

Analysis of Social Security Protection of Workers in India using NSS Data

Abstract

Social security protection is a cornerstone of economic stability, providing workers with a safety net against vulnerabilities. In this context, the present study seeks to analyse the social security protection of workers in India using PLFS 2024 dataset. The analysis revealed that the vast majority of India's workers, nearly three out of four workers (76.2%) in India work without any social security protection. However, while union territories performing well, some states like Haryana (40.01%), Himachal Pradesh (38.66%), Delhi (37.02%), Uttarakhand (36.98%), and Telangana (36.94%) provides social security protection to one third of its workers and states like Karnataka (30.71%), Maharashtra (29.37%), Gujarat (28.5%), and Tamil Nadu (28.19%) are performing relatively better than national average on social security protection coverage of its workers. Workers engaged in principal activities show the highest social security coverage among all categories, though significant gaps remain. Approximately 24.65% of workers engaged in principal employment activities access some form of social security benefits. While complete coverage (PF/pension, gratuity, and healthcare/maternity) being the most prevalent at 42.2% for workers engaged in principal employment, only PF/pension and health care/ maternity benefits dominated for informal, part-time or gig employment worker at nearly 30%. Female workers face slightly less social sector protection coverage overall (at 79.67% vs 74.97% for men) but better access to health care/maternity benefits. The study points to systemic deficiencies of social protection that require urgent policy attention to create more inclusive and comprehensive working environment especially for women and informal gig like workers.

Introduction:

Social security is a cornerstone of economic stability, providing workers with a safety net against vulnerabilities such as poverty, illness, and unemployment. In India, where a diverse workforce spans formal and informal sectors, ensuring equitable access to social protection is critical for reducing socio-economic disparities and fostering inclusive growth. The absence or inadequate presence of social protection hinder workers' ability to achieve financial security, improve productivity, and withstand economic shocks. By integrating social protection with opportunities for decent employment, workers can be better equipped to enhance their livelihoods and contribute to sustainable economic progress (FAO, 2016). In this context, the present study seeks to analyse the social protection of workers in India using unit level data. By examining these dynamics, the research aims to provide insights that inform policy interventions, strengthen social protection frameworks, and promote equitable economic opportunities for all workers in India.

The data source and methodology:

The present study analyses the social sector protection in India. For the purpose, this study leverages data from the Periodic Labour Force Survey (PLFS) 2024 conducted during January 2024 to December 2024. The 2024 PLFS dataset is particularly valuable due to its extensive coverage of both formal and informal workers, capturing critical variables such as gender, industry of employment, and geographic location (states). The dataset enables robust analysis

The analysis across Indian states showcasing a clear disparity in social security implementation. As indicated in Figure 1, Bihar emerges as India's worst-performing state with only 8.44% of workers covered by social security - meaning a staggering 91.6% lack any protection. This is followed closely by states like Rajasthan (16.43%), and Madhya Pradesh (16.58%). Uttar Pradesh, India's most populous state, fares only marginally better at 17.2% coverage, leaving 82.8% of its massive workers unprotected.

A cluster of states including West Bengal (18.51%), Jharkhand (19.41%), and Tripura (20.53%) show slightly better but still inadequate coverage. Kerala, often lauded for its human development indicators, surprisingly ranks in the middle at 24.21% coverage, suggesting its much-touted social security networks might not be as comprehensive as believed. Southern states like Tamil Nadu (28.19%) and Andhra Pradesh (17.94%) show mixed results, with Tamil Nadu performing significantly better than its neighbour.

The best-performing states are concentrated in India's more urbanized and industrialized regions. Telangana (36.94%), Uttarakhand (36.98%), and Delhi (37.02%) form the upper tier. However, the states like Himachal Pradesh (38.66%) and Haryana (40.01%) are performing relatively better than national average. Though even these top performing states leave more than half their workers unprotected. The union territory of Lakshadweep (34.38%) and the Himalayan states of Jammu & Kashmir (34.78%) and Sikkim (35.46%) show strong performance, likely due to their smaller, more manageable populations and special status.

B. Types of Social Security Benefits:

For the fortunate 24% who do receive benefits, the Provident Fund (PF) or pension schemes form the bedrock of coverage. About 16% of workers have only PF benefits, while 42% of covered workers receive the complete package of PF, gratuity, and healthcare. However, these numbers mask severe gaps - healthcare and gratuity protections remain weak even for those with coverage, with only 1.9% receiving standalone healthcare benefits and a negligible 0.2% getting gratuity alone.

C. By activity status:

Workers engaged in principal (primary) employment show marginally better outcomes, though coverage remains inadequate. About 24.65% of principal workers receive some benefits, with 42.2% of this group obtaining the full package of PF, gratuity, and healthcare. PF remains the dominant benefit, with 16% accessing it alone and 29% combining it with healthcare.

When considering both principal and subsidiary activities, the row totals reveal that 76.23% of Indian workers lack any social security protection. Among those with benefits, the most prevalent category is the combination of PF/pension, gratuity, and health care/maternity benefits, accounting for 42.1% of workers. This indicates that when social security is provided, it tends to be comprehensive. The next most common benefit is PF/pension combined with health care/maternity benefits, covering 29.0% of workers, followed by PF/pension and gratuity at 8.9%. Single-benefit categories are less common, with only PF/pension at 16.0%, only health care/maternity benefits at 1.9%, only gratuity at 0.2%, and the combination of gratuity and health care/maternity benefits at 1.8%. The high percentage of workers without

protection highlights a significant gap in social security coverage, while the prevalence of comprehensive benefits among those covered suggests a polarized system.

Social Security Protection for workers engaged in Principal Activities:

For workers engaged solely in principal activities, the row totals of Panel B in Table 1 show a similar pattern to the combined activities. A substantial 75.35% of workers have no social security protection, slightly lower than in Panel A of Table 1. The combination of PF/pension, gratuity, and health care/maternity benefits remains the most common among those with benefits, covering 42.2% of workers, closely aligned with Panel A. PF/pension and health care/maternity benefits follow at 29.0%, and PF/pension and gratuity cover 8.9%. Single-benefit categories include only PF/pension at 16.0%, only health care/maternity benefits at 1.9%, only gratuity at 0.2%, and gratuity with health care/maternity benefits at 1.8%, summing to 100%. The near-identical distribution to Panel A suggests that principal activities largely drive the social security landscape, with a persistent lack of coverage for a majority of workers and a concentration of comprehensive benefits among those who are covered.

Table 1: (Un)Availability of Social Security Protection to Indian Workers across Gender in 2024

	No Social Security Protection	Availability of Social Security Benefits							Total
		Only PF/pension	Only gratuity	Only health care/maternity benefits	Only PF/pension and gratuity	Only PF/pension and health care/maternity benefits	Only gratuity and health care/maternity benefits	PF/pension, gratuity, health care/maternity benefits	
Panel A: Based on Both Principal and Subsidiary Activities combined									
Male	74.97	16.8	0.2	1.5	8.9	28.8	1.8	42.0	100
Female	79.67	13.5	0.3	3.3	8.8	30.0	1.6	42.6	100
Total	76.23	16.0	0.2	1.9	8.9	29.0	1.8	42.1	100
Panel B: Based on Principal Activity Status Alone									
Male	74.81	16.8	0.2	1.5	8.9	28.8	1.8	42.0	100
Female	77.03	13.3	0.3	3.2	8.8	29.9	1.6	42.8	100
Total	75.35	16.0	0.2	1.9	8.9	29.0	1.8	42.2	100
Panel C: Based on Subsidiary Activity Status alone									
Male	98.75	22.2	1.6	6.8	10.5	30.4	1.4	27.0	100
Female	99.36	24.9	0.7	6.4	3.5	37.4	1.2	26.0	100
Total	99.05	23.1	1.3	6.7	8.2	32.7	1.4	26.7	100

Source: Author’s calculation using PLFS 2024 NSS data.

Social Security Protection for workers engaged in Subsidiary Activities:

The Panel C in Table 1 reveals data on social security protection for India's subsidiary workers - those in informal, part-time or gig employment. The statistics reveal a starkly different picture, with 99.05% lacking social security protection, the highest across all panels. Among the small fraction of workers with benefits, the combination of PF/pension and health care/maternity benefits is the most prevalent at 32.7%, followed by the full combination of

PF/pension, gratuity, and health care/maternity benefits at 26.7%. Single-benefit categories are more prominent here than in the other panels, with only PF/pension covering 23.1%, only health care/maternity benefits at 6.7%, and only gratuity at 1.3%. The combination of PF/pension and gratuity accounts for 8.2%, and gratuity with health care/maternity benefits covers 1.4%. The near-total absence of social security protection underscores the vulnerability of workers in subsidiary roles, with benefits, when available, leaning toward partial combinations rather than comprehensive coverage.

D. By gender:

Those who are working in India in 2024, female workers face a higher lack of social security protection (79.67%) compared to male workers (74.97%), indicating a notable gender disparity. Among those with benefits, the combination of PF/pension, gratuity, and health care/maternity benefits is the most prevalent for both genders at around 42%. The combination of PF/pension and health care/maternity benefits is also significant, with females slightly ahead at 30.0% versus 28.8% for males. Both genders have equal access to PF/pension and gratuity (8.9%). For single-benefit categories, females have greater access to health care/maternity benefits alone (3.3% vs. 1.5% for males), likely reflecting targeted maternity provisions, but lower access to PF/pension alone (13.5% vs. 16.8% for males). Gratuity alone (0.3% for females, 0.2% for males) and gratuity with health care/maternity benefits (1.6% for females, 1.8% for males) show minimal differences. The higher lack of protection for females underscores a gender gap, though females with benefits often access more comprehensive or maternity-related coverage.

Social Security Protection for workers engaged in Principal Activities:

For workers engaged solely in principal activities, the gender gap in social security protection persists, with 77.03% of females lacking coverage compared to 74.81% of males. The combination of PF/pension, gratuity, and health care/maternity benefits remains the most common, with females slightly outperforming males (42.8% vs. 42.0%). Similarly, PF/pension and health care/maternity benefits are accessed by 29.9% of females and 28.8% of males, showing a marginal female advantage. Both genders have identical coverage for PF/pension and gratuity (8.9%). In single-benefit categories, females again have higher access to health care/maternity benefits alone (3.2% vs. 1.5% for males), while males have greater access to PF/pension alone (16.8% vs. 13.3% for females). Gratuity alone (0.3% for females, 0.2% for males) and gratuity with health care/maternity benefits (1.6% for females, 1.8% for males) show negligible differences. The patterns closely mirror Panel A, suggesting that principal activities dominate the social security landscape, with females facing slightly less coverage overall but better access to health care/maternity benefits.

Social Security Protection for workers engaged in Subsidiary Activities:

In subsidiary activities, social security protection is extremely limited for both genders, but females face a slightly higher lack of coverage (99.36%) compared to males (98.75%). Among the small fraction of workers with benefits, females have higher access to PF/pension and health care/maternity benefits (37.4% vs. 30.4% for males), reflecting a stronger emphasis on

maternity-related benefits. However, males have slightly higher coverage for the comprehensive combination of PF/pension, gratuity, and health care/maternity benefits (27.0% vs. 26.0% for females). For single-benefit categories, females have greater access to PF/pension alone (24.9% vs. 22.2% for males) and health care/maternity benefits alone (6.4% vs. 6.8% for males, though the difference is small). Males, however, have higher access to gratuity alone (1.6% vs. 0.7% for females). The combination of PF/pension and gratuity is more common among males (10.5% vs. 3.5% for females), while gratuity and health care/maternity benefits show minimal gender differences (1.2% for females, 1.4% for males). The near-universal lack of protection in subsidiary activities highlights the precarious nature of these roles, with females facing a marginally worse situation but better access to certain benefit combinations.

Conclusion and Policy suggestions:

The analysis underscores how India's social security system remains tightly coupled with formal, principal employment, leaving subsidiary workers almost entirely unprotected. These disparities point to systemic failures in India's social security architecture. The system remains designed for traditional, stable employment relationships, leaving behind the growing ranks of informal and gig workers. While PF/pension systems show relative strength, the lack of healthcare and gratuity protections especially for women and informal workers points to systemic deficiencies that require urgent policy attention to create more inclusive and comprehensive social security frameworks.

The data demands urgent policy action. India needs flexible, portable benefit systems that can cover workers across employment types. Strengthening healthcare access and guaranteeing minimum retirement protections should be immediate priorities. Most crucially, the near-total exclusion of subsidiary workers must be addressed perhaps through innovative digital solutions that can reach informal sector workers. Without such reforms, India risks creating a permanent underclass of workers without basic protections, even as the economy grows.

References:

FAO (2016). [“Qualitative research on the impacts of social protection programmes on decent rural employment”](#). Food and Agriculture Organization of the United Nations.

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