ISSN: 2278-4632
Vol-15, Issue-03, No.06, March: 2025

AUTOMATION VS. EMPLOYMENT: THE NEED FOR LEGAL PROTECTIONS AGAINST JOB DISPLACEMENT IN INDIA

Dr Pamarthi Satyanarayana, Assistant Professor, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, School of Law, Chennai, Tamil Nadu.
Email:satishgoudpamarthi@gmail.com, https://orcid.org/0009-0008-4041-3674.
J Krishna Charan, Research Scholar, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, School of Law, Chennai, Tamil Nadu. Email: krishnacharan478@gmail.com, https://orcid.org/0000-0002-6788-2322

ABSTRACT:
Automation and artificial intelligence (AI) have advanced at a rapid pace in India, raising concerns over jobs getting destroyed and the Indian workforce being vulnerable. Technological innovation, on one hand, improves productivity and increases the overall size of the economy, but on the other hand, it disrupts previous systems of employment in manufacturing, service and white-collar jobs. The article looks at the consequences of automation on employment and whether the labour laws in India are capable to deal with the consequences of the automation. While there are labour laws, India does not have the needed legal framework to protect workers from mass layoffs caused by automation. Legislation needs to also address the inadequacy of reskilling initiatives, lack of social security for displaced workers, and lax implementation of policies. Based on global best practices, this paper calls for a set of policy interventions including mandatory reskilling, labour protections geared towards the AI sector, and a universal social security guarantee. A preliminary analysis of the most important labour legislation, judicial pronouncements and industrial policy reveals the imperative of evolving legal protections for employment stability in the digital age. If we do not take action in terms of law lighting, a situation of high unemployment, growing socio-economic disparity and labour unrest is round the corner. Based also on the comparison to the experiences and risks of workers with AI in the Global North, the article ends with a recommendation to balance regulation to ensure technological innovation while respecting rights of workers in India.
Keywords: Automation**,** Artificial Intelligence, Labour Laws**,** Job Displacement**,** Workforce Protection.

INTRODUCTION:

Automation and Artificial Intelligence (AI) have heavily transformed the employment ecosystem around the world, India included. Industries are adopting the approach of digital transformation, creating a shift in the way things are done, subsequently promoting efficiency, lowering costs, and increasing productivity. Nevertheless, this fast pace of technological progress makes one by one more jobs obsolete. We talk about automation rise, robotics, AI driven systems, and eventually, all those traditional human labour across multiple sectors, especially, the manufacturing, IT services, customer support, logistics, and even legal and healthcare sectors are being taken over by a machine. Automation brings many advantages, including some operational streamlining and improved accuracy, but it also raises the question of job security, income inequality and the future of labour rights.

In a country like India with a large part of our work force squarely invested in Low-Skilled and Semi-Skilled Jobs AI-Driven Automation is looked upon as a Double-edge sword. Even though it increases productivity and demands for industries, it makes some workers lose their job, especially those workers doing manual and repetitive, routine tasks. This problem is compounded by the lack of a strong legislative framework to address job displacement caused by automation. India's labour laws were made when the job community was based on manual works and it does not meet the interests of the future economic

ISSN: 2278-4632
Vol-15, Issue-03, No.06, March: 2025

market if AI would ever dominate one day. Consequently, workers that may be displaced by automation have little recourse with respect to better legal protections, retraining paths, or compensation mechanisms. The question of automation and jobs in India is not only an issue of economics and technology but also a question of law and society. Ignoring automation-induced job displacement could exacerbate socio-economic inequalities and trigger mass unemployment and unrest. Other experts argue that it's impossible for job losses to outpace new job creation, which is always coming along with technological progress, but the speed of automation indicates that the transition may in fact be far from smooth. This study the effects automation has had on the Indian workforce, limitations of Indian Labour laws and finally, suggest policy reforms to ensure that the negatives of job displacement are reduced. The discussion seeks to draw on global best practices to generate a clear legal framework to make sure that automation creates economic development, but does so without negatively impacting the wages and livelihoods of workers.

EMPLOYMENT EFFECTS OF AUTOMATION IN INDIA:

Automation and Artificial Intelligence (AI) is fundamentally changing the labour market in India, causing job disruptions in different sectors. The workplace has seen many advancements in recent times, as businesses attempt to integrate robotics, decision making with the aid of AI, and machine learning techniques to perform tasks that were once exclusively performed by human beings. This has its growing advantages of efficiency, savings, and accuracy; however, it also comes with its grave threat of employment, especially in a developing economy like India which has a mammoth number of low-skilled or semi-skilled workers.

Manufacturing is one sector which has been strongly impacted whereby automation has led to the elimination of human intervention. Robotic arms, AI-based quality control and automated supply chain management are prevalent in industries like automobile assembly, textile production, and electronics manufacturing, reducing the need for manual labour. In the same way, the IT and services sector, which was a big employer is also facing impact of AI influenced automation. Tech tools such as automated customer service chatbots, AI-driven data analytics, and robotic process automation (RPA) have led to attrition for many mundane recurring administrative and technical support jobs, shrinking scope for employment in call centers and back-office functions.

Automation is evident in banking and financial sector of India. However, algorithms driven by AI are increasingly able to do complicated financial analyses, fraud detection, and automated trading with fewer human analysts and clerks required. In a similar vein, there are a few sectors — logistics, retail, and healthcare to name a few, that are making this shift, with tools like AI-driven stock tracking, automated cashier systems, and surgery conducted with robotic assistance gaining popularity. These technological advancements may enhance the quality and efficiency of services, but they increase the redundancy of labour, especially those in routine-led activities.

While the fear of job losses is rampant, automation is not the end of employment options. Instead, it transforms the labour market through the demand for new skills. The experts who handle AI management, machine learning, software development, and cyber security are now in increasing demand. But the real difficulty will be closing the skills divide between the current workforce and new technology-driven jobs. Compounding this issue is the scarcity of accessible and affordable programs for upskilling which can leave many displaced workers finding it difficult to pivot into new roles.

Second, the socio-economic effect of job displacement in India due to automation cannot be ignored. Higher unemployment rates driven by automation may cause greater income inequality, social unrest, and subpar purchasing power of the working class. For many such workers, job losses are terrible news because there are no comprehensive unemployment benefits in India, unlike in richer countries where

ISSN: 2278-4632
Vol-15, Issue-03, No.06, March: 2025

social security is much stronger. Many labourers in India work in the informal sector, where there is little legal protection or financial support available if workers lose their jobs because of technology.

As automation continues to radically shift our workforce, we need to do more to prepare for these negative impacts. To counter such challenges, the Indian government and policymakers would have to bearing in mind the need to push labour law reforms, skills development programmes, collaborative policies based on human-AI partnership instead of human-AI replacements. Achieving a right balance between technological development and job security is crucial in the economic upliftment of the area, without jeopardizing the rights of Indian workers.

EXISTING LABOUR LAWS AND LIMITATIONS:

Labour laws in India were instituted during the time of old-fashioned employment with a shore of emphasis on work protection within the manual and commercial sectors. But with the rise of automation and AI-driven work models, these inadequacies have laid bare the faults in the legal structure of the country. ***The Industrial Disputes Act, 1947, the Factories Act, 1948, the Contract Labour (Regulation and Abolition) Act, 1970*** and other existing labour laws, fundamentally focus on the rights of workers employed in industries that are primarily dependent on human labour. While these laws serve a vital role in protecting workers against unfair termination and various grounds for workplace exploitation, they fail to meet the growing pressing threats related to job loss through automation and AI. This is why one of the shortcomings of India's labour laws is their lack of particular protections for workers displaced by automation. For example, Industrial Disputes Act provides for compensation for retrenchment on job loss, but does not provide for redundancy for technology. Increasing restructuring due to automation-driven efficiencies are bypassing these legal safeguards as so-called business restructuring (in lieu of retrenchment) for employers allows avoidance of statutory compensation.

Another big gap is in the legal space when it comes to reskilling and adapting the workforce. While nations like Germany and Sweden have had their governments erect strong redistributions for workers made obsolete by automation, there is no comprehensive legal framework set in India yet on skill enhancement and re-employment opportunities. Though initiatives like Skill India and PMKVY concerns a lot to bridge the gap, still these are very low in outreach and not very effective, especially to workers in rural and semi-urban areas.

Moreover, the emergence of the gig economy and contract-based employment add USPs to the complexities of labour law enforcement in the age of automation. As organisations move away from full-time employment into freelancing and its equivalents, and a massive part of the workforce is out of the reach of existing labour protections. An attempt has been made to incorporate some of these issues in the ***Code on Social Security, 2020*** whereby benefits will also be extended to gig and platform workers. Yet, the implementation has remained weak and coverage does not extend adequately to workers displaced by automation through AI. Arguably the most important one is absence of social security for workers who will lose their jobs because of automation. While developed countries provide unemployment insurance and social transition, India's social security network is weak and does not provide this kind of coverage. Financial security through facilities like ***Employees' State Insurance (ESI) scheme and the Employees' Provident Fund (EPF)*** does exist but they are not specifically designed for job loss due to technological disruption.

In light of these limitations, however, there is a need to re-align Indian labour laws with the reality of an AI-enriched job market. However, bridging the gap between technological progress and the rights of workers requires the kind of action that, instead of letting workers fend for themselves to have AI earn them a living, introduces policies that must be implemented by employers to provide retraining, secure

ISSN: 2278-4632
Vol-15, Issue-03, No.06, March: 2025

social security that protects workers from displacement, and legislation that provides legal recourse whenever AI layoffs occur.

THE NEED FOR LEGAL PROTECTION & POLICY REFORMS:

The high potential of automation and Artificial Intelligence (AI) to disrupt employment opportunities in India is hampered, with a stark absence of effective legal protections and comprehensive policy structures to avert job loss. While technology boosts economic growth, productivity and efficiency, it also represents a significant threat to job stability and security – especially for low-skilled and semi-skilled workers. India needs immediate legal and policy action to protect its workforce and economy by either revamping or replacing existing laws to address these complexities as AI redundancies in the digital economy strike at the heart of our existing labour laws. And job displacement due to automation per se is not explicitly covered under Indian labour laws making it one of the principal legal challenges. While any retrenchment must be based on one of the grounds given in the ***Industrial Disputes Act, 1947***, the Act does not make provision for loss of job due to loss of employment. As such, a lot of firms get away with violating labour laws in name of business necessity by calling it restructuring or upscaling technology, and avoid providing statutory compensation. The bespoke legal infrastructure of the digital economy has to account for job losses stemming from automation and devise safeguards including severance, a retraining agenda and an employer requirement to create further work for affected workers to find.

Another major area in need of legal regulation is the policies for widespread upskilling and workforce adaptation. The workers displaced by automation often do not possess the skills necessary to move into alternative occupations, resulting in years of unemployment, economic uncertainty. Even with schemes like the ***Pradhan Mantri Kaushal Vikas Yojana (PMKVY)*** and Skill India aimed to fill the skill gap, the impact is marginal since their outreach is often limited, the curriculum is outdated, and there is regular mismatch between skill training and industry needs. In India, retraining programs funded by employers for upskilling and reskilling the workforce should be a part of the overall labour policy and be implemented in cooperation with several industries at a local level, and in cooperation with academia to promote programs in AI, data science and digital literacy.

The other thing that needs to be urgently scaled-up is the need for social security that facilitates workers that get displaced due to AI and automation. Developed economies are built on the cushion of a strong unemployment insurance but India has no safety net for those who would lose jobs with technological disruption. Gig and platform workers have been promised something for some time, the ***Code on Social Security, 2020*** is a small step, but the ground reality is still lacking. Lawmakers need to consider providing an unemployment insurance system for those types of workers affected by automation to help bridge some of the gaps during times of transition. Employers reaping the rewards of increased automation should be required to pay social security contributions to help displaced workers.

BEST PRACTICES AROUND THE WORLD REGARDING JOB DISPLACEMENTS :

While automation and AI-based technologies are impacting traditional employment pathways globally, several countries have augmented their national legal and policy frameworks to address job losses and prepare their workforce for transition. Such global best practices provide a meaningful lens through which India may be able to create its own legal regime to marry technology and people security. Drawing lessons from developed economies including Germany, Sweden, the United States, and Singapore, India can craft its own policies to stimulate reskilling, establish social security systems, and encourage responsible business practices to minimize disruptions caused by automation.

There are also well-known examples of effective labour-market politics to prevent job losses from automation, such as Germany. Germany's system of dual vocational training brings together classroom

ISSN: 2278-4632
Vol-15, Issue-03, No.06, March: 2025

study with on-the-job training in a way that helps ensure workers learn only the skills employers currently want. Germany has a similar scheme called ***Kurzarbeit*** (short-time work) which enables businesses to drop hours for workers rather than losing their jobs, with the government covering some of the lost wages. The policy has been crucial in curbing mass unemployment during economic recessions and technological shifts. A comparable mechanism might also serve India well, requiring employers to contribute to a workforce retraining pool, and providing wage subsidies to businesses that keep workers even as they automate.

Another excellent model is Sweden, which focuses on the ***Active Labor Market Policies*** (ALMPs) around lifelong learning, retraining, and government-enforced transition programs. Together with private industries, the Swedish Employment Service identifies gaps between demand and supply of skills in specific industries so that every targeted reskilling programme is tailored for a specific industry set-up. Sweden's flexicurity model, which mixes flexible employment contracts with strong social security benefits, also prevents workers from suffering from sudden job losses. With a huge labor force base, India can introduce a country-wide skilling program that simultaneously channels displaced workers into new jobs, ensuring strong unemployment benefits at the same time.

Likewise, the United States too has undertaken substantial policy initiatives to relate to job displacement caused by automation. For example, the ***Trade Adjustment Assistance*** (TAA) Program offers retraining, wage subsidies, and financial assistance to workers impacted by automation and globalization. Furthermore, several U.S. states have ***implemented Technology Impact Assessments*** (TIAs), to assess the impact of AI deployment on employment ahead of the approval of projects for large-scale automation. A similar regulatory regime can be introduced in India, which mandates businesses to conduct impact assessments and create transition plans prior to automating people-intensive functions.

Singapore, as a global hot-spot for digital transformation, is also investing heavily in plans to ensure its workforce can adapt to rapid change such as its Skills Future Program for offering government subsidized lifelong learning opportunities to workers throughout the economy. Moreover, the labour policies in Singapore also focus more on human-AI collaboration instead of complete automation, hence, companies should be adopting AI systems that complement human workers rather than replace them entirely in the workplace. India can learn from this model by incentivizing enterprises which resort to human-centric AI solutions and by promoting a learning organization intent in developing human capabilities across its workforce.

India needs to prepare a holistic plan to deal with job losses due to automation if it has to thrive in the face of rapidly changing technologies and it can learn best practices in this regard from around the world. Policymakers across the world, including in India need to adopt measures such as employer-funded reskilling programs, unemployment benefits, short-time work schemes, and AI impact assessments to steer their economies through the difficult transition of an increasingly automated economy, ensuring a sustainable employment frontier and worker protection.

CONCLUSION:

Automation and AI-driven technologies only imply potential opportunities and threats with respect to the skills of the Indian workforces. On one hand, automation is also a driver of productivity and economic realistic plan, but it challenges the traditional structures of employment as well, resulting to job losses, income insecurity, and logistically unrealistic skill mismatches. With a significant proportion of Indians employed in sectors predominantly characterised by labour-intensive activities, the need for policymakers to engage in economic theory and become proactive in anticipating and cushioning the impact of automation while extracting its advantages for sustainable growth has never been greater. In comparison to the challenges posed by job displacement driven by AI, India's existing labour laws predominantly

ISSN: 2278-4632
Vol-15, Issue-03, No.06, March: 2025

made for an industrial-era economy are more than ill-equipped. Thousands of workers could end up losing their jobs but with little if any legal protections, no access to retraining, or available support. The Government needs to amend labour laws to specifically punish losses from automation, to require companies to pay for upskilling, and to expand social security for displaced workers. Regulatory frameworks need to facilitate responsible AI deployment as well, so businesses are required to make use of employment impact assessments before deploying automation technology.

By taking lessons from global best practices, India could adapt models like dual vocational training from Germany, flexicurity policies from Sweden and Skills Future initiative from Singapore to build a future-ready workforce. To balance economic advancement with protection of the workforce, we should also be using a mix of reskilling carrots, jobless benefits for those who lose their jobs through no fault of their own, and making human-AI collaboration common with complementary employment policies. The future of work in India will take time but needs a balance where new technological innovations will be welcome so that no worker is left behind. India by adopting progressive labour policies, amplifying skill development initiatives and incorporating AI ethics into employment regulations could respond to these challenges without compromising the rights and livelihoods of its people.

REFERENCES:

1. Dougherty, S., Frisancho Robles, V. C., & Krishna, K. (2011). Employment Protection Legislation and Plant-Level Productivity in India. *National Bureau of Economic Research*. https://ideas.repec.org/p/nbr/nberwo/17693.html
2. Sofi, I. A., Mehrotra, S., & Reshi, A. H. (2022). Employment Protection Legislation and Labour Market Outcomes: A Unit Level Analysis of the Indian Manufacturing Sector. *Asian Journal of Law and Economics*, *13*(1), 101–122. https://doi.org/10.1515/ajle-2021-0063
3. Ramarajan, M., Dinesh, A., Muthuraman, C., Rajini, J., Anand, T., & Segar, B. (2024). *AI-Driven Job Displacement and Economic Impacts* (pp. 216–238). IGI Global. https://doi.org/10.4018/979-8-3693-2643-5.ch013
4. Legal Protection Principle for Workers Terminated Due to Industrial Digitalization. (2022). *Journal of Law, Policy and Globalization*. https://doi.org/10.7176/jlpg/117-02
5. Danielsson, A., & Abdel-Haq, M. (2024). The Right to Work in Light of Encroaching Automation. *Advances in Human and Social Aspects of Technology Book Series*, 343–374. https://doi.org/10.4018/979-8-3693-1127-1.ch018
6. Kim, P. T. (2024). *Artificial Intelligence, Big Data, Algorithmic Management, and Labour Law*. 819–834. https://doi.org/10.1093/oxfordhb/9780192870360.013.63
7. Islam, I. (2018). *Automation and the Future of Employment: Implications for India*. *5*(2), 234–243. https://doi.org/10.1177/2322093718802972
8. Estlund, C. L. (2017). What Should We Do After Work? Automation and Employment Law. *Social Science Research Network*. https://doi.org/10.2139/SSRN.3007972
9. De Stefano, V. (2018). Negotiating the algorithm automation, artificial intelligence and labour protection. *Research Papers in Economics*. https://ideas.repec.org/p/ilo/ilowps/994998792302676.html
10. Babu, B. R., & Lakshmi, P. D. V. V. (2024). *Protection Against Unemployment - A Fundamental Right? A Study In The Context Of Indian Constitution, Indian Judiciary & International Perspectives*. https://doi.org/10.53555/kuey.v30i6.5169
11. Vermeulen, B., Kesselhut, J., Pyka, A., & Saviotti, P. P. (2018). The impact of automation on employment: just the usual structural change? *Sustainability*, *10*(5), 1661–1688. https://doi.org/10.3390/SU10051661

ISSN: 2278-4632
Vol-15, Issue-03, No.06, March: 2025

12. De Stefano, V. (2018). 'Negotiating the Algorithm': Automation, Artificial Intelligence and Labour Protection. *Social Science Research Network*. https://doi.org/10.2139/SSRN.3178233
13. Cuccu, L., & Royuela, V. (2024). Just reallocated? Robots displacement, and job quality. *British Journal of Industrial Relations*. https://doi.org/10.1111/bjir.12805
14. Hammer, A., & Karmakar, S. (2021). *Automation, AI and the Future of Work in India*. *43*(6), 1327–1341. https://doi.org/10.1108/ER-12-2019-0452
15. Rabarijaona, H., & Arifani, D. (2020). *Legal protection of employees / workers who experienced employment relationship impact digitalization*. *7*(3), 211–221. https://doi.org/10.26532/JPH.V7I3.13339
16. B, K. A. (2024). Risks of Unemployment in the Future for Workers as India's Labour Sectors Embrace Automation, Robots, and Artificial Intelligence. *International Journal For Multidisciplinary Research*. https://doi.org/10.36948/ijfmr.2024.v06i02.17831
17. Calvão, F., & Thara, K. (2019). Working Futures: The ILO, Automation and Digital Work in India. *Revue Internationale de Politique de Développement*, *11*, 223–246. https://doi.org/10.4000/POLDEV.3097