

Disabled in a Dynamic Labour Market: A Theoretical and Empirical Exploration on Employment Outcomes in India and Kerala

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ABSTRACT

This study examines the employment situation of persons with disabilities in India in a changing labour market. Using human capital and labour market segmentation theories, it analyses how education, type of disability, gender, region, and occupation influence their employment outcomes. Based on Census data from 2001 and 2011, the study finds that persons with disabilities continue to face low educational attainment, strong gender disparities, and concentration in informal and low-paying jobs, despite some improvement in literacy levels. Many are excluded from skilled occupations and secure employment. A comparison with Kerala shows better disability recognition due to stronger institutions, but inclusive employment remains limited. The study concludes that employment exclusion of persons with disabilities is structurally rooted and calls for targeted education-focused and coordinated policy measures to achieve inclusive growth.

Keywords: Disability and Employment; Labour Market Segmentation; Human Capital, Gender Disparities; Informal Employment; Occupational Structure; Regional Inequality; Inclusive Growth.

INTRODUCTION

The labour market has evolved from a rigid and locally bounded system to a flexible, globalised, and skill-intensive structure shaped by technological advancement and the expansion of the knowledge economy. In this dynamic environment, mobility, adaptability, and continuous skill upgrading are central to labour market participation. However, persons with disabilities (PWDs) remain structurally disadvantaged despite these transformations. While contemporary labour markets increasingly reward education, productivity, and specialised skills, disabled individuals continue to encounter persistent social, institutional, and economic barriers that restrict their access to mainstream and secure employment opportunities. Empirical evidence reflects the magnitude of this exclusion. Census 2011 reports that approximately 2.1 per cent of India's population (about 26.8 million persons) live with disabilities, while in Kerala the proportion is about 2.3 per cent (around 7.9 lakh persons).

Despite progressive legislative measures such as the Rights of Persons with Disabilities Act, 2016, employment outcomes remain uneven. Labour force participation among PWDs is significantly lower than that of non-disabled persons and a substantial proportion over 90 per cent; are engaged in informal, low-security employment. A large segment of the disabled workforce is concentrated in the secondary labour market, characterised by low wages, precarious work conditions, limited union protection, and restricted occupational mobility. In contrast, the primary labour market where wages are more closely aligned with skills and productivity remains relatively inaccessible. Labour market segmentation thus operates along lines of physical and mental capacity, reinforcing wage discrimination, limited career progression, and inter-sectoral immobility. Existing literature further indicates that employment disadvantages vary by disability type, gender, literacy level, and region, while institutional responses remain insufficient to dismantle structural barriers.

Against this background, the present study examines the position of persons with disabilities within a transforming labour market, with specific focus on labour market segmentation, wage inequality, and occupational mobility. The research adopts a theoretical and descriptive design based on secondary data from Census reports, National Statistical Office (NSO) surveys, government publications, and relevant academic literature. The analytical framework is grounded in labour market segmentation theory and human capital theory. By situating disability within the broader context of economic restructuring,

the study argues that the marginalisation of persons with disabilities is not merely a social issue but a structural economic problem that must be addressed to achieve inclusive and sustainable development.

Classical and Keynesian Views of Employment

Until the Great Depression, the theoretical background on unemployment was dominated by Classical view, holding that excessively high wages depress labour demand. And the only solution to attain full employment is wage cut. The classicist assumed that economy is always at full employment. The policy implication is that institutions maintaining high wage levels, such as unions or minimum wage laws, harm employment in the aggregate. Economists dismissed the possibility that aggregate demand might not be sufficient to absorb aggregate supply, citing Say's Law that "supply creates its own demand". The Great Depression that gripped the industrialized world during the 1930s, and John Maynard Keynes's General Theory of Employment, Interest and Money (1936), challenged this traditional consensus. Keynes argued that pessimistic expectations by capitalists, translated into anemic investment in the plant and equipment, can become self fulfilling, trapping an economy in a down turn. Later, the "New Classical" economists revived the classical analysis of unemployment and they continued to dominate till the occurrence of the Global Financial Crisis (GFC). The result of the GFC is a radical shift in the macroeconomic policies towards Keynesianism.

A Theoretical Exploration on Wage Differences and Disabled Labour Force

The Neoclassical theories especially the 'Theory of Equalizing Differences' and the 'Efficiency Wage Theory', have only a minor role in explaining the wage differences among the disabled persons. The human capital theory can be applied to disabled labour force, who earns fewer wages than non-disabled workers. According to the human capital theory, the wage rate is determined by the productivity of the workers, i.e. marginal productivity, which in turn depends upon the human capital formation. Generally among the disabled labour force the human capital formation is lower, which will ultimately lead to lower productivity and less return for the work done. Jacob Mincer (1974) in his study found that it is not merely human capital alone which is the determinant of earning. Thus the earning of an individual depends not only on the stock of human capital and its rate of return, but also on the severity of disability or ill health. So the disability can limit the amount of human capital which can be employed in earning function at any point of time.

Structural Parameters of Labour Market

Structural parameters of labour market can be made in different dimensions. Work participation, working hours, working condition, job security, regulation on different aspect of employment etc. Work is fundamental to human well-being, contributing not only to income generation but also to social inclusion and economic development. In labour market analysis, the Work Participation Rate (WPR) the ratio of the labour force to the working-age population serves as an important indicator of how effectively an economy utilises its human resources. Work participation is shaped by economic, demographic, and social factors, and is generally lower among marginalised groups, particularly women and persons with disabilities, increasing their vulnerability to poverty and exclusion. Labour market outcomes are further influenced by working hours, the trade-off between work and leisure, working conditions, and job security, all of which affect productivity, income stability, and the overall quality of employment. Together, these factors determine both the extent and the nature of labour market engagement.

Disabled in a Dynamic Labour Market: An Empirical Enquiry

To get an employment is always a challenge for physically and mentally challenged persons. On employment front, PWD have more chances of being excluded and even after getting the employment they have more chances for being displaced from the work. In India using the NSSO (2002) data, Mitra and Sambamoorthi note that "among all working age PWD, we found that 37.6 per cent were employed" (Mitra & Sambamoorthi, 2006). Only 4.8 per cent of all working age PWD were 'salaried-wage employees', and in general, the chances of a PWD being in employment of any kind were roughly 60 percent of those of the general population. In a multivariate analysis of the factors that increase or reduce employment prospects, for example, 'being married strongly increases a man's probability of being employed while it reduces that of a woman's' and that 'Surprisingly, education has a limited effect on the probability of being employed for PWD. Although vocational training was associated with a higher probability of employment, this finding is not consistent across samples'.

The situation of the disabled with respect to their working status is gloomy in India. The majority of the disabled are nonworking. This calls for effective rehabilitation measures which would facilitate employment (Mishra, A K and Ruchika Gupta, 2006). The World Bank study on People with Disabilities in India (2009) identified that PWD are substantially less likely to be working than other people. However, the extent of the differences varies sharply by disability type, with those with mental illness, mental retardation and visual impairments the most disadvantaged. The gap in employment between disabled and non-disabled people has increased over the 1990s, which is a cause of major concern. PWD appear to face different obstacles to employment according to their gender and to whether they live in rural or urban areas. This heterogeneity has important implications for policy and program design, as one size is unlikely to fit all. Again the study

found that for the most part, education has a limited effect on the probability of being employed for people with disabilities. It appears that observable characteristics of PWD do not explain most of their “employment deficit”, but rather than other factors including discrimination are driving their poor employment outcomes.

Table 1: Number of Disabled Population by Types of Disability in India

Distribution of Population	India	
	Population	Percentage (%)
Total Population	1,028,610,328	100.0
Total Disabled population	21,906,769	2.13
<i>Type of Disability</i>		
1) In Seeing	10, 634, 881	1.0
2) In Speech	1,640,868	0.2
3) In Hearing	1,261,722	0.1
4) In Movement	6,105,477	0.6
5) In Mental	2,263,821	0.2

Source: Census of India, 2001

Based on Census of India, 2001, persons with disabilities constituted 2.13 per cent (table 1) of India’s population (21.9 million out of 1,028.6 million). Though numerically small, this represents a sizeable group with significant implications for labour market outcomes and inclusive development. Visual impairment emerges as the dominant disability, accounting for nearly half of the disabled population, followed by mobility-related disabilities. These forms of disability directly affect human capital formation, employability and productivity, especially in labour-intensive and informal employment settings. Disabilities related to mental, speech and hearing impairments, while smaller in proportion, are associated with deeper social exclusion and employment disadvantages. From a theoretical perspective, the distribution underscores the heterogeneous nature of disability, implying that labour market exclusion operates through multiple channels such as physical accessibility, skill acquisition, discrimination and workplace adaptability. For India and Kerala, this calls for disability-specific policy interventions, with emphasis on accessible infrastructure, assistive technologies and inclusive labour market institutions rather than uniform approaches to disability inclusion.

Job Mobility

Job mobility is a significant determinant of an individual’s labour market status, as it influences wage growth, skill accumulation, and employment stability. Persons with disabilities (PWDs) often face additional barriers in job search processes due to communication and mobility limitations, reducing the likelihood of voluntary job changes (Elwan, 1999). At the same time, they are more susceptible to involuntary job changes, partly due to health-related uncertainties that may lead to job mismatches or performance challenges. Job displacement frequently results in wage losses, and concerns regarding wrongful termination remain pronounced among disabled workers, limiting their ability to benefit from human capital investment gained through mobility (Chun-Wei, 2000). Empirical evidence by Baldwin and Schumacher (1999) indicates that workers with disabilities are more likely than non-disabled workers to experience external and involuntary job changes. The authors attribute this pattern to a higher incidence of job mismatch and potential discrimination in termination practices. They further observe that factors such as health insurance coverage, pension benefits, and accumulated job experience reduce mobility for all workers, though these stabilising effects are stronger among non-disabled workers. Overall, job mobility patterns reveal structural disadvantages faced by persons with disabilities within the labour market.

Discrimination

Persons with disabilities (PWDs) are widely recognised as one of the most marginalised and socially excluded groups across societies. They experience discrimination in multiple spheres of life, including employment, education, marriage, participation in socio-religious activities, access to family property, adequate nutrition, and household decision-making, often compelling them to live as second-class citizens. The situation is particularly severe in rural areas, where structural barriers and limited institutional support further restrict opportunities (Mitra & Sambamoorthi, 2006b). Pandey and Singh (2004) argue that one of the most damaging consequences of disability is social exclusion, manifested through limited employment opportunities and restricted job prospects. Employment discrimination remains a persistent obstacle to labour market inclusion for PWDs (Metts & Metts, 1998). Empirical evidence suggests that a significant portion of employment and wage differentials between disabled and non-disabled workers can be attributed to employer discrimination (Baldwin & Johnson, 1995). Such discrimination not only limits job mobility but also increases vulnerability to layoffs, as disabled workers may be disproportionately affected during fluctuations in labour demand. In this context, analysing the Work

Participation Rate among the disabled population in India and Kerala becomes particularly relevant for understanding the extent of labour market exclusion and inequality.

Table 2: Distribution of Disabled Population By Literacy Rate And Educational Level Across Gender in India (In Percent)

Literacy status/Educational level	2001			2011		
	Persons	Males	Females	Persons	Males	Females
Percentage to disabled population						
Illiterate	50.7	41.9	62.7	45.5	37.6	55.4
Literate	49.3	58.1	37.3	54.5	62.4	44.6
Percentage to Total Literates						
Literate but below primary	26.5	25	29.9	19.4	18.3	21.5
Primary but below middle	26.4	25.6	28.1	24.3	23.5	25.8
Middle but below matric/secondary	16	16.6	14.8	16.7	17.3	15.8
Matric/Secondary but below graduate	20	21.5	16.9	23.6	24.9	21.2
Graduate and above	6	6.6	4.6	8.5	9	7.7

Source: Census of India, 2001

Table (2) on literacy and educational attainment of persons with disabilities in India (2001–2011) reveals persistent educational deprivation despite modest improvement over time, alongside pronounced gender disparities. Although the illiteracy rate among persons with disabilities declined from 50.7 per cent in 2001 to 45.5 per cent in 2011, disabled women continue to experience significantly higher levels of illiteracy compared to their male counterparts in both census years. Educational attainment among the literate disabled population remains concentrated at the primary and lower secondary levels, though a gradual shift towards secondary and higher education is observable, particularly among males. From a theoretical perspective, these trends are consistent with human capital theory, which posits that limited education reduces productivity and employability, and with segmented labour market theory, which explains how restricted access to education especially for disabled women confines them to low-paid, informal, and insecure employment. Overall, the evidence underscores that, despite incremental progress, structural barriers in education continue to reproduce labour market exclusion among persons with disabilities in India, a pattern equally relevant for analysing disability, gender, and employment outcomes in Kerala.

Table 3: Percent Distribution of Disabled Population by Literacy Status and Educational level in India

Literacy status and Educational Level among disabled population	2001			2011			Progress between 2001 & 2011		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Illiterate	50.7	41.9	62.7	46	37.6	55.4	-5.2	-4.3	-7.3
Literate	49.3	58.1	37.3	55	62.4	44.6	5.2	4.3	7.3
Percentage to Literates							0	0	0
Literate but below primary	26.5	25	29.9	19	18.5	21.5	-7.1	-6.5	-8.4
Primary but below middle	26.4	25.6	28.1	24	23.5	25.8	-2.1	-2.1	-2.3
Middle but below matric.secondary	16.4	16.6	14.8	17	17.3	15.8	0.3	0.7	1
Matric/Secondary but below graduate	20	21.5	16.9	24	24.9	21.2	3.6	3.4	4.3
Graduate and above	6	6.6	4.6	8.5	9	7.7	2.5	2.4	3.1

Source: Census of India, 2001

Table (3) indicates a slow and uneven educational transition among persons with disabilities between 2001 and 2011, characterized by declining illiteracy, modest upgrading of human capital and persistent gender disparities. Illiteracy fell from 50.7 per cent to 46.0 per cent, with relatively faster improvement among women, yet female illiteracy in 2011 remained far higher than that of men, reflecting entrenched structural disadvantages. Educational gains were concentrated mainly at the lower levels, as movement out of below-primary and primary schooling was not matched by strong expansion at middle and secondary stages. While secondary and higher education registered some improvement especially among women the overall scale remains limited. The pattern strongly supports human capital theory, where constrained educational attainment restricts productivity and employability, and segmented labour market theory, which explains the continued confinement of persons with disabilities, particularly women, to low-quality and insecure employment despite incremental educational progress.

Table 4: Population and Disability Profile in India, 2001–2011

Category	Area/Group	2001	2011	Absolute Change (2001–2011)
Total Population (Millions)	Total	1028	1210	+182
	Rural	743	833	+90
	Urban	286	377	+91
	Male	532	623	+91
	Female	496	586	+90
Disabled Population (Millions)	Total	26.81	21.90	-4.91
	Rural	18.63	16.38	-2.25
	Urban	8.17	5.51	-2.66
	Male	14.98	12.60	-2.38
	Female	11.82	9.30	-2.52
Disabled Population as percent of Total	Total	2.60	1.80	-0.80
	Rural	2.50	1.96	-0.54
	Urban	2.85	4.16	+1.31
	Male	2.81	1.99	-0.82
	Female	2.38	1.58	-0.80

Source: Author’s calculation from Census of India 2001 and 2011.

Table (4) reveals contrasting demographic and disability trends between 2001 and 2011. While India’s total population increased substantially across rural, urban, and gender categories, the absolute number and overall percentage of persons with disabilities declined at the national level. Rural disability prevalence decreased both in absolute and percentage terms; whereas urban areas recorded a notable increase in the proportion of disabled persons despite a decline in absolute numbers, possibly reflecting improved identification, migration patterns, or classification changes. Gender-wise, both disabled males and females experienced reductions in absolute and proportional terms, though males continued to report a higher prevalence rate than females. Overall, the data suggest demographic expansion alongside shifting patterns in disability reporting and spatial concentration, particularly toward urban areas.

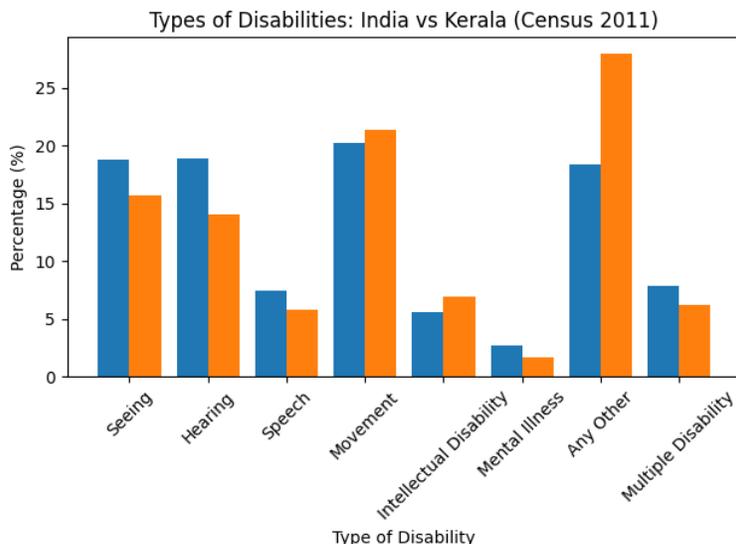
Table 5: Distribution of Types of Disabilities in India and Kerala

Type of Disability	India (%)	Kerala (%)
Seeing	18.8	15.7
Hearing	18.9	14.1
Speech	7.5	5.8
Movement	20.3	21.4
Intellectual Disability	5.6	6.9
Mental Illness	2.7	1.7
Any Other	18.4	28.0
Multiple Disability	7.9	6.2

Source: Census of India, 2011

The table indicates clear regional differences in the composition of disability between India and Kerala, with important implications for labour market participation. Nationally, disability is primarily concentrated in movement, hearing, and visual impairments, which directly restrict employability, especially in informal and manual sectors. Although Kerala

reflects this general pattern, it reports a lower share of sensory disabilities and a higher proportion of intellectual and other disabilities, suggesting stronger healthcare systems and more effective diagnostic and reporting practices. Theoretically, this aligns with the human capital framework, as Kerala’s investments in health and education help reduce severe barriers to productivity, while institutional perspectives explain the broader recognition of diverse disability categories. Overall, the findings highlight persistent accessibility challenges and the need for region-specific, disability-sensitive employment policies rather than uniform interventions.



Source: Census of India, 2011

Table 6: Work Participation Rate (WPR) – Disabled Population vs General Population (Census 2011)

Region	Population Category	Total (%)	Male (%)	Female (%)
India	General Population	39.8	53.3	25.5
India	Persons with Disabilities	36.3	47.2	22.6
Kerala	General Population	46.5	70.1	26.5

Source: Census of India, 2011 (Main & Marginal Workers Classification)

Table (6) highlights clear regional and gender-based disparities between the general population and persons with disabilities, with important theoretical implications. At the all-India level, persons with disabilities show lower participation and representation outcomes than the general population, with the gap being particularly pronounced among women, indicating that disability intensifies existing gender inequalities. This pattern aligns with human capital theory, which links limited access to education and skill formation with reduced employability, as well as labour market segmentation theory, which explains the restricted entry of disadvantaged groups into primary labour markets. The comparison with Kerala underscores the role of institutional and regional factors such as better education, health infrastructure, and social policies in improving overall outcomes. Nevertheless, even in Kerala, persons with disabilities continue to lag behind the general population, suggesting that labour market exclusion in India is structurally embedded through the intersection of disability, gender, and regional context rather than merely individual limitations.

Table 7: Type of Employment – Disabled Population vs General Population (Census 2011)

Region	Population Category	Cultivators (%)	Agricultural Labourers (%)	Household Industry Workers (%)	Other Workers (%)
India	General Population	24.6	30.0	3.8	41.6
India	Persons with Disabilities	13.2	29.9	5.2	51.7

Kerala	General Population	5.5	12.7	2.6	79.2
Kerala	Persons with Disabilities	4.2	14.8	3.1	77.9

Source: Census of India 2011, Workers Classification (Main + Marginal Workers)

Table (7) on occupational distribution reveals pronounced structural differences between the general population and persons with disabilities, supporting the theoretical perspectives of human capital constraints and labour market segmentation. At the all-India level, although the general workforce remains largely agrarian, persons with disabilities are notably underrepresented among cultivators, reflecting barriers related to land ownership, physical capacity, and independent production. Instead, they are concentrated in agricultural labour, household industries, and other low-paid and informal activities, consistent with the segmented labour market hypothesis that disability confines workers to secondary, insecure segments with limited mobility and protection. The Kerala experience underscores the influence of regional structural transformation, as its service-oriented economy is broadly reflected in the occupational profile of persons with disabilities; however, even in this more advanced context, disabled workers remain disproportionately represented in marginal forms of employment. Taken together with evidence on literacy, education, disability types, gender disparities, and spatial location, these findings suggest that disability in India functions as a structurally embedded constraint within a skill-biased labour market. Despite improvements in education and health, exclusion persists due to limited human capital accumulation, asset deprivation, mobility restrictions, and weakly inclusive institutions, indicating that labour market marginalisation of persons with disabilities is a persistent structural outcome rather than a temporary developmental lag.

CONCLUSION

The study finds that persons with disabilities continue to face systematic exclusion from India's evolving labour market despite overall economic growth and improvements in human development. Evidence indicates lower literacy levels, limited educational advancement, gender disparities, and concentration in low-paid, informal occupations, reflecting both human capital constraints and labour market segmentation. Although modest progress occurred between 2001 and 2011, structural barriers persist, and even in socially advanced regions like Kerala, improved development indicators have not ensured inclusive employment outcomes. The findings suggest that inclusive growth requires targeted interventions such as accessible education, skill development, workplace adaptations, and stronger enforcement of employment legislation since economic growth alone is insufficient to overcome entrenched labour market exclusion of persons with disabilities.

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