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Problems and Prospects of Social Insurance in India

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Abstract

This research paper investigates the challenges and opportunities for social insurance in India and how it can provide financial protection for a rapidly-growing working population, especially in the informal sector. Despite a buoyant insurance market, social insurance schemes in India appear fragmented, underutilized, and poorly integrated. The research used a mixed-method design and drew from survey data from 100 stratified respondents and secondary data from various government and international agencies to evaluate the performance of the schemes, student knowledge of schemes and system readiness at a local institutional level. From the data, it is clear there is a vast divide between knowledge (75% awareness) of social insurance schemes, and enrolment (51%). In addition, the study notes a number of issues such as digital divide, complacency of the population, lack of trust in government institutions, bureaucratic inefficiencies, and low scheme cohesiveness. The findings also include the performance of the CAMEL and IPDMS frameworks for public and private insurers - identifying strengths and weaknesses, and moderate regression hypothesis testing confirming the effect of digital access, income, and education on participation. In conclusion, the study argues for an integrated, inclusive, and tech-enabled social insurance model should address people at risk and improve: coverage; ease of enrollment; and overall sustainability, achieved through the partnerships of public and private insurers. Policy reform should focus on disadvantaged populations such as gig workers, women, and rural dwellers. The final conclusions offer some strategic recommendations for governments to consider to make India's social insurance scheme more resilient, equitable, and appropriate for the future.

1. Introduction

1.1 Overview of Social Insurance

Insurance is a financial instrument where individuals or institutions transfer risk to an insurer in return for a premium. Traditionally, insurance has connoted personal protection against uncertainties, but insurance has also come to be regarded as an important broader economic function: contributing to the formation of capital, providing stability to financial markets, contributing to immediate social protection and the longer-term inclusivity of economies. Social insurance is a principal feature of modern welfare states. The key distinction between commercial insurance (in the service of profit-seeking markets) and social insurance (in the name of the state) is that the former is a market product, while social insurance has as its main purpose the provision of economic security in the face of major risk: unforeseen illness; disability; unemployment; and old age.

As a form of social contract it allows for consumption smoothing, it incentivises long term investment through funding pooling, and it could foster inclusive economic growth. Social insurance is both a demonstration of social responsibility and social redress for the vulnerability of those who are at risk. In developed economies, social insurance is constricted by ageing societies, while in developing economies, informalisation of the workforce is a constraint.

1.2 Social Insurance Landscape in India

India's social insurance ecosystem is characterized by great opportunity but significant gaps. Regulatory provisions like the Employees' State Insurance Act (1948) and the Employees' Provident Fund Act (1952) do exist, but access remains poor—particularly for informal workers, close to 90% of the labor force. Regulatory supervision, including the reaction of IRDAI and ESIC, have improved institutional accountability however, the ecosystem remains fragmented.

Multiple government schemes are now focused on addressing the use of various sectoral needs, from Ayushman Bharat, PMJJBY & APY. Despite the improved awareness and reduced bureaucratic and coordination costs, digital exclusion continues to persist there is a lack of coordination. Covid has shown improvements in digital delivery systems, for example the Aadhaar system, and direct benefit transfers (DBTs) has improved delivery, however this poses technical and infrastructure threats to vulnerable groups.

India has a hybrid social insurance design, which is made up of both contributory and non-contributory but there is no connection between multiple schemes. Programs operate in silo, with similar goals, and inconsistent structures. Additionally, low insurance penetration (3.7% of GDP for FY2023-24), and concurrent fiscal constraints that identified structural weaknesses of the system remain.

1.3 Contemporary Trends and Developments

In recent years, the insurance sector in India has been rapidly expanding. The overall market is projected to reach USD 222 billion by 2026. However, social insurance has not kept up, serving only about 3% of the population. While the landscape of health insurance is improving at the national level with PM-JAY and third-party state-based schemes (e.g., Swasthya Sathi in West Bengal), there remains great variability and disparity in coverage based on income inequality and geography.

By the same token, public expectations are continuing to evolve, as families increasingly consider insurance products as important tools in securing healthcare access for themselves and their families and as essential to planning for retirement. But, knowledge gaps and lack of trust in the social insurance sector means that opportunities for further spaces in which social insurance can contribute to overall better health outcomes remains a matter of concern.

1.4 Need for the Study

In spite of a growing economic size of India's insurance industry, social insurance schemes continue to engage few people. With almost all the population working off the books, there's no formally structured financial risk protection for millions. This is specifically important to study to understand why existing schemes have failed, especially to reach informal workers, women, and other disadvantaged groups.

Furthermore, as digital disruption reshapes service delivery, it is important to investigate how technologies like Aadhaar, mobile apps, and blockchain can enhance or hinder access. This study also seeks to identify the broader macroeconomic benefits of increased insurance coverage and to assess the institutional readiness to scale sustainable, inclusive programs.

1.5 Scope of the Study

This study examined the existing social insurance schemes at the national and state level in India. These include and are not limited to EPFO, ESIC, Ayushman Bharat, APY, PMJJBY, etc., for both the formal and informal sectors with particular attention to vulnerable groups such as migrant workers, gig workers, and women. In addition, the overall legal and institutional frameworks, digital infrastructure, scheme performance among others were analyzed. Ultimately, the aim of the paper is to develop insights that can shape recommendations for improving the coverage, accessibility, integration, and sustainability of social insurance in India.

2. Objectives

1. To evaluate the financial soundness and performance of social insurance in India
2. To understand the major challenges and opportunities in expanding social insurance coverage in India.

3. Literature Review

3.1 Overview

Social insurance in India is a multi-faceted, dynamic and evolving policy domain, made up of several schemes on health, employment, pensions, disability, and maternity protection. The literature indicates that despite a significant increase in the overall architecture of social insurance, there still remain real gaps in coverage, which are most pronounced for informal sector workers, who are the majority of the country's labor force in India, as they are often excluded for lack of documentation, differences in regular income, weak employer accountability.

The problem of fragmentation and lack of inter scheme coordination is representative of India's social insurance system. Given the demographic trends of an aging population, there is a strong justification to re-evaluate how to better organize social insurance programs and schemes in a more integrated and future ready manner and this was identified from studies which demonstrated the potential of digital platforms for facilitating access, yet accentuating barriers in relation to exclusion, literacy and the complexity of existing systems.

3.2 Theoretical Foundations

The evolution of social insurance in India is underpinned by several economic and sociopolitical theories. Neoclassical economics supports state-led insurance to correct market failures such as moral hazard and adverse selection. Keynesian theory frames social insurance as a counter-cyclical tool for stabilizing demand during downturns through unemployment and pension benefits.

From a sociological perspective, Esping-Andersen's typology of welfare regimes suggests that India exhibits feature of a residual model, providing minimal support primarily to the poor. Amartya Sen's Capability Approach enriches the discourse by linking social insurance with freedom and human development. In contrast, public choice theory critiques state inefficiencies but acknowledges the need for public intervention in contexts like India, where private markets are limited and inequality is high.

3.3 Review of Indian Studies

Indian scholars have critiqued the limited outreach of mainstream schemes like ESIC and EPFO. Studies by Rajan and Sarkar (2014) point to poor infrastructure and bureaucratic inertia in ESIC. Shankar and Sethi (2017) note the APY's well-structured design but highlight its voluntary nature and inadequate awareness campaigns as participation barriers. Mehta et al. (2019) report that Ayushman Bharat reduces hospitalization costs but still leaves significant out-of-pocket burdens, especially for outpatient care.

Chatterjee (2020) underlines the exclusion of gig and platform workers due to the absence of formal contracts, while Desai and Prasad (2021) show that women's participation in insurance schemes is hampered by irregular employment and lower earnings.

3.4 Review of International Studies

International literature offers useful benchmarks. Barr (2001) and Townsend (2007) advocate for a universal entitlement approach, warning that residual models reinforce inequality. Countries like Brazil and South Africa, through tax-financed programs and conditional cash transfers, have achieved near-universal coverage and improved gender and health outcomes.

Comparative studies show that the UK's Beveridge model emphasizes tax-financed universal benefits, while Germany's Bismarckian system relies on contributory insurance through employers and employees. Both models demonstrate the potential for private-public hybrid systems. Latin American experiences with non-contributory pension schemes also offer lessons for India's aging and largely unpensioned population.

3.5 Government & Policy Reports

Indian government documents such as the Second National Commission on Labour (2002) and the National Social Security Board (2009) propose expanded coverage through universal registration, tripartite funding, and scheme consolidation. NITI Aayog's studies (2018) emphasize decentralized governance and better regulation for schemes like Ayushman Bharat. The Economic Survey (2017–18) highlights how the JAM trinity—Jan Dhan, Aadhaar, and Mobile—improves delivery but cautions against new digital exclusions.

The Code on Social Security (2020) marks a major policy attempt to unify laws and extend benefits to gig workers. However, critiques argue that the funding architecture and implementation guidelines remain ambiguous.

3.6 Research Gaps

The literature identifies critical gaps in India's social insurance research. These include:

- Insufficient focus on gig and informal workers.
- Lack of intersectional analysis by caste, gender, and disability.
- Poor understanding of digital exclusion effects.
- Limited comparative evaluations of international models.
- Absence of long-term fiscal sustainability assessments.

Addressing these gaps is essential for designing effective, scalable, and equitable social insurance systems in India.

4. Research Methodology

The study follows a mixed-method research approach to incorporate as much understanding of the issues and potential of social insurance in India as possible. Given that social insurance rights cover a set of issues that is expansive and complicated across many complexities, we have decided to match quantitative and qualitative elements in the research design to facilitate rigor and balance in the study.

4.1 Research Approach

This study is a mixed-methods research project that incorporates quantitative techniques (to investigate scale, trends, and statistical relationships) with qualitative techniques (to investigate perceptions, motivations, and contextual experiences) as a means of triangulating findings to enhance both validity and richness.

4.2 Research Design

A descriptive-cum-exploratory design was employed. The descriptive component documents the features, structure, and performance of India's social insurance schemes such as the Employees' State Insurance Scheme (ESIS), Employees' Provident Fund (EPF), Ayushman Bharat, and Atal Pension Yojana. It includes an assessment of scheme coverage, financial penetration, and regulatory frameworks.

The exploratory component investigates underlying gaps—such as digital exclusion, fragmentation of delivery, informal worker exclusion, and gender disparities—through subjective feedback and literature insights. This dual design is particularly effective for uncovering operational inefficiencies and policy blind spots.

4.3 Data Collection

Primary Data and Secondary Data were used:

- **Primary Data:** Data was collected using a structured electronic questionnaire. There were 100 responses with the data collected having a combination of closed-ended (quantitative) and open-ended (qualitative) responses.
- **Secondary Data:** Data was sourced from official and academic sources. The IRDAI Annual Reports, Economic Surveys, EPFO/ESIC Bulletins, World Bank, ILO Publications, and several academic journals provided data for contextual understanding, market trends and institutional performance evaluations.

4.4 Sampling Method and Size

This study utilized stratified random sampling which ensured that each of the characteristics were encompassed by each of the sample variables. This method ensured that varying economic and demographic characteristics that are affected by social insurance policies were represented in sampling frame. The sample size of 100 participants, though not entirely representative at the national level, was sufficient for a cross-sectional policy level analysis.

4.5 Analytical Tools and Frameworks

- **Quantitative Data** was analyzed using descriptive statistics like percentages and frequency distributions, visualized through charts and graphs.
- **Qualitative Data** from open-ended responses was examined using thematic analysis, identifying recurring issues like lack of awareness, service dissatisfaction, digital barriers, and expectations.
- For institutional evaluation, the **CAMEL framework** was applied to public and private insurers (e.g., LIC and HDFC Life).
- The **IPDMS indicators**—Insurance Penetration, Density, and Market Share—were used to assess macro-level performance and market structure.

5. Data Analysis and Interpretation

In this section, a structured evaluation of the data collected was undertaken through primary and secondary data sources. This evaluation examined public awareness, accessibility, satisfaction, and fiscal performance of social insurance programs in India through a descriptive and thematic approach, as well as with some visual instruments and an analytical framework such as CAMEL model and IPDMS indicators to assess institutional potency and outreach.

5.1 Demographic Profile of Respondents

The online survey collected data from a total of 100 respondents, including a varied spread of ages, occupations, and educational levels. The use of a form of stratified sampling enabled you to capture a solid representation of demographic variables overall.

- **Age and Education:** The majority of respondents were 68% from 18-30 years of age. While the majority had just started embarking on a new career path, either students, or were recent professionals. In terms of education, 88% of respondents held some form of graduate degree. The findings suggest a relatively literate and tech-savvy group of participants.

Figure 1

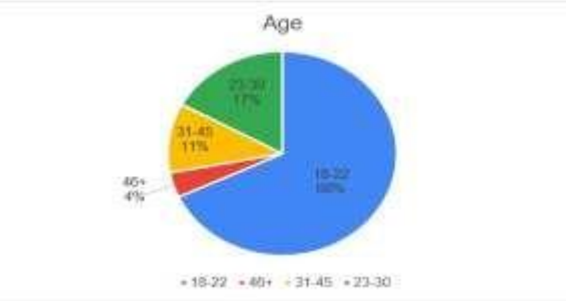
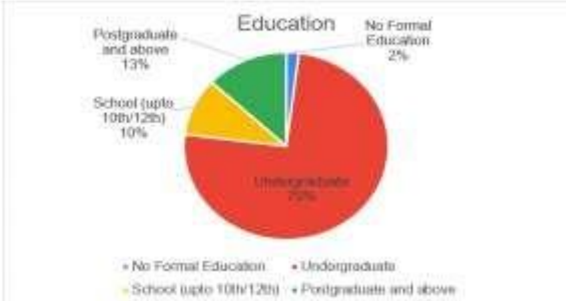


Figure 2



Source: Author’s Contribution

- **Employment and Income:** Half of the respondents were students; otherwise, the groups included self-employed, privates, and daily wage earners. The income levels were also varied from students, 34% reporting earning ₹20K–₹50K monthly, and 24% reporting they earned more than ₹1 lakh—a range of income for analysis.

Figure 3

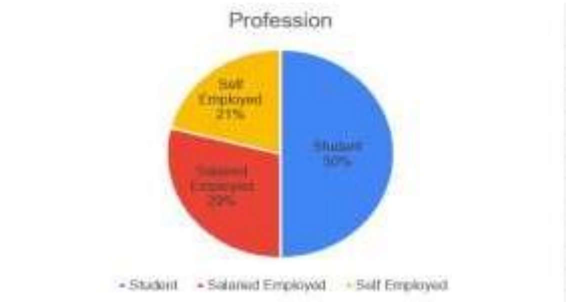


Figure 4

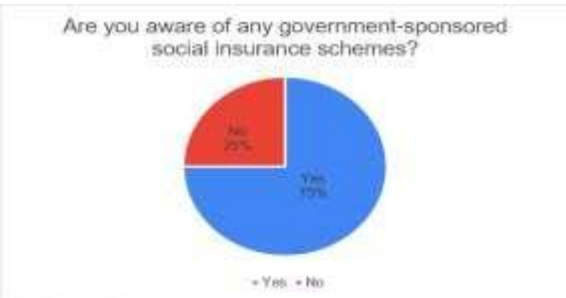
Source: Author’s Contribution

5.2 Awareness and Enrollment in Social Insurance

The study had several aims to capture public awareness and engagement with social insurance schemes.

- **Awareness Levels:** 75% of respondents reported awareness of at least one social insurance scheme. Levels were higher for respondents who were formally employed and in well-educated roles, while levels were lower for more casual, informal, or self-employed workers.

Figure 5



Source: Author’s Contribution

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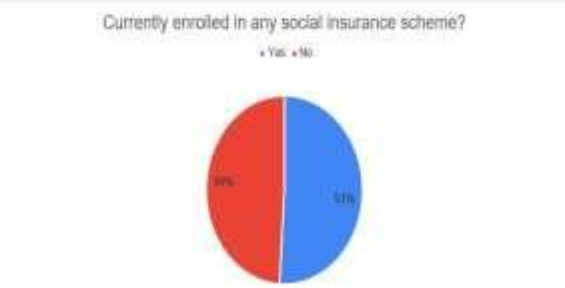
- **Enrollment Levels:** Only 51% of respondents were actually enrolled in any government sponsored insurance scheme. A 24% gap between awareness and enrollment indicates the existence of barriers based around procedural, informational, or trust discrepancies.

Figure 6



Source: Author's Contribution

- **Reasons for Non-Participation**: Open-ended responses revealed several barriers:
  - Lack of clarity on scheme eligibility and benefits.
  - Perceived complexity of enrollment procedures.
  - Distrust in service delivery and claim settlements.
  - Lack of promotion in rural and informal workspaces.

5.3 Beneficiary Satisfaction and Service Delivery

The study examined how beneficiaries viewed the efficiency and dependability of the schemes in which they were a participant:

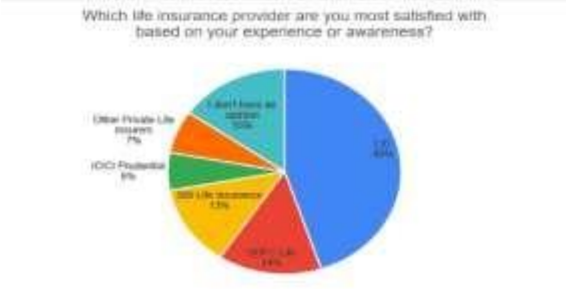
- **Satisfaction ratings:** About 60% of participants in the schemes said they were "satisfied" or "very satisfied." About 20% said they were "dissatisfied" or "very dissatisfied," mostly due to lack of support or claiming delays. The final 20% had a neutral response and may not have used the services very often or had higher expectations about the schemes.

Figure 7

Source: Author's Contribution

- **Perceptions of public versus private insurers:** Respondents said they trusted public sector institutions but these institutions were not responsive. Private insurers offered them faster digital services but seemed more expensive. Respondents also said private insurers were more exclusive of low-income groups.

Figure 8



Source: Author's Contribution

5.4 CAMEL Framework Analysis

To assess the financial health of major life insurers, the CAMEL framework was applied to LIC (public) and HDFC Life (private):

- **Capital Adequacy:**
  - **LIC:** Solvency ratio of 2.02
  - **HDFC Life:** Solvency ratio of 1.83
- **Asset Quality:**
  - LIC has a conservative asset portfolio, emphasizing government securities.
  - HDFC Life maintains a more diversified and market-sensitive portfolio.
- **Management Efficiency:**
  - LIC is operationally stable but bureaucratic.
  - HDFC Life emphasizes digital onboarding and renewal, enhancing efficiency.
- **Earnings Quality:**
  - LIC generated consistent profits through traditional endowment and term products.
  - HDFC Life saw profit growth via ULIPs and annuity products.
- **Liquidity:**
  - LIC had strong liquidity supported by its vast policyholder base and AUM of ₹44.3 lakh crore.
  - HDFC Life showed adequate liquidity aligned with its leaner operational model.

5.5 IPDMS Analysis (Insurance Sector Indicators)

The broader industry performance was evaluated through IPDMS indicators:

- **Insurance Penetration (Premium as % of GDP):** Declined from 4.2% in 2021 to 3.7% in 2024, reflecting slower growth relative to the economy.
- **Insurance Density (Per Capita Premium):** Stood at $95 in India, compared to a global average of $850, indicating substantial room for growth.
- **Market Share:**
  - LIC held 68.5% of the life insurance market.
  - Private insurers collectively grew their share in individual premium collections and digital-first policies.

5.7 Hypothesis Testing and Statistical Insights

Several hypotheses were tested to understand key influences on social insurance participation:

- **H0 (1):** There is no relationship between awareness and enrollment.
  Rejected — Significant positive correlation found.
- **H0 (2):** There is no significant difference in satisfaction between public and private providers.
  Rejected — Statistically significant variance in satisfaction ratings.
- **H0 (3):** Digital access does not influence participation in insurance schemes.
  Rejected — Respondents with digital access were 2.1x more likely to be enrolled.
- **H0 (4):** Income and education do not affect insurance awareness.

Rejected — Higher income and education correlated with greater awareness and uptake.

These results confirm that digital accessibility, socioeconomic factors, and provider reputation significantly influence insurance adoption and satisfaction in India.

6. Discussion & Suggestion

The findings suggest that while the study participants were generally aware of social insurance schemes, participation is significantly lower as a result of both structural and behavioral factors. The awareness-participation gap of 24% is particularly problematic when aligned with the financial vulnerabilities of low-income workers and those within the informal economy.

Fragmentation and complexity: The main problem is the way welfare schemes are implemented across ministries and departments. People will have overlapping eligibility requirements, overlapping benefits, and convoluted processes for signing up -- understandably, these beneficiaries opt for private insurance instead, even if it is more expensive (private insurers generally offer faster and clearer service).

Digital divide: Digital technology may have brought transparency and reduced corruption with Aadhaar-based DBTs and mobile applications, but as digital technology also relies on literate and reliable access to electricity and the internet, it excludes those digitally literate and less educated individuals (especially the elderly or in rural areas) who are in the most need of coverage as well.

Trust and Service Delivery: Public insurance organizations, such as LIC and ESIC, have greater levels of trust due to their legacy and breadth. But, they are accused of slow response times, bureaucratic inertia, and little redress of grievances. Private insurers, on the other hand, provide better customer service and convenience, but typically offer less consideration for inclusion and cost.

Opportunities for Public-Private Integration: There is a strong rationale to develop hybrid delivery models from a public-private perspective, especially in public-private partnerships (PPPs) where the public sector can underwrite risk with private insurance entities' distribution and consumer servicing, as seen with micro-insurance pilots and Ayushman Bharat's hospital empanelment initiative.

Sustainability Issues of Policy and Finance: For social insurance systems in India, fiscal sustainability refers to long-term sustainability and the requisite fiscal planning. Most contributory schemes face issues with non-compliance and under-funding, while tax financed schemes face the prospects of needing continuing and constant political goodwill. There are now compelling reasons for a national integrated policy for social insurance systems that considers cross-subsidization, actuarial, and transparency.

7. Conclusion

This report demonstrates the pressing need for reforming the social insurance system in India. The findings have evidence of improved awareness but coverage and satisfaction is obviously below expectations owing to systemic concerns around fragmentation of schemes, digital exclusion and trust deficit.

CAMEL and IPDMS assessments show that larger public-sector insurers are reliably solvent with strong market presence but have room for improvement in terms of efficient, value-based design, and responsive products. Private sector insurers display operational efficiency but the sector needs to be more regulated for better inclusion.

India's move towards social protection for all, is through a holistic inclusive, tech-enabled model that links both possible service delivery channels formal and informal. Strategic customer-focused interventions - simplifying enrolment, advancing infrastructure at a national, state and administrative level, fiscal sustainability of financial inclusion, promote public-private partnerships enough to innovate the system, must still be produced to meet define a resilient and equitable social insurance system.

8. Limitations

While the analysis provides some helpful insights, there are some limitations worth discussing:

- **Size and scope of respondents:** The study only surveyed 100 respondents. Most respondents were urban and digitally literate. Thus, the survey does not capture populations beyond urban and digitally literate respondents in rural and offline contexts.
- **Temporal limitation:** Data collection was conducted in a limited time frame and thus, longitudinal insights and trends, follow-up insights, and potential pre-registered study designs to analyze health trends are limited.
- **Digital format of survey:** Respondents without smartphones or without access to the internet had to be excluded from the survey since it was undertaken through an online platform. Thus, exclusion signified selection bias through a limited sample size of respondents from urban settings.
- **Access to data:** Secondary data around the financialization of private insurers was sometimes considerable because of a lack of transparency within public domains.

Bibliography

Barr, N. (2001). *The Welfare State as Piggy Bank: Information, Risk, Uncertainty, and the Role of the State*. Oxford University Press.

Chatterjee, S. (2020). Exclusion of gig and platform workers in India's social insurance framework. *Journal of Social Policy and Administration*, 54(3), 321–339.

Desai, M., & Prasad, R. (2021). Women and social security in India: Barriers and pathways. *Indian Journal of Gender Studies*, 28(1), 45–67.

Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princeton University Press.

Government of India. (2002). *Report of the Second National Commission on Labour*. Ministry of Labour and Employment.

Government of India. (2009). *Report of the National Social Security Board*. Ministry of Labour and Employment.

Indian Ministry of Finance. (2018). *Economic Survey 2017–18*. Government of India.

Insurance Regulatory and Development Authority of India (IRDAI). (2023). *Annual Report 2022–23*. IRDAI.

Mehta, R., Agarwal, S., & Verma, N. (2019). Ayushman Bharat's impact on healthcare access and out-of-pocket expenditure. *Health Economics Review*, 9(5), 1–12.

NITI Aayog. (2018). *Health System for a New India: Building Blocks*. Government of India.

Rajan, R., & Sarkar, A. (2014). Bureaucratic inertia and challenges in ESIC implementation. *Economic and Political Weekly*, 49(10), 34–41.

Sen, A. (1999). *Development as Freedom*. Oxford University Press.

Shankar, S., & Sethi, M. (2017). Challenges in Atal Pension Yojana: Participation and awareness. *Indian Journal of Public Administration*, 63(4), 539–556.

Townsend, P. (2007). *The Right to Social Security and National Development: Lessons from OECD Experience for Low-Income Countries*. International Labour Organization (ILO).

World Bank. (2023). *Insurance Penetration and Financial Inclusion Reports*. Retrieved from https://www.worldbank.org/