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Artificial Intelligence and India's Informal Labour Markets: Persistence, Inequality, and Policy Blind Spots

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Abstract

Artificial Intelligence (AI) is changing labour markets worldwide, yet little knowledge is available for economies with persistently high informal dominance. This study in the context of expanding artificial intelligence (AI), focusing on structural persistence, inequality, and policy blind spots investigates the informal labour market of India. The paper analyses gender disparities, wage dynamics, and employment structures alongside India's changing AI strategy using secondary data from the Periodic Labour Force Survey (2017–18 to 2023–24).

The findings are reflection of the structural nature of the existing parallel labour markets by demonstrating the persistence of informality, with urban areas continuously above 50% and rural regions surpassing 87%. Wage inequalities persist, with formal workers earning almost twice as much as informal workers, while female-to-male wage ratios in self-employment declined sharply from 59.6 percent to 34.3 percent over the period, highlighting increasing gendered vulnerabilities. A review of India's AI plans, from AI for All (2018) to AI for Viksit Bharat (2025), suggests that policy remains skewed towards the formal sector, providing only a passing mention of gig workers while largely excluding the larger informal workforce. The findings suggest that AI has a high probability of exacerbating inequality instead of reducing it in the absence of concerted actions in skills, digital access, and social protection. This paper concludes that a fundamental policy shift is necessary to explicitly include informal workers in India's AI agenda to prevent the widening of existing inequalities.

Keywords: *Artificial Intelligence; Informal Employment; Indian Labour Market; Wage Inequality; Gender Disparities; Rural–Urban Divide.*

1. Introduction

Artificial Intelligence has become one of the most transformative technologies of the present century, reshaping economic functions entirely. While global studies highlight both the risks of displacement and the opportunities of augmentation (Frey & Osborne, 2017; Webb, 2020; Acemoglu & Restrepo, 2021), most of this research has been focused on highly developed countries' relatively organised labour markets. The case of developing economies presents a distinct

challenge: where the widespread existence of informality hampers workers' and companies' capacity to adapt to technological change (International Labour Organization [ILO], 2023; OECD, 2023).

India is a prime example of this case. Almost 80% of its labour force remains employed informally, even with widespread technological dissemination and continuous economic growth (Periodic Labour Force Survey [PLFS], 2023–24). Informality as reported by Ahangarian, 2023 plays a dual role of acting as a cushion in the time of crisis but also acts as a constraint to productivity. It is not just a transitory phase of expansion, rather it is a structural feature of the economy (Ahangarian, 2023). However, the Indian initiatives in artificial intelligence, such as AI for All (NITI Aayog, 2018) and AI for Viksit Bharat (Government of India, 2025), provide significant economic benefits while also giving some consideration to the formal sector, with little acknowledgment or focus on gig or platform workers. This is a concern in terms of whether AI will perpetuate inequality or offer new opportunities for growth in a labor market that is dominated by the informal sector, thus challenging the augmentation theory. Without the inclusion of informal workers in skill development and protection policies related to AI, the risk of displacement rather than augmentation is indicated by the analyses discussed below.

Through the examination of the persistence of informality, gender and wage disparities, and the inclusiveness of AI policy mechanisms in India, this article seeks to respond to these questions. The analysis tries to explores India's labour market experience within broader conversations on technology and development based on evidence from the PLFS (2017–18 to 2023–24). By doing so, the research enhances understanding of the possibilities and risks of applying AI in societies where informality prevails, highlighting the conditions under which technological development might foster exclusive rather than inclusive transformation.

2. Literature Review

Frey and Osborne (2017) laid the foundational framework for understanding the reshaping of the labour market due to technological advancement, revealing that the jobs requiring low and middle levels of skills, involving routine and predictable tasks, were more susceptible to automation. Extending this work, Webb (2020) challenged earlier claims and found that AI also affects non-routine, high-skill cognitive tasks such as medical diagnostics, financial modelling, etc. However, this impact on high-skilled tasks may be augmentative rather than substitutive, thereby enhancing productivity without fully displacing the human workers (Webb 2020). Acemoglu and Restrepo (2021) used a task-based framework and further distinguished between automation and augmentation technologies arguing that the net impact of AI will depend on the amount of displacement of the workers, the reallocation of the tasks and the ability of institutions to support the workers' adaptation to the changing scenarios.

International evidence shows that artificial intelligence (AI) has uneven effects on economies worldwide. In developed economies, AI has worsened job polarization, resulting in a U-shaped relationship between employment growth and low-skilled and high-skilled jobs (OECD, 2023). On the other hand, the risk of exclusion looms over workers in less-developed countries because of their lack of digital skills, infrastructure, and institutional support (ILO, 2023). International evidence reveals that during this AI-induced change, it is necessary to focus on the informal labor market in India.

Ahangarian (2023), challenging the assumption that growth leads to formalization, found that informality remains a dominant feature of labour markets, dominating non-agricultural employment in South Asia and Africa. The World Bank (2021) similarly characterizes informality as a structural condition that provides crisis resilience while constraining productivity and access to social protection. Informal enterprises face additional barriers to technology adoption, including limited access to credit and digital capabilities, which restrict their ability to benefit from technological change (Skinner & Valodia, 2020).

The Indian labour market has been undergoing structural change rapidly, yet nearly 80% of the employment in the Indian economy is of an informal nature (PLFS 2023-24). Women dominate informal self-employment and home-based work in India, facing acute barriers to skills and social protection (Chen, 2012). Informal workers are "locked out" of formal skilling pipelines, which in turn acts as the main reinforcer of the cycles of exclusion, as emphasized by the India Informal Economy report (2024). As Rakshita (2022) notes, informal workers lack access to essential skilling programs, which leaves them vulnerable to displacement. Sanghi and Sensarma (2014) highlight fragmentation in India's skill ecosystem, with limited alignment between vocational training and emerging technological demands. India's informal workforce, comprising over 550 million people, has long operated outside formal training and technological systems, but this landscape is rapidly changing as AI, and digital platforms begin to penetrate traditional sectors (ETCIO, 2025). However, only 42.6% of Indians were considered employable, revealing a critical mismatch between available skills and AI-driven labour demand. This gap is particularly acute among rural, female, and marginalized workers, who face compounded barriers. (ETCIO, 2025).

Together, literature builds three key findings. **First**, emerging AI technology has profound implications that extend beyond automating routine tasks, transforming even high-skilled cognitive work, with the relationship between augmentation and displacement strongly depending on institutional support. **Second**, informality in developing economies, such as India, is not a transitional phase but a structural state that limits adaptation to new technologies and acts as a safety net during crises. **Third**, exclusion from skilling ecosystems and digital infrastructure, especially for women, rural, and marginalized workers, deepens vulnerability and restricts the ability of informal workers to take advantage of technological advancements. While existing studies document job polarization risks and the resilience of dual labour markets, there is much less work that systematically analyses how AI intersects with India's predominantly informal labour force. This study fills the blind spot by examining labour market persistence alongside a critical assessment of India's AI policy framework.

Objectives of the Study

The present study aims to examine the implications of expanding artificial intelligence (AI) within an informality-dominated labour market context in India. The research adopts a structural and policy-oriented perspective with the following objectives:

- To document the persistence of informal employment in India, including rural–urban differences, using evidence from the Periodic Labour Force Survey (2017–18 to 2023–24).
- To analyse wage inequality and gender disparities across formal and informal employment, highlighting structural labour market vulnerabilities.
- To assess the extent to which India's evolving AI policy frameworks—from *AI for All* to *AI for Viksit Bharat* recognise and incorporate the realities of informal workers, and the implications for inclusive growth.

3. Data and Methodology

The study uses secondary data from the Periodic Labour Force Survey (PLFS) from 2017–18 to 2023–24. Employment has been classified into two categories: informal employment (casual labour and self-employment) and formal employment (regular wage and salaried workers) to capture the structural dominance of informality. The study does not directly measure artificial intelligence (AI) adoption; instead, it adopts a structural diagnostic approach to assess labour market vulnerabilities and policy preparedness in the context of expanding AI.

Compound Annual Growth Rates (CAGR) were calculated independently for formal and informal employment to analyze long-term trends. To calculate the rural–urban informality difference, employment was further broken down by location. Wage analysis is based on average wages reported over the duration of the PLFS's four quarters. With an assumed 22 workdays per month, a standard proxy in Indian labour market studies that accounts for the intermittent nature of casual work, monthly wages were constructed. This made comparability with self-employed and regular wage/salaried groups possible. These were utilized to determine wage gap ratios, which were determined by dividing the average wages for the formal and informal sectors.

An independent-samples t-test was conducted to assess the statistical significance of the formal-informal wage gap, confirming that formal wages are structurally higher ($p = 0.0000004$). A Pearson correlation analysis revealed a strong positive relationship between formal and informal wage trends ($r = 0.922$), indicating co-movement but persistent disparity. The study also examines gendered income differences by calculating the female-to-male wage ratios for the various employment categories. All wages are reported in nominal terms, with emphasis placed on relative differentials rather than real income changes. For improved interpretation, trends that emphasize the existence of informality, inequality of wages, and gender variability within the context of AI-related policy discussions and technological advancement were illustrated in graphs and tables.

4. Results and Discussions

4.1 Informal vs Formal Employment Trends

Table 1: Informal and Formal Employment in India (2017–2024)

Year	% Informal (self-employed + casual)	% Formal (regular wage/salary)	Rural Informal (%)	Urban Informal (%)	Gap Rural Urban
2017–18	77.10%	22.80%	86.90%	53%	33.90%
2018–19	76.20%	23.80%	86.60%	51.30%	35.30%
2019-20	77.10%	22.90%	87.50%	51.20%	36.30%
2020-21	78.90%	21.10%	87.90%	53.60%	34.30%
2021-22	78.50%	21.50%	87.40%	52.90%	34.50%
2022-23	79.10%	20.90%	87.80%	52%	35.80%
2023-24	78.20%	21.70%	87.50%	52.50%	35.00%
CAGR	0.24%	-0.82%	0.11%	-0.16%	

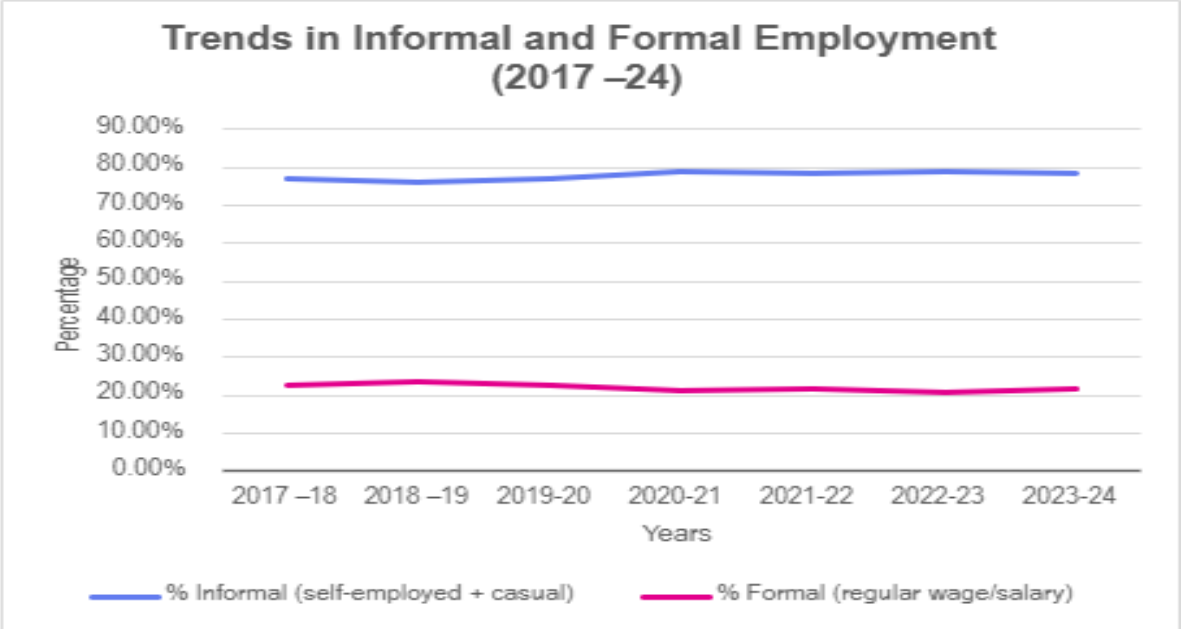
Source: Calculations from Periodic Labour Force Survey (PLFS) Annual Reports, 2017–18 to 2023–24, National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.

Table 1 and Figure 1 represent the employment trends in India from 2017-18 to 2023-24, revealing a persistent dominance of informality over the years, which accounted for 77-79% of the total employment throughout the period against a strikingly low share of 21-22% occupied by the formal regular wage and salaried workers (International Labour Organization [ILO], 2023; PLFS). This is indicative of the fact that despite rapid efforts in the form of technological diffusion and economic growth to transform the Indian labour force market, the formal sector compound annual growth rate declined by –0.82% over the years, whereas informalization grew at a compound annual growth rate of 0.24%.

Rural informality remains at an all-time high of 87-88%, which reflects a heavy dependence on agriculture and casual labour (World Bank, 2021). By contrast, urban informality is around 51-53%, which is relatively lower but is still about half of the workforce. The main reason for this can be traced to the large-scale migration of the low-skilled, undereducated and untrained workforce of the rural areas due to population pressure and lack of job opportunities (Mohapatra, 2012). This points to the limited trickledown effect of digital growth and technological innovations to empower workers even in urban areas, which are the hub of technological innovations (Pisu, M. et al., 2021). **Figure 2** visualises this persistent gap between urban and rural informality.

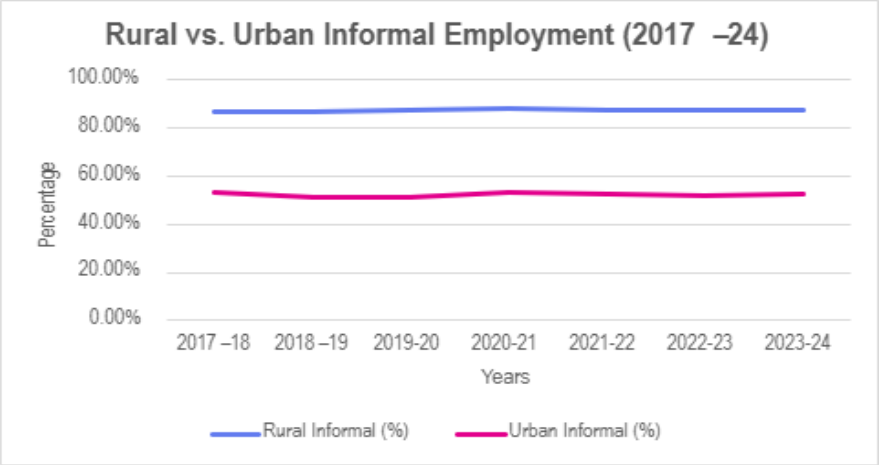
These trends are evidence of a fundamental mismatch between the proposed AI contribution and the actual scenario of the workforce (ILO, 2023). AI was supposed to be the driver of inclusive growth (NITI Aayog, 2018; Government of India, 2025), yet the evidence of increased informalization points out that the majority of the workforce remains outside the skill enhancement plans and social security goals (Rakshita, 2022). The informal sector expanded slightly at the advent of Covid-19 pandemic as it played the major role of shock absorber during the time of crisis due to the inability of the formal sector to deliver adequate social security coverage. The AI policies in the future need to explicitly target empowering the informal workforce with infrastructure and skill development; otherwise, technological expansion will further deepen the already existing inequalities, as stated by the ILO report, 2023.

Figure 1: Rural Urban Informal employment (2017-2024



Source: Visualization from Periodic Labour Force Survey (PLFS) Annual Reports, 2017–18 to 2023–24, National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.

Figure 2: Rural vs Urban informal employment trends (2017-24)



Source: Visualization from Periodic Labour Force Survey (PLFS) Annual Reports, 2017–18 to 2023–24, National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India

4.2 Wages and Gender Gaps

Table 2: Average Monthly Wages by Employment Type (2017–24)

Year	Formal Sector (Regular Salaried) Average Wages	Informal Sector (Casual+ Self Employed) Average Wages	Wage Gap Ratio = Formal/Informal
2017–18	16527.25	8577.69	1.93
2018–19	15884.75	8214.13	1.93
2019–20	16728.25	8425.25	1.99
2020–21	17571.75	8786.38	2.00
2021–22	18391.00	8703.00	2.11
2022–23	19491.50	10992.75	1.77
2023–24	20702.25	11237.50	1.84

Source: Calculations from Periodic Labour Force Survey (PLFS) Annual Reports, 2017–18 to 2023–24, National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India

Figure 3: Wage Trends by Employment Type (2017–24)]

Source: Visualization from Periodic Labour Force Survey (PLFS) Annual Reports, 2017–18 to 2023–24, National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.

Figure 3 and Table 2 show the persistent wage divide between the salaries of the formal and informal workers. Across the time frame, the formal sector employees earned almost twice that of the informal counterpart, with a wage gap ranging from 1.77 to 2.11 times. An independent-sample t-test confirms that this difference is **highly statistically significant** (p = 0.0000004), indicating that formal wages are structurally higher and not due to random variation. Moreover, correlation analysis shows a strong positive relationship (r = 0.922) between formal and informal wages, suggesting that while both wage series rise over time, the gap remains consistently large. However, from 2018-19 the gap begins to widen again as reflected by the wage gap ratio and during 2021-22 it was the highest, mainly because of the advent of Covid-19, in which the informal sector acted as the main shock absorber of the country and supported the displaced workers while the formal sector retained wage stability. As one World Bank study observed, "high initial losses in jobs, hours worked and wages – and large gaps by gender, skill level and sector of workers – largely dissipated by the fourth quarter of 2020"

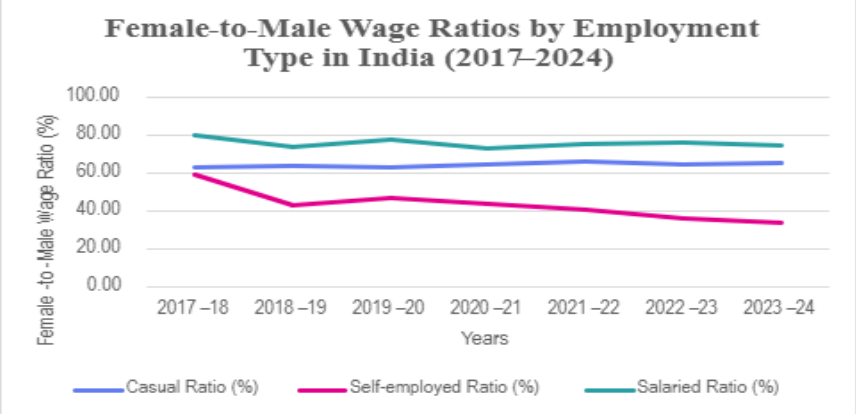
The brief narrowing of the gap can be witnessed post-Covid-19 in 2022-23, mainly because of the short-term recovery policies (employment generation policies and public welfare policies) of the government post-pandemic, the wage gap reduced to 1.77. But in 2023-24, the wage gap began to surge again, indicating the structural reliance of the dual labour market. These patterns suggest that, despite policy efforts, technological and economic gains such as those promised by AI adoption continue to bypass much of the informal workforce.

Table 3: Female-to-Male Wage Ratios by Employment Type in India (2017–24) (%)

Year	Casual Wage Ratio (%)	Self-employed Wage Ratio (%)	Regular Salaried Wage Ratio (%)
2017–18	63.19	59.59	79.87
2018–19	63.77	43.37	74.07
2019–20	63.53	46.92	77.96
2020–21	64.82	43.88	73.15
2021–22	66.52	40.99	75.48
2022–23	64.55	36.29	76.08
2023–24	65.83	34.34	74.68

Source: Calculations from Periodic Labour Force Survey (PLFS) Annual Reports, 2017–18 to 2023–24, National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.

Figure 4: Female-to-Male Wage Ratios (2017–24)



Source: Visualization from Periodic Labour Force Survey (PLFS) Annual Reports, 2017–18 to 2023–24, National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.

Table 3 and Figure 4, clearly indicates that the gender wage gaps exist in all categories of employment in India. The female-to-male wage ratios indicate that the gap in casual employment is modest, with ratios between 63% and 66%, which evidently shows that women in casual or informal sectors continue to earn significantly lower wages than men. In self-employment, the ratio has dropped from 59.6% in 2017-18 to 34.3% in 2023-24, suggesting an alarming trend of women in informal self-employment are increasingly becoming economically vulnerable. While salaried women are relatively better off, they still earn only 75% of what their male counterparts earn, which reflects structural wage gaps in the formal employment system. These trends have important implications for the adoption of AI and labor policies. The informal female workforce, especially self-employed, are more vulnerable to exclusion from the new technological paradigm due to their lower wages, limited access to finance, and lack of social security. Policies are needed to be designed to address these patterns of wage inequalities, in order to ensure better representation of women and fair labour market practices

4.3 Policy Evolution and Informal Worker Inclusion

Table 4: Policy Evolution and Informal Worker Inclusion (2018–2025)

Year / Document	Key Focus	Sectors Highlighted	Economic Vision	Treatment of the Informal Economy
2018 – AI for All (NITI Aayog Draft)	Inclusiveness, "AI for social good"	Agriculture, healthcare, education, smart mobility, and smart cities	AI as a tool for inclusive growth	**No explicit mention** of informal workers; focus on formalized sectors
2023 – National Strategy for AI (Updated)	Refinement, AI Garage model, capacity building, ethical AI	Agriculture, healthcare, education, R&D, skilling, governance, ethics	Position India as a global AI hub/testbed	**Formal sector centric**; mentions gig workers but limited skilling/social security focus
2025 – AI for Viksit Bharat (Latest)	Growth-oriented, generative AI, R&D transformation, workforce skilling, inclusive access for MSMEs	Banking, manufacturing, pharmaceuticals, automotive; potential in construction, retail, professional services	AI adoption to add **$500–600 billion** to GDP by 2035, supporting 8% annual growth to reach $8.3T total GDP	Recognizes gig/platform workers with social security and skilling; **limited broader informal sector integration** (e.g., no deep focus on informal workforce like street vendors)

Source: Compiled from NITI Aayog (2018, 2023) National Strategy for Artificial Intelligence and NITI Aayog (2025) AI for Viksit Bharat, Government of India.

Table 4 highlights the evolution of India's artificial intelligence (AI) policies from 2018 to 2025, revealing a gradual shift toward inclusivity but also exposing the shortcomings in addressing the informal workforce. Focusing on sectors such as agriculture, healthcare, and education, the 2018 "AI for All" strategy had inclusive growth as its focus but did not consider informal employment in preference for organized sectors and hoped for indirect economic benefits to be enough (NITI Aayog, 2018). In 2023, the National Strategy for AI had moved on to place at the top of its agenda ethical AI, capacity building, and use in research, development, and governance. But it remained skewed towards the formal sectors and merely made a passing reference to gig workers without social security or extensive skilling (NITI Aayog, 2023).

The agenda of "AI for Viksit Bharat" 2025, which hopes to increase India's GDP by $500-600 billion by 2035, using AI in the areas of banking, manufacturing, elite and retail, also fails to completely address the larger informal economy and its

entities including informal street vendors and informal casual laborers; however, its creation provisions for social protection and skill-building for gig and platform workers is a positive indicator (Government of India 2025). This pattern of policy formation highlights a systemic issue, on one hand, the continuous recognition of the augmenting potential of AI (Acemoglu & Restrepo, 2021), while on the other hand, informal workers remain trapped with structural constraints, including insufficient access to credit and inadequate computer literacy, internet access and required infrastructure for skill enhancement (Ahangarian, 2023).

So far, it is observed the AI strategies of India for informal sector empowerment has only been able to scratch the tip of the iceberg, while it's a start yet at this pace India might be too late in actually taking the advantage of automation and digitalization, there is a risk of the displacement effect dominating the augmentation effect of automation in the labor market. To mitigate such inequalities, ensure economic transformation, and counter the potential of employment polarization, future policies regarding artificial intelligence must include interventions for the unorganized sector and infrastructure (ILO, 2023; OECD, 2023). Otherwise, the implementation of artificial intelligence could potentially worsen the inequality in the unorganized sector of India.

4.4 Discussions

Indias labour market, despite of having a rapid economic growth and technological transformation has a continuous informal dominance which is highlighted in the study. Over the period of 2017-24, the informal sector consisted of about four-fifths of the workforce. Rural informality was strikingly high at about 87-88%, and urban informality hovered around 51-53%. This constancy of informal dominance over the period despite the rapid efforts supports the theory of persistence of the dual labour market in the economies. It is evidence of the framework that informality is a structural rather than a transitory feature of the developing countries (World Bank, 2021; Ahangarian, 2023).

This imbalanced structure is further exacerbated by wage gaps. With few exceptions, formal sector workers received almost twice the wages of their informal counterparts, with wage gaps varying from 1.77 to 2.11. While government recovery initiatives introduced during the COVID-19 era partly offset this difference, the gap widened once again in the next period (2023-2024), indicating a systemic reliance on a dual labor market. The most extreme expression of this is in terms of gender gaps: the female-to-male wage ratio for self-employed individuals dropped from over 60% in 2017-18 to 34% in 2023-24, reflecting a growing feminization of economic risk. This is consistent with international evidence that women in informal sectors, having limited skills are among the least likely to derive benefits from new technological advancements (ILO, 2023).

These trends and patterns shed light on the divergent course of the policy vision for artificial intelligence in India. The AI for All policy did not have provisions for the facilitation of skill development in the case of informal workers. The National Strategy for AI in 2023 emphasized capacity building and ethical governance, but again focused on the formal economy, with mentions of gig workers only in a marginal manner, despite the informal sector's persistent dominance in the economy. With the overarching goal of $500-600 billions of additional GDP by 2035, the AI for Viksit Bharat in 2025 again focuses on high-value sectors like manufacturing and banking. While there has been some advancement in formulating guidelines for platform and gig workers, the policy does not have provisions for the larger informal sector, including street vendors, casual workers, and rural self-employed.

This gap between policy goals and labor market realities suggests a structural blind spot. The role of AI is contingent on whether it is a substitute or a complement to human labor, as argued by Acemoglu and Restrepo (2021). Since the Indian informal sector lacks the skills, infrastructure, and capital to adopt AI, AI can potentially be a displacement driver rather than a productivity enhancer. Policy actions must move beyond the formal economy. Three key priorities can be identified. First, strategic skilling can be done to help reduce adaptation costs through women and rural worker skilling programs, community digital literacy initiatives, and vocational training modules designed for the informal sector.

Second, resilience can be increased through digital and financial inclusion initiatives such as microcredit, internet access, and micro-informal enterprise development.

Third, displacement risk can be reduced by bringing social protection into AI policy through providing income support, health insurance, and security portability.

Taken together, these policies demand a paradigm shift: informality must be treated as a structural issue, not a residual one. AI policies will fail to promote inclusive growth unless they address these issues.

5. Conclusion

This research proves that the Indian workforce is still largely informal and that it has been suffering from wage and gender gaps despite the rapid development of technology. While the country's AI plans expect significant economic benefits, the informal workforce situation has, been overlooked, to a great extent. Technology development can, in fact, widen inequality rather than diminishing it, if AI policies are not set to achieve specific goals in this regard. Therefore, it is important to bring the informal workforce into India's AI agenda to ensure that development, along with economic growth, is achieved and that the overall goal of Viksit Bharat 2047 is fulfilled.

References

[1]. Acemoglu, D., & Restrepo, P. (2021). Automation and new tasks: How technology displaces and reinstates labor. Journal of Economic Perspectives, 33(2), 3–30. https://doi.org/10.1257/jep.33.2.3

[2]. Ahangarian, M. (2023). Informal economy and labour market in developing countries. Journal of Organizational Behavior Research, 8(S), 1–12.

[3]. Chen, M, M. A. (2012). The informal economy: Definitions, theories and policies (WIEGO Working Paper No. 1). Women in Informal Employment: Globalizing and Organizing (WIEGO). https://www.wiego.org/publications/informal-economy-definitions-theories-and-policies

[4]. Economic Times CIO. (2025). Revolutionizing informal employment in India: The impact of AI. https://cio.economictimes.indiatimes.com/news/artificial-intelligence/revolutionizing-informal-employment-in-india-the-impact-of-ai/122158912

[5]. Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerization? Technological Forecasting and Social Change, 114, 254–280. https://doi.org/10.1016/j.techfore.2016.08.019

[6]. Government of India. (2025). AI for Viksit Bharat: The opportunity for accelerated economic growth. NITI Aayog. https://niti.gov.in/sites/default/files/2025-09/AI-for-Viksit-Bharat-the-opportunity-for-accelerated-economic-growth.pdf

[7]. India Informal Economy Report. (2024). State of India's informal sector: A deep dive into enterprises, statistics, and segments. MicroSave Consulting. https://www.microsave.net/wp-content/uploads/2024/12/State-of-Indias-Informal-Sector_A-Deep-Dive-into-Enterprises-Statistics-and-Segments.pdf

[8]. International Labour Organization. (2023). World employment and social outlook: Trends 2023.**https://www.ilo.org/publications/flagship-reports/world-employment-and-social-outlook-trends-2023**

[9]. National Statistical Office. Periodic Labour Force Survey (PLFS) data. Ministry of Statistics and Programme Implementation, Government of India. https://mospi.gov.in/plfs

[10]. NITI Aayog. (2018). *National strategy for artificial intelligence #AIforAll* (Discussion paper). Government of India. https://niti.gov.in/sites/default/files/2019-01/NationalStrategy-for-AI-Discussion-Paper.pdf

[11]. NITI Aayog. (2023). *National strategy for artificial intelligence*. Government of India. https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf

[12]. Pisu, M. et al. (2021), "Spurring growth and closing gaps through digitalization in a post-COVID world: Policies to LIFT all boats", *OECD Economic Policy Papers*, No. 30, OECD Publishing, Paris, https://doi.org/10.1787/b9622a7a-en.

[13]. OECD (2023), *OECD Employment Outlook 2023: Artificial Intelligence and the Labour Market*, OECD Publishing, Paris, https://doi.org/10.1787/08785bba-en.

[14]. Rakshita, S. (2022). Skill development in the informal sector in India: Challenges and opportunities. SDMIMD Journal of Management, 13(2), 1–10. https://www.sdmimd.ac.in/iec2022/papers/236.pdf

[15]. Sanghi, S., & Sensarma, K. (2014, March). Skill challenges of informal sector in India. Economy Matters, 33–34. https://www.ies.gov.in/pdfs/publications-sunita-sanghi-kuntal-sensarma.pdf

[16]. Devey, R., Skinner, C., & Valodia, I. (2003). Informal economy employment data in South Africa: A critical analysis. Retrieved from https://www.researchgate.net/publication/228815735_Informal_Economy_Employment_Data_In_South_Africa_A_Critical_Analysis1

[17]. Webb, M. (2020). The impact of artificial intelligence on the labor market (Working Paper). Stanford University. https://www.michaelwebb.co/webb_ai.pdf

[18]. World Bank. (2021). Synthesis of the impacts of COVID-19 on India's labor market. https://openknowledge.worldbank.org/bitstreams/ae436725-6945-4dd7-9b5b-3795d84348fd/download

[19]. World Bank. (2021). The long shadow of informality: Challenges and policies https://www.worldbank.org/en/research/publication/informal-economy

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