sup>

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**RAMAYANA in Cambodian Sanskrit Inscriptions, Sculptures, Ramleela & Paintings by  
Prof. C. Upendra Rao, EASTERN BOOK LINKERS, 1sted.2024**

*“Today, we are restoring and renovating the temples in Angkor Wat. These are contributions which we are making outside because the civilisation of India has gone beyond India” - S. Jaishankar.*

This is what Jaishankar remarked as India reinforced its soft power prowess in Cambodia, by underwriting the revamping of temples in the Khmerian nation at the close of 2022. With New Delhi's soaring interest in Suvarnabhumi,( ancient Indian terminology for Southeast Asia), Prof. Rao's book entitled “Ramayana- in Cambodian Sanskrit Inscriptions, Sculptures, Ram Leela & Paintings” adroitly articulates the umbilical civilisational chord that binds Phnom Penh to New Delhi. This treatise factors into Prof. Rao's holistic experiences in the Austroasiatic Nation while tendering a comprehensive evaluation of Ramayana's permeation into the social fabric of Cambodia. Prof. C Upendra Rao is an erudite professor at the School of Sanskrit and Indic Studies at the eminent Jawaharlal Nehru University.

Prof. Rao notes that the Khmerian populace became conversant with the Ramayana of Valmiki from as early as 6th Century, but this was wholly not manifested in Reamkerti, the Khmerian avatar of Ramayan (16th-17th CE) for the Khmerian Reamkerti was conceived by Buddhist scholars, who aligned the text with Indigenous postulates of the Theravada Buddhism, which showcases the customisation of Ramayana pursuant to local cultural and social paraphernalia, as echoed by Saveros Pou, a French linguist of Cambodian origin, “It was made of a Valmikian wrap into which Khmer authors wove a gamut of weft-yarns drawn from their Buddhist culture.”

The linguistic contribution of Sanskrit and Pali to Khmer, the official language of Cambodia (p.58), epitomizes the Indian influence in the literary affairs of Cambodia and underpins robust society to society connect between two vibrant civilisations. Prof. Rao's detailed tabular analogies between Sanskrit and Khmer enrich the readers with scholastic insights into the Khmer-Sanskrit confluence (p.60-p.61).

The paramountcy of ethnic agencies such as Ramayana, for South Block in the diplomatic high-table, especially of South Asia, had been, in letter and spirit, terra incognita until the resurgence of nationalistic fervour in India attributed to the rise of right-wing parties. Cambodians have subsumed family ethos from Reamkerti in an enhanced vogue vis-à-vis India due to the transliteration factor, for instance, as Prof. Rao writes, Riem, (Khmerian pronunciation of Ram) implies elder brother, which in turn makes the fraternal ties between Ram and Lakshman, "one of the most revered themes in Khmer people's mind", and Sita, which is linked to furrow in India, is construed as an epitome of chastity as they trace the origin of name, 'Sita' to Pali term 'Seta' which is associated with the 'concept of purity'(p.79). Though Cambodians have intrinsically espoused Buddhism as their official religion, they have not renounced non-vegetarian dietary preferences as Prof. Rao writes, "Even though majority of them are buddhists, Buddhist prescriptions have never kept Cambodians from eating meat; it just kept them killing animals." Prof. Rao's opinion highlights that this propensity is symptomatic of a universal theory that counsels that religious precepts are amenable to domestic attitudes, geographies and contingencies du jour.

However, what can be flagged as a lacuna in his intellectual work is a mere allusion to Khmer rouge, which profoundly afflicted the cultural paradigm of Cambodia, in lieu of its contextual delineation. Similarly, repeated references to the war between Cambodia and Thailand as a prelude to the decline of the Sanskrit language should have been propped up in brief elucidation. His elaborate description of variations in different Reamkertis pertaining to the birth of Sita and Hanuman portends alterations stemming from oral traditions and diverse interpretations of an epic that is relatively exotic to them. Albeit pictorial demonstrations and glossaries augment the book's connection with ordinary readers, most of whom are oblivious to the cultural realm of foreign countries, in academic vitality, the book ought to have delved deeper into fundamentals of evolving soft power diplomacy of New Delhi as respects South East Asia to minister to pedagogical expediency of International Relations.

Prof. Rao's book serves as a ready reckoner for appraising cultural adhesion between Cambodia and New Delhi. As New Delhi aspires to become Vishwa Bandhu, Indian citizens must peruse such literature to be abreast of India's expansive cultural network underlying contemporary diplomatic engagements. Prof. Rao's attempts to excogitate literary heritage as a driver of ties not only between New Delhi and Phnom Penh but also with other South Asian nations, accord a renascent dimension to high-profile parleys in global theatre. While this book is prescient to New Delhi's Act East policy framework, it also exalts the scholastic equations between the two nations. As the Chinese leviathan exerts belligerence in the Asian sea, South Block must leverage the civilisational network, as indicated in the book, to encash what Jaishankar calls "global contradictions".



## BOOK REVIEW

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**Princean: How Nehru, Patel, and Mountbatten Made India, edited by Sandeep Bamzai, Rupa Publications India, October 2020**

*“Be not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them.” -William Shakespeare, Twelfth Night*

As the sun of democracy dawned upon India on the midnight of 14-15th of August 1947, these timeless words comforted the nation that withstood the agony of partition – “A moment comes, which comes but rarely in history when we step out from the new – when an age ends, and when the soul of a nation, long suppressed, finds utterance.” These timeless words were addressed to the nation by Pandit Jawaharlal Nehru as he spoke to the Constituent Assembly on the midnight of 14th-15th August. And with this, began the pilgrimage of a billion people towards the ideals of democracy, self-rule and stride towards the dreams that were for India, but also for the world.

The virtue of India, which has allured writers and travellers of the yore, is her sheer scale of size. In India, we endured the largest non-violent struggle for freedom. At the culmination of it, we drafted a constitution so extensive as to be regarded as the lengthiest of all ever produced by man. Independence, which they claimed after a long trail of sweat and blood. Independence, which they hold dear to their hearts and souls. But seldom do they ponder about the labour it took to stitch the loose threads of small states and principalities, and weave them into a union of states able to stand the odds of time and diversity. This is the story of the making of the Republic of India.

Author Sandeep Bamzai narrates this story in his book “Princestan - How Nehru, Patel and Mountbatten Made India.” As is widely known, the British Parliament, through the Independence of India Act, of 1947, granted the transfer of power of the territories directly under the British Raj, to the newly created dominions of India and Pakistan. Princely states, that more than five hundred in number, were left to their will to choose and determine their future. These states were free to join either of the newly created dominions or to declare themselves sovereign states. As history has it, no state chose, or perhaps more prudently – was able to choose, the latter course. An overwhelming majority of these states joined the Indian Union, and some joined Pakistan.

The title of the book ‘Princestan’ – in line with the terms Hindustan and Pakistan, talks of a loose confederacy of Princely States and Principalities ruled by hereditary rulers under the paramountcy of the British Crown. The book is divided into twelve chapters and styles an introduction and prologue at its commencement. Many books have been written so far on the merger of princely states into India, the most credible one being written by V.P. Menon, the then Secretary of the Department of State Affairs - The Integration of Indian States. However, there are certain features that make this book a unique text. One such feature is the way the author has narrated the turn of events using Jawaharlal Nehru, Sardar Vallabhbhai Patel, and Lord Louis Mountbatten as three integral pillars of the whole story; as these three political figures were directly responsible for the events in their capacities as – Prime Minister, Minister of Home Affairs and State Affairs, and Governor-General respectively.

It is generally accepted that Sardar Vallabhbhai Patel was the man of the hour during the integration of princely states in India. Mountbatten, being a distant relative of the British Monarch, and having unopposed sway amongst the Indian Princes and Rulers, evidently had a significant say in the affair. Nehru is put less in focus, if not criticised, on this matter. The author takes a remarkable stand and portrays Nehru as a leading protagonist in the whole drama unfolding between the kings. He writes “Nehru was the progenitor of the idea of breaking the back of the princes, his visceral hatred for them shaped by Fabian Socialism and a brutal jail stint in Nabha in the early 1920s.” (pg. viii) The author tries to highlight how Nehru’s perceived Fabian notions of his days in Europe, and his unpleasant experiences during the early days of the national movement, largely shaped his vision in regard to the situation with the Princely States. Later he again asserts “...and though the idea of an Integrated India emanated from Nehru, who wanted the princes and their fiefdoms dismantled, it was Sardar who showed the steel, resolve and the spine after Independence. But it is not as if Nehru took a back seat after 15 August 1947 in this regard.”

Another character highlighted by the author in the book is Lord Louis Mountbatten of Burma, Governor-General of the Indian Dominion, and the Viceroy of the erstwhile British Raj. The author writes “If Nehru was the fulcrum in the idea that there would be one India which included both the British-governed provinces and the Princely States, bound by the treaties to the British through the doctrine of paramountcy, then Mountbatten played an equally important role in breaking down the resistance of the princes to the concept of integration.” (pg. 30) Mountbatten’s role is complemented by that of the Princely rulers who were vehemently in favour of integration with India – such as Sir Sadul Singh of Bikaner – who vehemently advocated complete integration and even addressed a secret note titled “The Time for Right Decision: An Appeal to the Princes” to the Chamber of Princes. The author has proven successful in highlighting the roles of such figures, who are essentially ignored when we dispense credit for the integration and consolidation of the Indian Union.

Of the attempts made by Princely rulers to declare independence, the author writes “But ‘keep a bit of India’ remained a theme with the Monarchists and hope lingered as princes, their Prime Ministers, and Dewans, under the bidding of the British Political Department in frontline states of Kashmir, Hyderabad, Bhopal, Jodhpur and Travancore played the procrastinating game flirting with the idea of independence and even Princestan. Interestingly, the US State Department was also fishing in these troubled waters.” (pg. 100) The author goes on to narrate the bizarre story of the race for thorium reserves found in Travancore, which were critical for the development of nuclear power capabilities.

The author has also tried to capitulate the loose threads of the historical accounts about how a few princely rulers were biased in their view against secular India and were supporting the communal bid of the Muslim League. Nawab of Bhopal, in his capacity as the Chancellor of the Chamber of Princes, was the harbinger of such efforts. “...because of the Chancellor and his mindset, Muslim League outlook and policy dominated the workings of the Chamber’s Secretariat. It was done in a shadowy but cunning manner. The three Departments of the Narendra Mandal – the General Secretariat, the Constitutional Affairs Secretariat, and the Publicity Secretariat – were directly under the helmsmanship of persons with subjective viewpoints in that they were reactionary and even communal in their approach and outlook.” (pg. 188)

Succinctly, it can be concluded that “Princestan: How Nehru, Patel and Mountbatten Made India” is a book presenting a fresh take on a consequential segment of the history of modern India. The author has established the novelty of the book by bringing in new facts and their interpolations about the sequence of events that led to the integration of states in the Indian Union. For first-time readers, Princestan is a fair and trustworthy text on the history of the events around the accession of states. The author writes in the epilogue “The journey has been fulfilling, my interest has been galvanised, and the hunger for history has only grown in this time.” Perhaps this is how this book will leave its readers too.

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