

e-Formality Practices in India

Report carried out under the aegis of the
BRICS Network of Labour Research Institutes

NLI Research Studies Series
No. 166/2024

Dhanya MB



V.V. Giri National Labour Institute

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Preface

V. V. Giri National Labour Institute (VVGNI) represents India in the BRICS Network of Labour Research Institutes. Other member institutions of this network are: National Labour Market Observatory of the Ministry of Labour of Brazil, Brazil; All-Russia Research Institute for Labour of the Ministry of Labour and Social Protection of the Russian Federation; Chinese Academy of Labour and Social Security, China; and University of Fort Hare, Republic of South Africa.

One of the major objectives of this network is to undertake research studies on contemporary concerns related to labour and provide policy inputs to achieve strong, sustainable and inclusive growth. In 2021, the member states under India's Presidency, have renewed their focus on the issue of formalisation of the labour market. The LEM Declaration calls for 'strengthening policies, regulations and measures to facilitate transitioning from the informal to the formal economy taking into account ILO Recommendation 204 and UN SDGs' (BRICS LEM Declaration 2021, para.8) Accordingly, the BRICS Network of Labour Research Institutes had recently conducted a joint research study on *e-Formality practices*. This research study examines the evolution and development of the informal economy at the country level, involving mapping the e-Formalization Practices. Moreover, this study also assesses the impact of the pandemic in accelerating the use of e-formalization practices. It discusses promising examples/experiments of e-formalization practices that have been implemented having implications for formality at the country level.

The study undertaken in the context of India begins by providing an overview of the evolution of the informal economy in India. Further, the report analyses the extent of decline (or increase) in informality that has happened over time and the explanatory factors responsible for such changes. It also analysed the public policy approaches adopted at the country level to tackle informality and the extent these approaches successfully combine various policy areas and institutions to address heterogeneity in the informal economy and its multiple drivers. One of the major focus areas of the report is examining the impacts and implications of the pandemic on accelerating the use of e-formalization practices in India's economy. This analysis is based broadly on two themes – what type of pandemic benefits the government extended to workers and enterprises by leveraging on the existing e-formalization initiatives and what new e-formalisation practices were added into the portfolio to address the specific requirements that arose because of the pandemic and it details measures undertaken by the Government of India. The study concludes with summaries of the discussion and provides recommendations and the way forward by advancing strategies for inclusive, and sustainable growth.

Dr. Arvind
Director General



Acknowledgement

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First of all, I would like to acknowledge Dr Arvind, Director General, VVG NLI, NOIDA, for his encouragement and support to initiate the study. Also, sincere gratitude to my former colleague Dr Anoop Satpathy, wage specialist, DWT- South Asia, International Labour Organisation (ILO) for his valuable input on the chapterisation of this report.

The hard work of Mr. Ashish Thakur, Research Associate in documenting the report and helping me for data extraction is sincerely acknowledged. Dr Priyanka, Assistant Professor, Parul University was associated in this project for a short period, took up all the contributions with dedication and is worthy of acknowledgement. Without their consistent work, this report would not have materialised within this time along with many other official commitments.

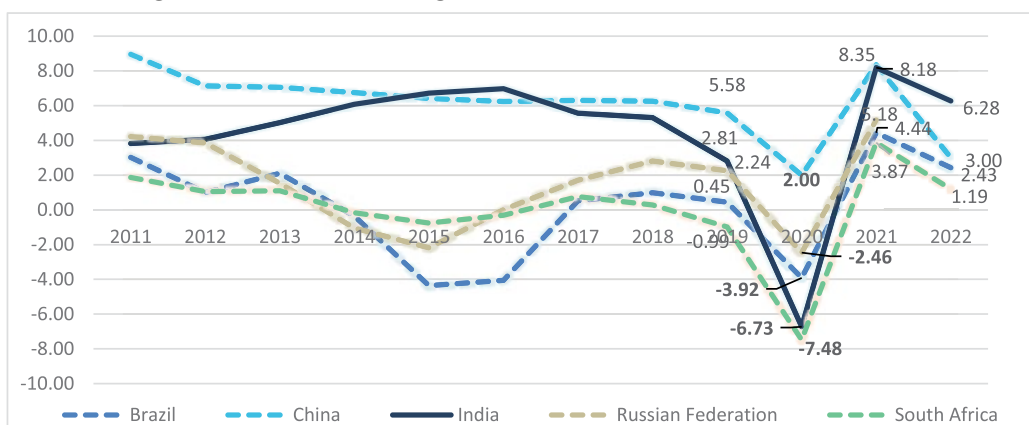
I would also like to thank Mr S K Varma, ALIO; Mr Rajesh Karn, PS and all other officers and staff of VVG NLI administrative, accounts, programs, library and publication section. Last but not least, I most gratefully acknowledge my son Aarjav and my parents for all their support throughout this report.

Chapter 1 : Introduction

1.1 Overview of Informality

The economies of BRICS countries (Brazil, Russia, India, China, and South Africa) are having an increasing impact on the global economic landscape. Their growing contributions go beyond mere figures, as their entire GDP is approximately 24 per cent of the world's total and includes 40% of the worldwide population.¹ This increased economic weight translates into higher stakes for these countries, owing to their deeper integration and formalization within the global system. In essence, the BRICS bloc is no longer a peripheral participant, but rather a driving force in influencing the global economy's future.

Fig. 1.1: GDP per capita growth in BRICS countries (annual %)



Source: World Bank Database

Most of the economies from BRICS fall under the category of Upper Middle-Income group except India i.e., a Lower Middle-Income country with GNI per capita of US\$ 2380.² Their economies vary differently in GDP per capita growth rate from the year with India being the highest at 6.28 per cent while South Africa remains the lowest at 1.19 per cent in the latest year (see Fig. 1). From 2011-21, average annual Real GDP growth rate of the nation drastically affected mainly due to fall in the global economy during the pandemic period in 2020. Only China (6.46%), India (4.35%), and Russia (1.44%) remained positive during this tenure. At the same time, both South Africa and Brazil suffered a sharp decline in their annual real GDP growth rate and remained at a negative growth rate. Catastrophe adversely impacted the informal sector, a significant aspect of BRICS economies, the most raising serious concern highlighting the urgency of boosting the transformation of informal economy to formal.

The size of the informal economy with a total workforce of almost two billion is steadily declining presently at both the global level and in BRICS countries with 58 per cent and 61.5 per cent of the employed population respectively.³ Still, because of its enormous size, it poses tremendous challenges not only for the employer, business firms and trade unions but also for academicians and policymakers. The existence of an informal economy is largely among the low-income nations and emerging market economies;⁴ hence it can be considered

1 BRICS 2021 https://brics2021.gov.in/about-brics#:~:text=BRICS%20is%20an%20important%20grouping,share%20in%20the%20world%20trade*.

2 World Bank database

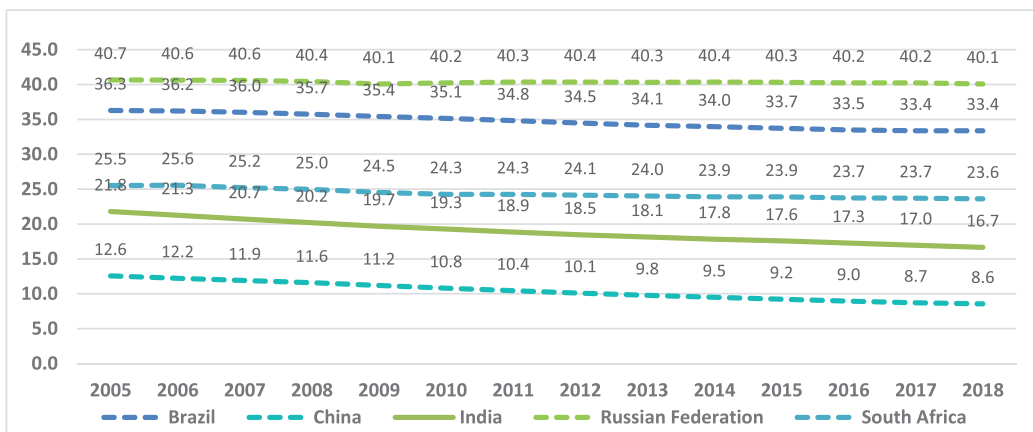
3 ILOSTAT database

4 What is informal economy?, International Monetary Fund, 2020

as the hidden engine of growth of such nations. But too much of its incidence may hamper sustainable development, especially among emerging ones like India. Thus, comprehensively addressing informality is essential in this 21st century.

Even after four decades of rapid economic growth⁵ and as the fifth largest economy at present⁶, around 94 per cent of all the enterprises in India belong to informal which does not come under many benefits. If adding the agriculture sector, this accounts for 88.6 per cent of the total workforce in the country engaged in the informal sector while 80.3 per cent if agriculture is not considered. This total informal workforce is further breakdown as follows: 79 per cent in the informal sector, 7.3 per cent in the formal sector and around two per cent in the domestic sector.⁷ The high incidence of informality in India has continued for several decades while focusing that the labour force will continue to increase till the year 2030 since India is currently going through a demographic transition and will continue till 2040.⁸ Without a reduction in the size of the informal sector, inclusive growth in India cannot be experienced.

Fig. 1.2: Dynamic General Equilibrium (DGE) based modelled estimate of Informal activity (% of GDP)



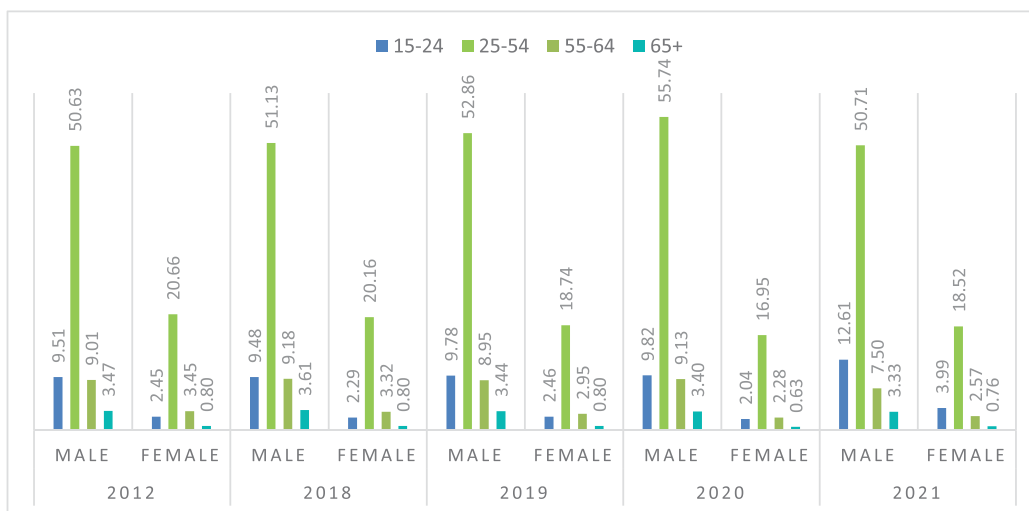
Source: World Bank Database

With a total of 2.7 lakh crore US\$ of total GDP,⁹ the Informal economy contributed to barely 16.7 per cent share according to the dynamic general equilibrium model of the World Bank database. The trend even shows a fall in the contribution of the informal economy from 21.8 per cent in 2005 to 16.7 per cent in the latest year. The reason behind the economy is usually associated with the various formalization efforts initiated by the Government of India in recent years which will be discussed in upcoming sections.

While a majority of the workforce in India is engaged in the informal economy, it is essential to examine the age-wise distribution of both male and female workers to understand the employment trend among the youth and adult population in India. Not surprisingly majority of shares in the informal economy are covered by the adult age group in both genders over the years.

5 Reserve Bank of Australia <https://www.rba.gov.au/publications/bulletin/2020/dec/economic-developments-in-india.html>
 6 International Monetary Fund, 2023
 7 ILO, 2021 <https://www.ilo.org/publications/informality-and-potential-south-south-cooperation-between-brics>
 8 ibid
 9 World Bank Database, 2018

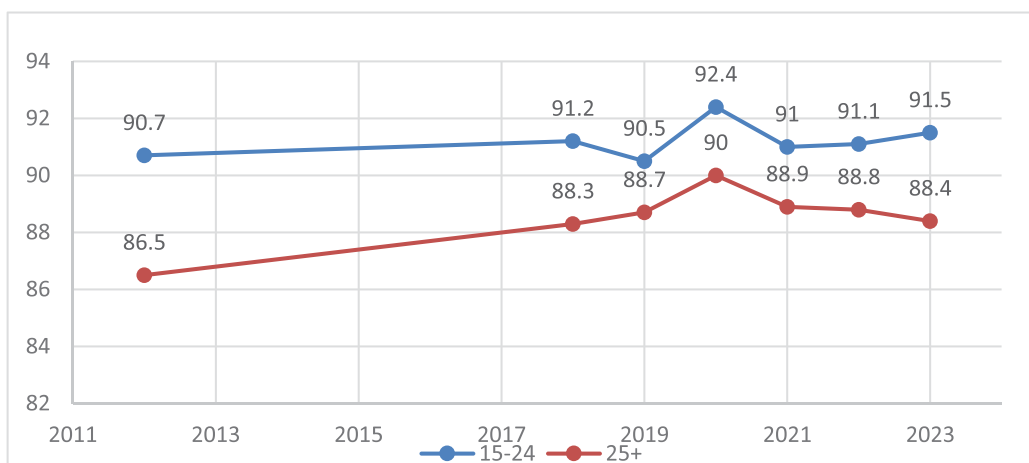
Fig. 1.3: Age-wise Distribution of Employment in Informal Economy (%)



Source: ILOSTAT, International Labour Organization.

The trend shows the share of employed adult male in total informal employment was 50.63 per cent in 2012 while it has remained almost the same in the latest year accounting for 5.71 per cent with a sharp rise in the year 2020 mainly due to the job losses in pandemic and mass remigration of the people to their origin place. The situation of female employment among the adult age group is relatively much lower than male counterpart. While their share in informal employment has witnessed a slight downfall in 2018 (18.52 per cent) as compared to 2012 (20.66 per cent). During the pandemic year, their share was the lowest ever below 17 per cent contrary to males.

Fig. 1.4: Informal Employment Rate among Youth and Elder Age Group (%)

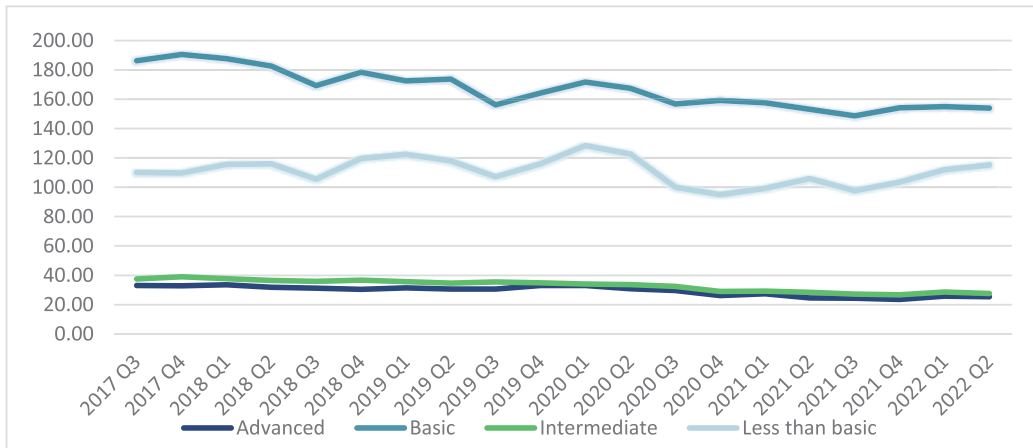


Source: ILOSTAT, International Labour Organization.

However, what is more concerning is the situation of youth in the informal economy, their share seems a sharp rise in total informal employment for both genders during 2021 as compared to the previous in 2020 with 12.61 per cent in males and 3.99 per cent in females respectively. Overall, their share in total informal employment accounted for 91 per cent in the latest year a slight fall than previous (92.4 per cent). The majority of India's workforce operates in the informal sector, with youth being the predominant contributors. While male participation has

remained stable, females faced a decline in job opportunities, especially during the pandemic. While youth saw a significant surge in informal employment in 2021. This may be reflecting the situation of underemployment among youth due to job losses during the pandemic and after the pandemic, they may be working in low-paid jobs in the informal sector which can be caused by less social security, low wages, poor working conditions, working poverty for youth workforce.

Fig. 1.5: Informal Employment by Education Level in India



Source: ILOSTAT, International Labour Organization

Let us now examine the association between different education levels and informal employment for the quarterly available data to see the trend in depth. Of all the education levels, except the workforce with less than basic education level, employment among all the other groups is witnessing a declining trend. Workers with less than basic and basic education levels have the highest share of employment in the informal economy over the available data leaving behind both the intermediate and advanced level at the lowest.

Almost 153.56 million of the workforce with a basic education level while 115.12 million who are illiterate remain employed in the informal market during the second quarter of 2022. In the third quarter of 2017, nearly 24 million of the workforce with basic education was more employed whereas almost five million of them with less than basic education level were less engaged as compared to the latest available data. Labourer without or with low formal education levels do not hold the required skills and knowledge for the dynamic labour market system due to which they face challenges to enter into the formal economy and remain vulnerable.

India has a large pool of educated workforce with limited opportunities in the formal sector. The trend of employment among the educated group in the informal economy has recorded a sharp decline in the last four years to 25.45 million for advanced educated and 27.64 million with intermediate education which is almost eight million and 10 million less than the third quarter of 2017 respectively reflecting the shift of educated workforce toward formal economy or with the rise in written contractual employment in India in recent years which provide various social protection to the employee.¹⁰

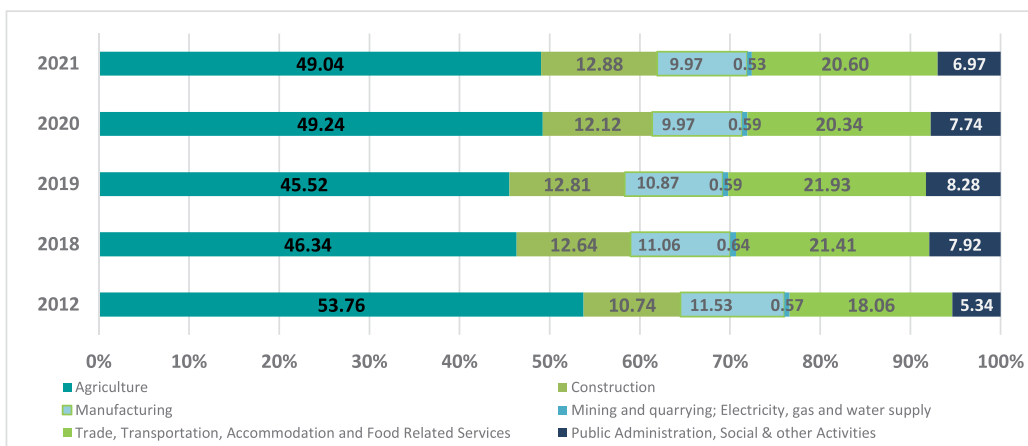
10 CEDA, Ashoka University, 2021



1.2 Status of Informal Economy among Different Sectors

The informality in employment has raised concern consistently since the 1990s when the word “informal” came into limelight and the India initiated its liberalization process. This resulted in the creation of opportunities with the expansion of the market and increasing competition which led to the emergence of the informal economy in India enabling rapid growth across the economic sector¹¹. But this rise in the informality situation has further led to the advantages of economic benefit being skewed toward a small section of society leaving behind a large chunk of the poor population without any inclusive growth.

Fig. 1.6: Distribution of Informal Employment by Economic Sector (%)

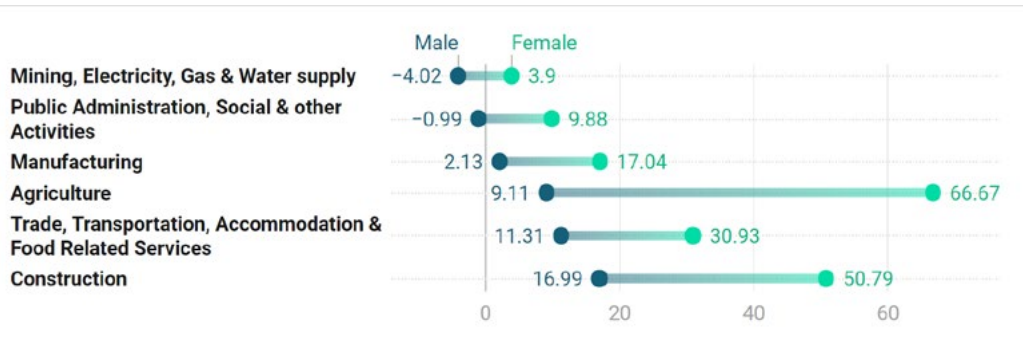


Source: ILOSTAT, International Labour Organization

Being the largest share, the Informal economy in India shows a significant degree of variation and variability across the economic sector. The agriculture sector’s share in employment with 49.04 per cent is the highest share of employment contributors, subsequently 20.60 per cent share including transportation, accommodation trade, and food-related services is the next largest share of employment contributors. Recently, the construction sector’s share in employing the workforce (13 per cent) is at the overall highest level. Other sectors together contribute 17.48 per cent. The change in employment share is visible in various economic sectors over these years. After a sharp fall from 2012 (53.76 per cent) to 2018 (43.34 per cent) in the agriculture sector, there was an increasing trend in the year 2021 (49.04 per cent). This increase may be due to the pandemic effect where many people migrated to their place of origin and involved in agricultural work. The increase in informal employment is further supported by the construction sector and other service industries between 2012 and 2018. However, both the sub-sectors in the service area were at the peak of employing the informal economy during 2018 and 2019 but halted the economy due to the catastrophic pandemic further reducing its share in employment with the possibility of a shift of labour in the agriculture sector as shown in figure 6. Informal employment share by the manufacturing sector has seen a slight fall in these years with the latest share of around 10 per cent mainly because of the rise in contractual records by the firms. While the distribution of services in the informal sector connected to trade, transportation, accommodation, and food increased from 2018 to 2019, it fell owing to the pandemic in 2020 because most services paused during this time.

11 Dhanya, 2013

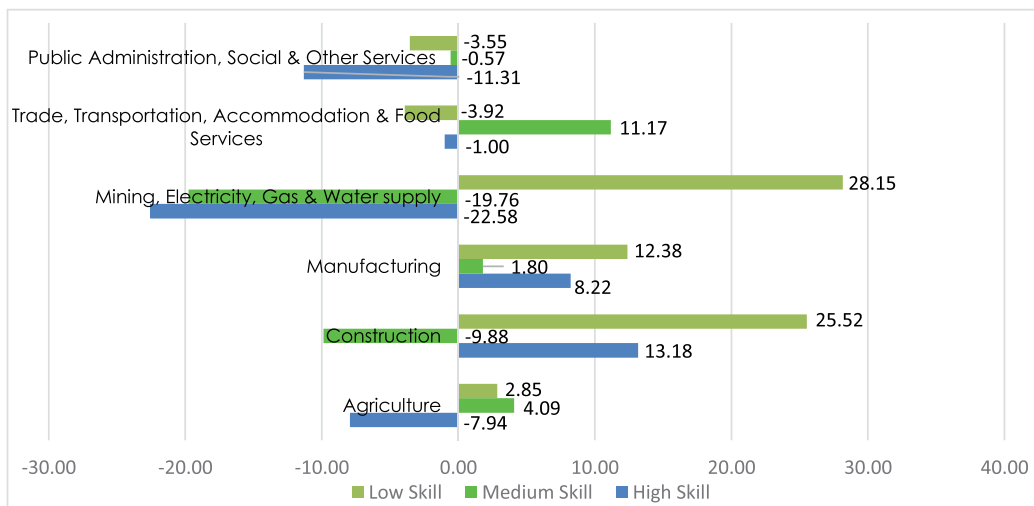
Fig. 1.7: Change in Informal Employment among Genders from 2018-2021 in different economic sectors (%)



Source: ILOSTAT, International Labour Organization

The trend shows a change in informal employment among both genders with a substantial gap from different economic sectors between the duration 2018 and 2021. This interval is considered highly volatile due to the economic shock caused by the pandemic because of which almost every sector suffered leading to a major shift in employment trends in both genders. Undoubtedly, the agriculture sector witnessed a massive gap between both genders as the inclusion of males increased by almost 9 per cent in informal employment while 66.67 per cent of females entered into the agriculture sector as informal labour which is much higher than expected. A similar trend is followed by the construction sector with 17 per cent of males and 50.79 per cent of females, trade, transportation, accommodation and food-related services with 11.31 per cent of males and almost 31 per cent of females and the manufacturing sector with 2.13 per cent of male and 17.04 per cent female workforce shifts between the tenure. Only mining, electricity, water supply and public administration, social and other activities are the two economic sectors where a change in informal employment among males remained negative in three years which reflects loss of employment while the female share in the same sector remained positive with 3.9 per cent and 9.88 per cent respectively.

Fig. 1.8: Change in Occupational Skill Level from Different Industries in Informal Employment during the year 2020-2021 (%)



Source: ILOSTAT, International Labour Organization



Further analyzing and comparing the different skill levels of employment for each economic sector in the informal economy from the data available for the latest year and previous, it seems the wide existence of heterogeneity in the data. The Pandemic affected the labour market severely in all the BRICS countries, India too witnessed vast economic destruction across the economic sectors. This substantial uncertainty impacted the livelihood of the workforce. The mining, electricity, gas and water supply sectors witnessed a large influx of low-skilled employment (28.15 per cent). At the same time, almost 20-22 per cent of the outflow of medium-skilled and high-skilled employees is also witnessed by the sector. The situation for the construction and manufacturing sectors remains almost the same as both sectors recorded an influx of low and high-skilled jobs which suggests the opening of the economy after the lockdown phase created employment opportunities for both the level of workforce in the informal economy. A significant dip was seen for all the skill-level occupations in public administration, social and other activities.

In the 1970s, when Keith coined the term 'informal sector', it was all over the world has been an important point of concern. The interest of policymakers toward informality persisted even more in 1991 at the 78th session of the International Labour Conference where discussions about the "dilemma in the informal sector" were made more broadly in both the developed and developing nations. As a result, it underwent a major reworking, and its particular characteristics and dynamics were better understood. Hence, the International Labour Conference in 2002 made major advances in the discussions surrounding informality by expanding its concept from "Sector" to "Economy" through which it does not only include the production-based concepts but also the peculiarities of labour.¹² Furthermore, the tripartite members of the conference came to an extensive agreement on the importance of addressing the vulnerability of workers in the informal economy as they are neither registered nor acknowledged in any official records. This led them unidentified in the labour market and not covered under benefits such as social protections, labour laws and other safety nets which resulted in frequent struggles for their fundamental principles and rights at work.¹³

While it poses various challenges such as activities with market values but without formal registrations, and difficulty in measurement; different experts around the globe have dissimilar thoughts about what should be included in the formalization of the informal sector, the issue of whether and how to formalize the informal sector is at the centre of the policy discussions around it. For some, informal activities should come under tax and have a permanent registration while few support the shifting of informal labour into formal waged employment, nevertheless, doing so, will require additional creation of formal jobs which will facilitate informal workers in recognition form.

12 The Informal Economy and Decent Work: A Policy Resource Guide supporting transitions to formality, ILO, 2013 https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_policy/documents/publication/wcms_210442.pdf

13 ILO, 2002

Fig. 1.9: ILO's Decent Work Integrated Strategic Framework Towards Formalization

Source: Employment Policies for Social Justice and Fair Globalization- Report VI, ILC 99th 2010, International Labour Organization

Concerning the high prevalence of informal economy all over the world and as a serious threat to sufficient social protection, inclusive development, quality employment and fundamental principles and the rights at the workplace of the workers, ILO, in the 104th Session of June 2015 embraced the recommendation – Concerning the Transition from the Informal to Formal Economy. However, its recommendation remains only as advice and is not legally enforceable on any member nation. ILO states that each worker and business firm will be covered under the recommendation. Considering the transition to a formal economy as a means to attain decent work, the key objective of the recommendation (R204) is also to focus on protecting formal employment from being informalized. Integration of the macroeconomic and social policies, employment and social protection is another major objective of the recommendation.

1.3. Major approaches ILO recommends toward formalization

General frameworks towards formalisation are as follows:

1.3.1 Legal and Policy Framework

ILO is facilitating in the member countries the transition from informal to formal economy through the development policies integrating into the policy approach. Moreover, members should evaluate the cause and incidence of the informality and implement the right norms and



regulations in place to facilitate the transition. A framework should address the establishment of a regulatory framework; financial security; fostering social dialogue, and equality while excluding discrimination and violence; fostering the MSMEs and favourable business environment; right to education and skill enhancement, infrastructure and technology; nurturing fundamental protection and rights at the workplace; occupational safety.

1.3.2 Employment Policies

For the growth and development of the nations, members shall execute an integrated National Employment Policy that includes employment which contains quality, productive and liberally chosen. This will accomplish the objective of the quality employment creation in the formal economy. Policy should foster economically viable industries; include the macroeconomic policies that promote decent employment; make strategies that create access to freely chosen employment to escape from poverty; promote education and skill development policies that encourage lifelong learning; effective initiatives to facilitate transition from unemployment to long term employment among the disadvantaged groups. Provide updated and significant data about the employment that can be accessed easily.

1.3.3 Rights and social protection

To recognize fundamental principles and rights at work and achievement of decent work with respect members should acknowledge the right to the negotiation of the workers with the abolition of all forms of involuntary employment, child labour and discrimination concerning employment; actions on unfriendly working conditions; extension of various social security among women with the accessibility of child care at the workplace and other measure which promote gender equality; establishing national social protection platforms.

1.3.4 Incentives, compliance and enforcement

Member nations should encourage the successful transition from informal to formal economy and highlight its benefits such as better accessibility to business, markets, education and skill, financing etc. They should also make improvements by reducing the registration process while reducing their fees through ICT; simplifying the taxation process which reduces the cost; creating new instruments or reviewing current instruments to safeguard agreements with existing laws; extending the labour inspections at workplaces where informal economy exists; ensure suitable and remedial actions to ease the transition process; actions to implement the capacity building for significant actors.

1.3.5 Freedom of association, social dialogue and role of worker's and employer's organizations

Member nations should make sure that the workers who are working in the informal economy enjoy the freedom and right to negotiate with their employers. Also, create a system where workers may independently utilize their freedom to unionize and engage in negotiations and discussions and encourage the involvement of the representative of the workers in the informal economy.

1.3.6 Data Collections

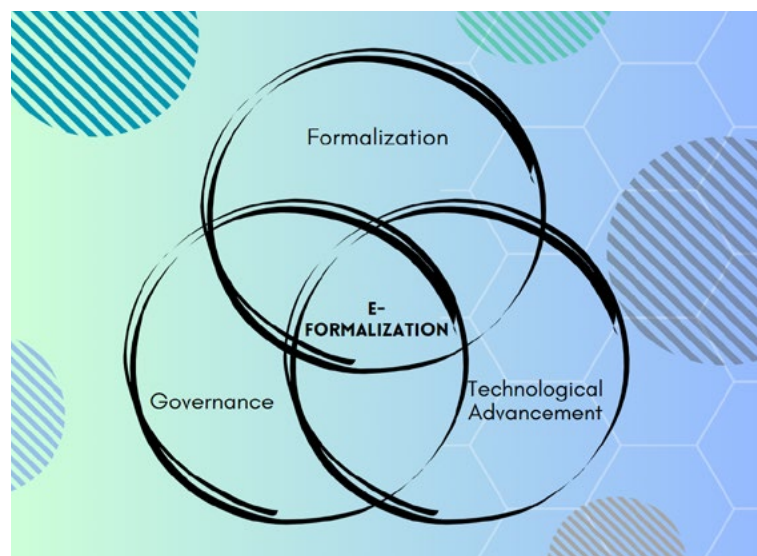
Member nations should collect the data regularly. Additionally, they must also engage in observing and assessing the movement toward the formalization process.¹⁴

Apart from this recommendation of ILO (R204), the Sustainable Development Goal which came into existence in 2015 also talks about decent work and informal employment to total employment.

¹⁴ R204, Transition from the informal to the formal economy recommendation, 2015, ILO

The constant growth of new technologies is transforming the economies, impacting not only methods but also the form and objective of employment among people and economic institutions. The Human Development Report for 2019 suggests a significant shift away from viewing technological advancement as an independent factor. It claims that technical developments do not arise in an isolated environment but are instead deeply interconnected with social and economic processes in society.¹⁵ This basic reinterpretation highlights the agency present in human behaviour by acknowledging technological evolution as the purposeful, inevitable result of human effort. As such, the report argues that governments can actively influence the direction of technology progress, steering it in the direction of advancing human development. The interaction between modern technologies, governance and informality has been studied from a variety of perspectives. Policymakers acknowledge the vital importance of how technological advances can influence institutional public policy to combat informality in upcoming future. Several governments are progressively promoting the use of new technology to simplify and smooth the transition from informal to formal economic activities as it has the potential to completely transform the execution of formalization regulations in the near future while relying on access to the internet.

Fig. 1.10: Coinciding Different Aspects that Contribute to e-Formalization.



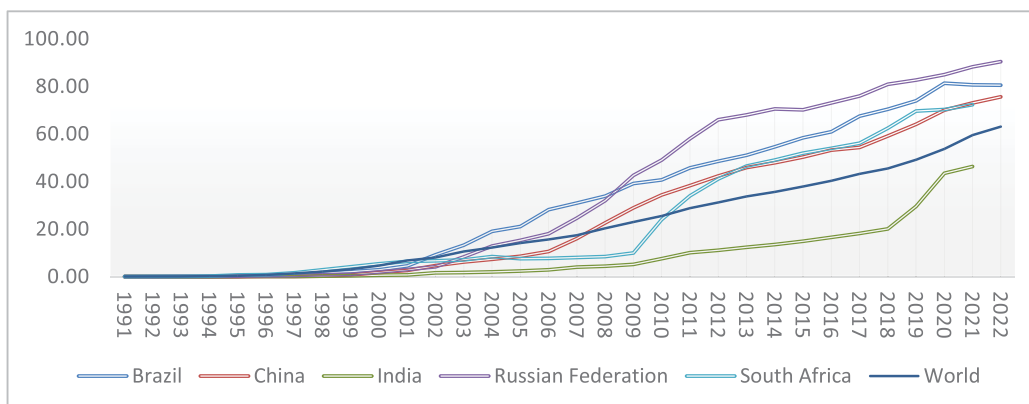
Source: Conceptualized by Author

1.4 Public Policy Approaches Adopted at Country Level

India has experienced a notable increase in internet penetration over the last ten years, fuelled by both the social isolation caused by the COVID-19 pandemic and the country's rapid technological improvements. The percentage of people who used the internet regularly increased from 7.5 per cent in 2010 to 46.31 per cent in 2021. The internet use increased twofold between 2018 and 2021, indicating an exponential rise that is consistent with worldwide trends in internet adoption.

15 Human Development report, 2019, United Nation <https://documents1.worldbank.org/curated/en/816281518818814423/pdf/2019-WDR-Report.pdf>

Fig. 1.11: Individuals Using the Internet (% of population)



Source: World Bank Database. Authors Calculation

To overcome the digital gap in rural India, the government of India has adopted substantial Panchayat-level efforts. These include initiatives for high-performing Panchayats, as well as financial and technical aid for their capacity building, which would enable them to efficiently manage delegated tasks. One such initiative was BharatNet, a significant rural telecom initiative, that intends to deliver equal broadband connection to all Gram Panchayats (about 2.5 lakh) throughout the country.¹⁶ This allows for the introduction of a variety of service providers, including mobile operators, ISPs, and content providers, clearing the pathway for e-health, e-education, and e-governance projects in distant locations. It was approved by the Government in 2011 and then phased down in 2016, and has made great progress. As of January 1, 2024, a 676,996 km optical fibre cable network had been built, connecting 209,481 Gram Panchayats. In addition, 797,505 Fibre-To-The-Home (FTTH) connectivity and 104,675 Wi-Fi hotspots have been constructed to provide connectivity throughout the last mile, bringing critical online services within rural areas.¹⁷ These programmes demonstrate the government’s determination to close the digital gap and modernise rural India using innovation and technology.

The burgeoning popularity of the internet has become a catalyst for India’s economic transformation. Digital technologies are increasingly harnessed to empower individuals, accelerate economic growth, and enhance e-governance. One tangible example lies in the burgeoning e-commerce sector, fuelled by the growing acceptance of electronic financial transactions. This shift towards cashless transactions, actively promoted by the government, has significantly bolstered the growth of e-commerce in India, creating new avenues for entrepreneurship and economic activity. India’s digital revolution goes beyond financial gains. By providing more people with access to information, education, and communication tools, increased internet usage encourages social inclusion. Additionally, e-governance programmes use technology to increase public service efficiency and transparency, which promotes citizen participation and institutional confidence.

As in the previous example, with the accelerated digitalization process, the Indian government has made some crucial initiatives in recent years to formalise the informal sector, which has resulted in several notable breakthroughs in the Indian economy. By acknowledging the International Labour Organization’s 204th recommendation, which recognises the internalization of digital processes in nations transitioning from informal to formal economies, the formalization process gained momentum in India with the government’s approval. India has successfully been able to reduce the scale of its informality throughout the sectors as a key

16 PIB, 2023 <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1944990>

17 Universal Service Obligation Fund, Ministry of Communication, Government of India <https://usof.gov.in/en/bharatnet-project>



government measure. This has been even proved by State Bank of India report in 2021 which says the Informal economy in India has shrunk from 52 per cent of its GDP in 2017-18 to 15-20 per cent of GDP in 2020-21.¹⁸

In the last few years, the government have introduced numerous significant measures to reduce informality while addressing the diversity of the nature of work in the informal economy using ICT and technological advancement, institutional collaboration and convergence. For instance, the introduction of Goods and Service Tax in 2017, the monthly EPFO payroll report, which offers information on firms paying the first ECR (Electronic Challan-cum-Return) in a certain month, is one of the sources to examine the amount of formalization. The estimate by SBI shows that 36.6 lakh jobs have been officially formalised as of August 2021 based on the data. e-Shram portal, the first national database for unorganised labour, comes next. In the first two months following its introduction, 5.3 crore unorganised employees (as of October 27) have registered, with 62 per cent of workers falling within the age group of 18-40 years. NCS portal, a one stop online platform for employers and job seekers. The implementation of many schemes was a significant step towards formalization like the MUDRA scheme which makes easier access to formal credit, the scheme aims to bring informal businesses into the formal sector. E-formalization practices in India played a crucial role in facilitating policy integration, enhancing transparency, and promoting inclusion in the formalization process. It has undoubtedly eased the whole process and minimized the need for physical paperwork, digital documentation and online registration. India has adopted a range of policy approaches to tackle informality, spanning tax reforms, labour reforms, financial inclusion initiatives, and skill development programs which we will discuss in the upcoming chapter.

The enormous unorganised sector that makes up a large percentage of India's labour population poses a special challenge to the country's efforts to formalise its economy. On the other hand, new advancements provide interesting opportunities for faster advancement. Following 2016, India saw an increase in efforts centred around the gig economy and digitalization, which might provide doors for quick formalisation faster than in other countries.

This encouraging trajectory was knocked off course by the worldwide epidemic. Wide-ranging economic effects were seen, with the informal sector appearing to be disproportionately affected. Despite this setback, an odd phenomenon developed: a growth in digital platforms, especially in the delivery and transportation industries, driven by a greater dependence on social distancing measures during pandemic.¹⁹ Complex analysis is necessary in light of this contradictory reality, which is marked by simultaneous devastation and digital development inside the informal realm. Even though the pandemic's immediate effects caused informal workers great challenges, the emergence of digital platforms points to a possible long-term formalization trigger. Because of their built-in structure and dependence on technology, these platforms provide new channels for entry into the formal sector, which might lead to opportunities for social security, better working conditions, and more financial inclusion for workers who were previously marginalized. Still, there are several important concerns. How much can these digital platforms help with formalisation, especially in light of the issues with worker exploitation and unstable working conditions in the gig economy? Eventually, formalising India's enormous unorganised economy will probably be a difficult and varied process. Navigating this complex situation requires an understanding of the interaction between the gig economy, the impact of the epidemic, and the promise of digital platforms. India may be able to make use of the special opportunities given by the current situation to create a more robust and inclusive formal economy for all via careful evaluation of these elements in conjunction with well-informed policy measures.

18 SBI, 2021 https://sbi.co.in/documents/13958/10990811/01112021_Ecowrap_20211101.pdf/a4a69fed-e227-6da0-d217-a8474a5ae982?t=1635764900143

19 NITI Aayog report



Chapter 2 : E-Formalization Practices in India

2.1 Major Practices by Government under e-Formalization

The informal sector in developing countries plays an important role in its economic growth and development. It employs the majority of its population and is considered the largest sector.¹ Numerous migrants from different parts of the countryside relocate to urban centres in search of higher quality of life.² In India, if adjusted according to various definitions, the informal economy exists somewhere between 60 per cent and 90 per cent.³ Apart from the agriculture sector, the presence of informality in the labour market is significant in urban or even in the formal sector as casual labour.⁴ But another fact is that national accounting for the informal economy is not possible to capture all the details. In addition to this, it leads to keeping labourers out of reach from social protection and other benefits including their rights.⁵ As a result, the Government of India has made various big initiatives in recent years to transform the informal sector into an organised structure, as a result of which the Indian economy has seen substantial advantages and even rapid progress towards the formalized economy while using the ILO's guidelines of R204, 2015 i.e., Transition from Informal to Formal Economy which advocates for a human-centred approach to maximising technical advancement to foster sustainable development and provide decent employment.⁶

When it comes to digital initiatives, the Indian government officially launched the National e-Governance Plan (NeGP) in 2006, with 27 Mission Mode Projects and eight components by various ministries and central and state governments, which is a decisive step towards computerization by taking advantage of ICT as its key component, which embodied more complex aspects of governance such as commitment to better services to citizens, efficiency, and transparency.⁷ In the past few years, it has reshaped the functioning of Government and has also kept the nation on the road of progress. By combining the core ICT infrastructure that facilitates openness in the whole process, it has proved its potential to reduce cost and time. The process to speed up access to e-Governance has been implemented not only at the national level but also at the state and local level to reach out to the most isolated citizens and each corner of the country.

Various programmes and policy efforts have been initiated to construct the core ICT infrastructure to enhance the e-Governance comprehensively which includes SWAN (State Wide Area Network), SDC, MSDG, NSDG and SSDG with other significant support components consisting of Core policies on human resources, security, and social media in addition to the standards relating to Metadata, Information Security, Interoperability etc.⁸ For example, e-Pramaan is one such initiative which is a national Single Sign-On (SSO) service portal which makes it easier for users to authenticate and secure their access to various government services

- 1 Informal Sector Production, OECD, 2002. <https://www.oecd.org/sdd/na/NOE-Handbook-%20Chapter10.pdf>
- 2 Field, Garry S., 1990 <https://ecommons.cornell.edu/items/3117db58-e606-4d52-bb8c-04de3984b2d0>
- 3 Unni and Naik 2013, NCEUS 2008
- 4 International Monetary Fund, 2019 <https://www.imf.org/-/media/Files/Conferences/2019/7th-statistics-forum/session-ii-murthy.ashx>
- 5 International Monetary Fund, 2020 <https://www.imf.org/en/Publications/fandd/issues/2020/12/what-is-the-informal-economy-basics>
- 6 ILO, 2015 https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meeting_document/wcms_377774.pdf
- 7 Ministry of Electronic and Information Technology. (<https://www.meity.gov.in/divisions/national-e-governance-plan>)
- 8 *ibid*



through mobile and other electronic devices. As an inclusive platform and a Single Window System, it was created to operate with bigger projects such as Adhaar cards, PAN, driving license etc. which helps to reduce the time and effort required to manage numerous credentials.⁹ GI Cloud is another initiative (also known as MeghRaj) for cloud services the Indian Government took in 2014 which accelerates the e-services using the ICT components. With the help of various cloud service providers, the Government has implemented the services across the country for efficient and smooth functioning which can be classified into three such varieties i.e., Basic Cloud Services which offers storage, networking, security etc.; Advanced Cloud Services include multiple-step authentication, SSL certificate management, analytics services etc; Managed Services which involve backup and disaster recovery as a service. To Boost the Cloud-based services, many National Data Centres (NDCs) have been set up in various regions of the Country i.e., Delhi, Pune, Bhubaneswar, Hyderabad and Guwahati.¹⁰ Over 18,000 Virtual Servers have been acquired and allocated to over 1100 Ministries/Departments for e-governance initiatives to accommodate the programmes envisioned under the Digital India Programme and the expanding requirements of existing Projects.¹¹

One of the key initiatives by the Indian government in 2015 on the NeGP's founding day was Digital India, which placed a broad emphasis on the country's digital transformation and how it will strengthen its economy and society. Under the initiative, various programmes and projects were implemented to promote digital literacy and infrastructure in the Country. It undoubtedly helped to augment the formalization process in the country such as the enrolment of employees on the Employee Provident Fund (EPFO);¹² acceleration of a cashless economy in which all the financial transactions must take place and be recorded in the virtual form;¹³ introduction of GST to make the indirect tax system more transparent, reliable and fast;¹⁴ JAM (Jan Dhan, Adhaar and Mobile) trinity which has helped to bring the people from the marginal group into the formal economy;¹⁵ registration of informal workers on the platform such as e-Shram portal;¹⁶ successful vaccination of millions of citizen during a pandemic by formally registering on CoWIN portal through Adhaar Card¹⁷, the introduction of PRAGATI as a modal platform to boost the intergovernmental communication with real-time presence to bring e-accountability and e-transparency in the system etc.¹⁸ to encourage the whole formalization process thus covering the informal economy into formal and legal manner. The study finds that, in recent years, there has been a significant transition in the formal economy with respect to considering the factors of changing human skill patterns and increasing higher education in India.¹⁹

This chapter details in depth the several more significant actions the Indian government has taken over the years to speed up the formalisation of the Indian economy. These actions have been distributed into diverse perspectives and are detailed below.

9 e-Praamaan, MeITY, Government of India. (<https://epraamaan.gov.in/>)

10 Press Information Bureau, 2022 <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/dec/doc2022128141601.pdf>

11 NIC, Telangana State. (<https://ts.nic.in/infrastructure/>)

12 PIB, 2021 <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1705409>

13 PIB, 2018 <https://pib.gov.in/newsite/PrintRelease.aspx?relid=183178>

14 PIB, 2018 <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1535747>

15 PIB 2021 <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1755394>

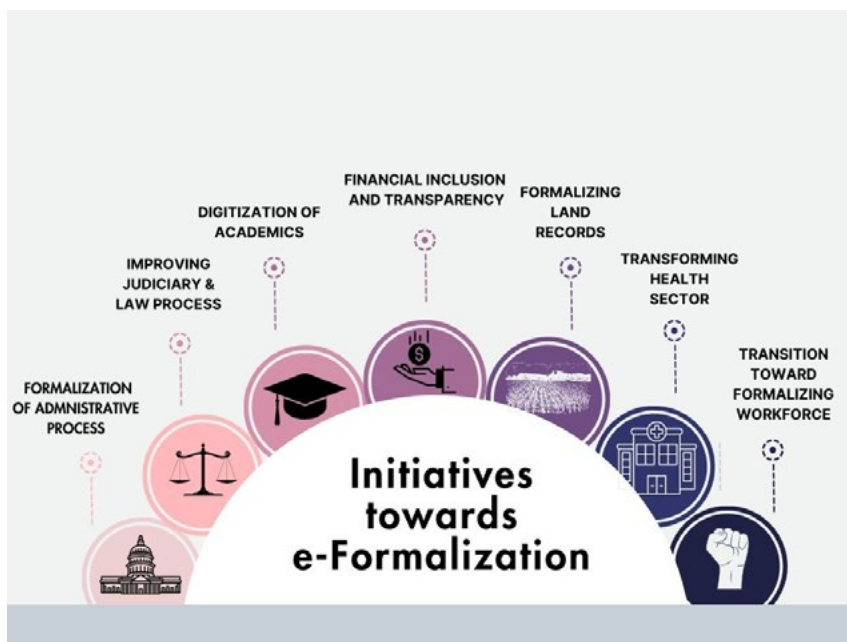
16 Ministry of Labour and Employment, Govt of India <https://eshram.gov.in/>

17 PIB, 2021 <https://pib.gov.in/PressReleasePage.aspx?PRID=1732812>

18 Ministry of Electronic and Information Technology, Govt of India <https://www.meity.gov.in/pragati-20-pro-active-governance-and-timely-implementation>

19 Natarajan, 2020

Fig. 2.1: Initiatives Toward e-Formalization in India



Source: Conceptualized by Author

2.2 Initiatives towards e-Formalisation in India

1. Workforce Transition towards Formalization

a. e-Shram²⁰ Portal for the registration of unorganised workers

As discussed, the majority of the workforce in India is engaged in the unorganized economy which does not consist of any formal record of the workers. It was necessary to bring these unorganized workers into a formalized economy to highlight them and provide accessibility to various social security and protections²¹. COVID-19 was the time when unorganized workers suffered the most which forced the Government to register them formally. Hence, the e-Shram portal was launched in 2021 to develop the National Database for Unorganized Workers (NDUW) to register almost 38 crores of unorganized workers.

The database is the first to be implemented at the national level which will include street vendors, domestic workers, migrant workers, gig workers, platform workers, construction labourers and others who are engaged in the unorganized sector. This will use the Adhaar number of the workers to be registered for authenticity which will include each and every detail of them such as name, occupation, address, date of birth, nature of occupation, education and skill qualification etc. Apart from this, the portal is also integrated with the Pradhan Mantri Shram Yogi Maandhan (PMSYM) to enable the workers to register with the social security platform which will provide Rs. 3000 per month after the age of 60 years to unorganized workers. In the initial quarter of 2023, the analysis shows that 40 per cent of the registered workers are already listed with PMJAY under the Ministry of Health and Family Welfare.²²

20 e-Shram portal, Ministry of Labour and Employment, Government of India. <https://register.eshram.gov.in/#/web-dashboard>

21 Dhanya, 2018

22 PIB 2003, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1906432>

**Table 2.1: Sector-wise Registered Workers on e-Shram Portal (million)**

Occupational Sector	Number of Registered Workers	Occupational Sector	Number of Registered Workers
Agriculture	152.77	Electronics	7.81
Domestic and Household Workers	28.21	Tourism and Hospitality	3.87
Construction	26.34	Healthcare	3.15
Apparel	18.25	Tobacco Industry	2.51
Miscellaneous	12.57	Office Administration and Management	2.30
Automobile and Transportation	8.16	Retails	2.27
Capital Goods and Manufacturing	6.86	Handicraft and Carpets	2.19
Professionals	0.77	Beauty and Wellness	1.94
Gem and Jewellery	0.67	Food Industry	0.97
Printing	0.47		

Source: e-Shram database, Ministry of Labour and Employment, Government of India

Note: Specified Data in the table is fetched from October 2023.

At the end of October 2023, almost 29 crore unorganized workers were registered under the different professions listed in the table above. Workers in the agriculture sector are highest in number with more than 15 crores followed by domestic workers (2.8 crore), construction workers (2.6 crore), Apparel (1.8 crore) and so on. While looking at the gender-side registration, female workers had the highest share of registration with around 53 per cent rest 47 per cent of the registered workers were male. Similarly, talking about the age group, around 61 per cent of the workers were youth aged between 18-40 years, followed by 22.84 per cent of workers between 40-50, around 15 per cent were above 50 years while 1.38 of the registrants were between 16-18 years age group.

b. Job related services through NCS Portal²³

To transform the national employment service to offer a range of job-related services, the Ministry of Labour and Employment under the Digital India initiative launched the National Career Service (NCS) portal in 2015. By offering a centralised platform for companies and job seekers, the NCS portal helps to formalise the job search and placement process through additional services such as career assistance, internships, vocational guidance, job matching and information related to skill enhancement while assisting the majority of youthful applicants. This can expedite the process of matching talents to job needs, increasing transparency and efficiency. Portal initiatives connect with the people with its three key pillars i.e., nationwide establishment of Model Career Centres; connection with the states for job agreements; a well-designated ICT-based platforms.

During 2022-23, employers reported registering around 35.7 lakh²⁴ vacancies on the NCS

²³ National Career Service, Ministry of Labour and Employment, Government of India <https://www.ncs.gov.in/>

²⁴ Press Information Bureau, 2023 <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1915543#:~:text=Around%2035.7%20lakhs%20vacancies%20have,%25%20compared%20to%202021%2D22.>



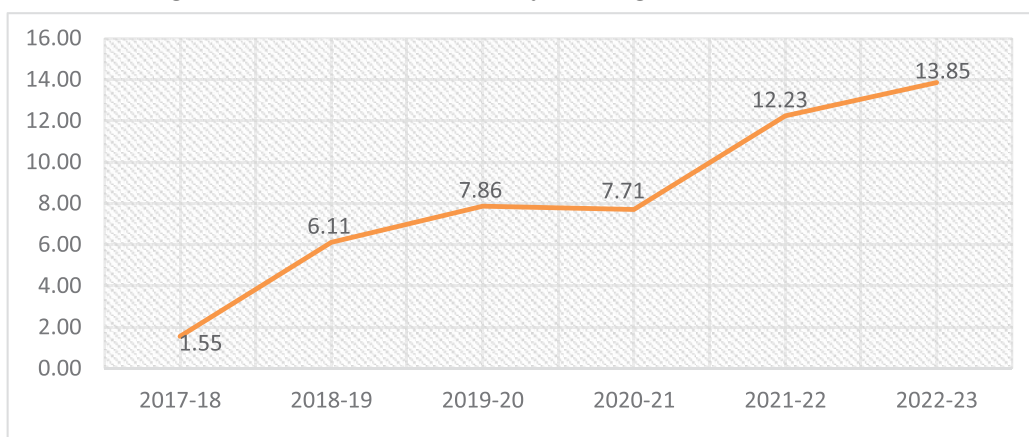
portal which is 175% higher than the previous year i.e., 13 lakhs. This rise in vacancies has been recorded across all the sectors. On the 28th Aug, 2023, more than 1 million active vacancies were registered by employers from different sectors on the portal which is almost double active vacancies in may month of 2023.²⁵ From one million, one-third of the vacancies are open for newly entered candidates just after completion of their education. The variety of industries represented among the opening positions on NCS suggests that there is an increase in job possibilities in the nation as a whole. The sectors with the most reported open positions were the Finance & Insurance industry with 51 per cent, the Transport and Storage sector with 13 per cent while other industries, including manufacturing, IT & Communications, operations & support, etc., accounted for around 12 per cent of the job openings.²⁶ In this way, the portal enables to creation labour market information system electronically, by eliminating the need for physical visits and paperwork processes while encouraging wider participation in the formal economy.

c. EPFO Portal²⁷ to provide social security to employees

Employment Provident Fund Organization (EPFO) was established in 1951 and provides social security to employees is the largest organization in terms of the beneficiaries covered and financial transactions. Digitalization of the service was initiated in 2016 when its online portal was launched that allot separate 12-digit Universal Account Number (UAN) to each member ID which will same for the entire lifetime. Even if an employee changes the organization his UAN number will not change. It provides various facilities such as nomination, enquiring about the balances, settling claims and registering online cases. Apart from this, few other benefits also a member can avail of are easy transfer and withdrawal of the claims, online passbook, KYC update etc.

Till the end of October 2023, around 16 crore people are subscribers at EPFO with tremendous growth in the last five years. During the 2022-23 financial year, 13.85 million additional members were enrolled on Provident Fund²⁸ which is around a 13 per cent increase from previous years which accounted for 12.23 million new subscriptions.

Fig. 2.2: Trends in Net New Payroll Registration (in million)



Source: Employee's Provident Fund Organization, Ministry of Labour and Employment.

25 Press Information Bureau, 2023 <https://pib.gov.in/PressReleaseframePage.aspx?PRID=1953024>

26 *ibid*

27 Employment Provident Fund Organization Dashboard, Ministry of Labour and Employment, Government of India <https://mis.epfindia.gov.in/ChartDashboard/>

28 PIB, 2023 <https://pib.gov.in/PressReleaseframePage.aspx?PRID=1925883>



d. Unorganised Workers Social Welfare Scheme- PM Shram Yogi MaanDhan (PM-SYM)

The schemes run under the Ministry of Labour and Employment; Govt of India is a social welfare scheme specifically for unorganized workers. It is meant for old-age protection who are mostly engaged in brick kiln workers, vendors, domestic workers, rag pickers, agriculture workers etc. covering 42 crore other such unorganized workers in the country. This program extensively and indirectly leads the way to its contribution to the formalization process by registering the workers formally with real time tracking given below in Table 2. The data can be helpful in targeting and identifying the informal labourers for future welfare initiatives.²⁹

Table 2: Statewise Registered workers in the PMSYM welfare scheme

State	Card issued	State	Card Issued
Haryana	825217	Kerala	15598
Uttar Pradesh	676237	Delhi	10452
Maharashtra	608034	Chandigarh	4349
Gujarat	389067	Manipur	5835
Chhattisgarh	231017	Nagaland	4971
Bihar	218021	Arunachal Pradesh	2925
Odisha	185773	Meghalaya	5774
Jharkhand	136122	Andaman & Nicobar Islands	2346
Madhya Pradesh	179647	Puducherry	5942
Andhra Pradesh	170752	Goa	1989
Rajasthan	132025	Dadra & Nagar Haveli & Daman & Diu	1648
Karnataka	135705	Mizoram	1164
West Bengal	113389	Sikkim	326
Tamil Nadu	67542	Ladakh	1435
Himachal Pradesh	47597	Lakshadweep	21
Uttarakhand	39271	Telangana	42491
Punjab	58538	Tripura	33393
Assam	40809		

Source: PMSYM, Ministry of Labour and Employment, Govt of India.

e. SAMADHAN Portal for Registering Grievances of Unorganised Workers

Another such initiative is the platform launched by the Ministry of Labour and Employment, which contributes in part to the formalization process in India by registering grievances of unorganised workers or trade unions and tracking their status online, encouraging businesses to adhere to various labour laws and regulations, and that eventually leads to a formalised economy. Furthermore, the platform allows improved interaction and dispute resolution between employees and employers, preventing concerns from growing into confrontations. It also assists in the collection of data on different labour conflicts and claims, which may then be utilised by the government to identify regions where informalization is common and devise targeted policies to solve the concerns.

²⁹ Ministry of Labour and Employment <https://labour.gov.in/brief-pm-sym-ww>



f. **Startup India**

Programme launched in 2016 by Government of India has significant contribution in formalising the Indian economy. It aims to make a robust ecosystem for fostering the innovation and startups in the country³⁰. Here are the few significant way through which the programme is contributing to formalisation. It is helping in establishing a research atmosphere such as incubators, innovation hub and research park. Policies aiming at lowering regulatory costs and speeding up patent applications have been introduced, strengthening regulatory assistance and promoting innovation and intellectual property protection. Giving entrepreneurs priority when it comes to assisting their worldwide market expansion has made it easier to enter markets. The project has also placed a strong emphasis on developing skills by incorporating entrepreneurship into training programs and curricula for schools. Growth in startups has added a great deal to the formal employment sector by creating a lot of jobs and encouraging skill development. Furthermore, companies are being encouraged to operate legally and follow rules thanks to the promotion of digital infrastructure and the simplification of compliance procedures. When taken as a whole, these initiatives have significantly increased economic growth, innovation, and job creation in India, underscoring Startup India's important influence on the formal sector.

g. **eSkill India**

eSkill India's extensive initiatives focused at skill development and employment generation play a vital role in the economy's formalization. It improves the employability of the Indian workforce by providing a wide range of skill development programs that address soft as well as technical abilities in a variety of industries, including manufacturing, IT, and healthcare. In order to ensure that the skills taught are in high demand, the organization works closely with industry to identify skill gaps and provide training programs that are relevant. Furthermore, flexible access to educational resources is offered by eSkill India's digital learning platforms, extending the reach to underprivileged and rural places. It also formalizes individual talents through accredited certification programs, making it simpler to get official work and decreasing informal labour. Moreover, eSkill India encourages job creation, helps new enterprises formalize, and offers training in business skills to promote entrepreneurial endeavors. The organization enhances the effectiveness of its programs by collaborating with government initiatives like PMKVY and the National Skill Development Mission. Additionally, eSkill India provides job placement and matching services, which successfully link competent workers with companies and lower the number of informal employment. Furthermore, eSkill India emphasizes the value of formal work and skill development through advocacy and awareness campaigns, which helps to change people's perspectives and motivate more people to look for formal job possibilities. Through the provision of accredited certificates, the resolution of skill shortages, and the facilitation of job placements, eSkill India is a key player in the formalization of the economy.

2. **Financial Inclusion and Transparency**

Fostering digital transactions in the country was a new initiative taken by the government, and the event has been a huge success, getting appreciation from all around the world. One of the key objectives of digital India is to make the financial system more quality-based, transparent, and accessible to the general public around the clock while also assisting in formalising the Indian economy. At the initial of 2023, 40 per cent of the overall transactions

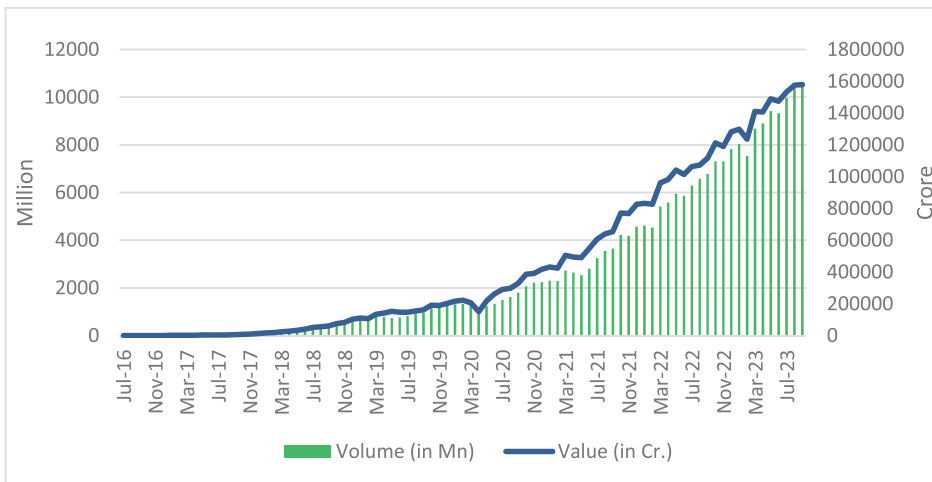
30 Dhanya, 2021

(around 50 per cent of transactions in micropayments) were digitally in India which also signifies the behavioural shift of citizens toward the cashless economy.³¹ Hence, we will look at the few major steps to augment the financial inclusion in the country that have been mentioned below:

a. Bharat Interface for Money-Unified Payment Interface (BHIM-UPI) to encourage digital transaction

A domestic payment system called Bharat Interface for Money-Unified Payment Interface (BHIM-UPI) became the major backbone of the digital transactions launched in 2016 which was created by the National Payment Corporation of India (NPCI) to enable e-payment through banks directly and with the major objective to promote the use of technology in financial matters among citizen. This has transformed the way transactions are done in India while targeting to push as many citizens as possible into the formal economy. It works with various authorized banks and 24 third-party UPI-based applications, using which customers can transfer money to any bank account instantly without revealing other’s bank account information. The effort aims to make mobile-based cashless transactions quick, trustworthy and safe.³² Since 2018-19, digital payment has seen drastic growth of more than 200 per cent. This paradigm shift in digital payments has been reflected in both the volume and the amount of transactions.

Fig. 2.3: Augmenting Unified Payment Interface (UPI)



The UPI-based transaction has recorded over 15 lakh crore which is 44 per cent y-o-y and 4 per cent m-o-m increment in July 2023. Economic Survey 2022-23 of India reported 121 per cent of average increment of UPI transactions in value and 115 per cent increment in volume between 2019-22.³³

b. Direct Benefit Transfer (DBT) to curb corruption through unified and reliable platform

The portal was first implemented in 2013 as a platform to help the recipients receive their payment fast and easily while reducing the middlemen which will help to curb corruption in the country. It was launched as mission mode project to modify the way the government services are provided with the help of the Central Plan Scheme Monitoring System to serve as the standard system for DBT processing. The whole framework is unified with reliable payment platforms such as the National Payment Corporation of India (NPCI),

31 PIB, 2023 <https://pib.gov.in/FeaturesDeatils.aspx?NoteId=151350&ModuleId%20=%202>

32 BHIM UPI, National Payments Corporation of India <https://www.npci.org.in/>

33 PIB 2023 <https://pib.gov.in/PressReleasePage.aspx?PRID=1894929>



Reserve Bank of India, and other operational banks in India such as Regional Rural Bank, Public, Private and other cooperative banks operating almost 313 government schemes from fifty-three different ministries. Aadhaar is desired to get one due to the fact that offers a unique identification and helps to target the intended beneficiaries.

DBT resulted in the acceleration of the government's effectiveness, productivity, accountability, and openness while enhancing public trust in the governance. Earlier, the traditional system was inefficient in transferring the benefits to every beneficiary in a shorter period, reflecting various lags in transparency and financial inclusions. DBT emerged as a revolutionary system where beneficiaries can receive money directly into their bank account using the Adhaar Payment Bridge by enabling households in both rural and urban to be individually linked with government programmes. A few major benefits under the DBT are financial assistance to the farmers in the form of fertilizers or crop insurance, payment to the MGNREGA workers, transfer of compensation for Pradhan Mantri Awas Yojna, transfer of scholarship for Junior Research Fellow, Research Associate, National Fellowship for students with disabilities, Direct Cash Transfer for food grains and many more. DBT covers the schemes into two different categories, i.e., Cash Transfer.³⁴

Fig. 2.4: Annual Financial Records of Direct Benefit Transfers (DBT) Scheme

	No. of Transaction(Cr)	Total Amount Transfer(Cr)
2019-20	438	381,631
2020-21	603	552,527
2021-22	717	630,264
2022-23	693	716,396

Source: Direct Benefit Transfer, Government of India

Looking at the annual data, both the number of transactions and the amount are increasing significantly year by year. In 2022-23, total of 693 crore of the total transactions were recorded under the DBT with a total amount of 716396 crore rupees which is almost the double transfer amount in the year 2019-20.

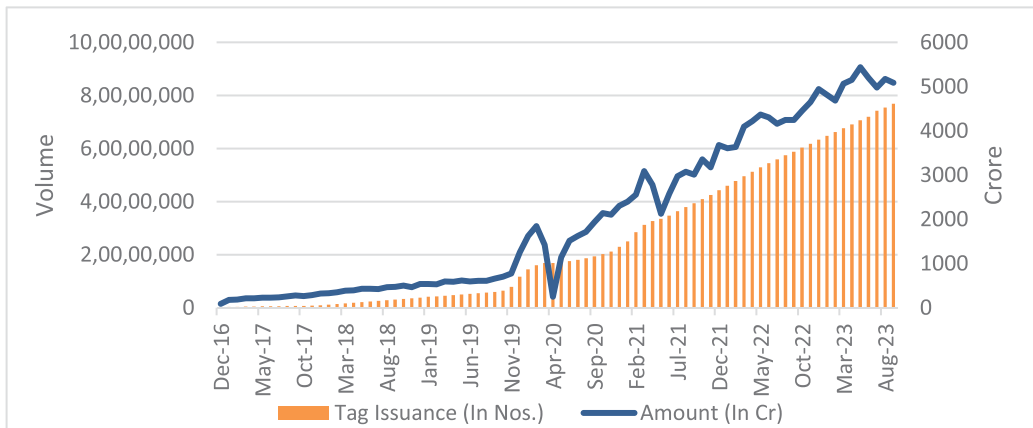
c. Facilitating transportation through NETC FASTag

Another innovative and important step toward e-formalization is FASTag. With the nation's rapidly expanding road infrastructure, the number of motor vehicles on the road was increasing, generating congestion at toll plazas and lengthening their waiting time in the queue. As a result, it was necessary for the government to address this issue and hence introduced FASTag, an Electronic Toll Collection (ETC) system implemented by the National Payment Corporation of India (NPCI) in partnership with the National Highway Authority of India (NHAI) - Ministry of Road Transport & Highway. Using Radio Frequency Identification (RFID Tags) adhered to the window screens of cars, toll tax is collected in digital form at almost every toll plaza on both National and State Highway across the country while reducing the waiting time. Tag is now mandated for every motor vehicle to completely modify the tax collection system on the highways while also achieving the government's goal of implementing a cashless economy.³⁵

34 Direct Benefit Transfer, Government of India, <https://dbtbharat.gov.in/>

35 National Electronic Toll Collection FASTag, National Payment Corporation of India <https://www.netc.org.in/>

Fig. 2.5: Accelerating FASTag Transaction Over the Period

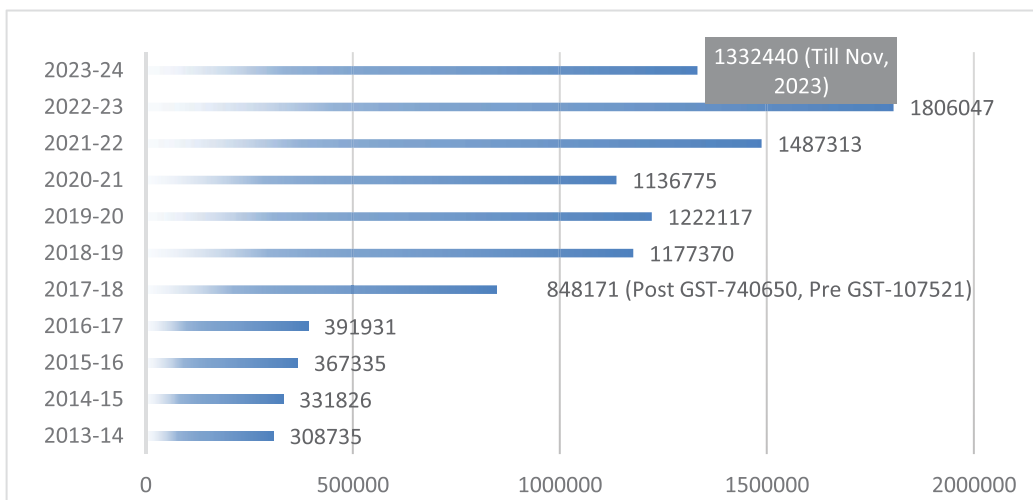


Source: NETC FASTag Statistics, National Payment Corporation of India.

d. Financial transparency through Goods and Service Tax (GST) for economic formalisation

Goods and Services Tax as a reformed indirect tax is seen as a significant advancement in the e-Formalization process for financial transparency in the Indian taxation system. It was announced in 2017 to deliver on several promises, including increased revenue, economic formalisation, decreasing tax evasion and a more cohesive market with much better buoyancy in tax collection. Since its introduction, after six years, it has successfully resulted in the continuous strengthening of the revenue collection which was its primary objective. Data reveals the reformed system has effectively impacted generating higher revenue than before. Tax revenue collection has increased more than 4.5 times in 2022-23 as compared to pre-GST year i.e. 2016-17 (figure). In terms of the increased e-formalisation of economic activity under the reformed GST system, the overall number of authorised GST evaluated in June 2023 was more than 200 per cent higher at 1,40,91,249 compared to 44,35,653 in 2017.³⁶

Fig. 2.6: Annual Revenue Collection of Pre and Post GST Era (in crores)



Source: GST Council, Government of India

36 A Statistical Report on Completion of 6 years of GST https://tutorial.gst.gov.in/offlineutilities/gst_statistics/6YearReport.pdf



It is encouraging and heartwarming to consider India’s progress in the future potential of GST for formalizing the Indian economy since this would lead to higher revenue and financial inclusion for people that were previously excluded as well as micro and small companies. The benefits of putting tax reform and digitalization building blocks together will show up in our macro and micro-level indicators in the coming years.

e. Digitalizing Land Records : DILRMP MIS 2.0 to Restructuring Land Record System

More than half of India’s workforce is involved in agriculture, either directly or through indirect means. Hence, making the land record management system in transparent form is of utmost importance to bring it into the formalized system. As a result, the Government of India launched the National Land Record Modernization Programme (NLRMP) in 2008 with an objective to restructure the land record system in India. Further, it was later converted into the Digital India Land Record Modernization Programme (DILRMP MIS 2.0) completely funded by the central government in 2016 in the wake of the Digital India Programme with target of making an Integrated Land Information Management System (ILIMS) across the country till 2023-24. It includes various mechanisms such as digitalization of land records and registrations, survey/resurvey, training and capacity building, records rooms at decentralized levels.

Fig. 2.7: State-wise Total Numbers of Generated ULPIN Account

State/UT	ULPIN Generated	State/UT	ULPIN Generated
MAHARASHTRA	25,831,502	HARYANA	921,685
JHARKHAND	22,733,164	GOA	789,875
MADHYA PRADESH	20,330,743	PUNJAB	409,511
GUJARAT	2,717,799	UTTARAKHAND	8,200
ANDHRA PRADESH	2,000,000	RAJASTHAN	237,551
ODISHA	490,471	JAMMU AND KASHMIR	758,356
WEST BENGAL	249,200	TRIPURA	61,729
ASSAM	168,753	MIZORAM	535
KERALA	79,570	UTTAR PRADESH	516
TAMIL NADU	2,958	BIHAR	19,755,630
LADAKH	2,796	SIKKIM	361
CHHATTISGARH	854	HIMACHAL PRADESH	1,281
DADRA & NAGAR HAVELI/DAMAN & DIU	433	NAGALAND	20

Source: Department of Land Resource, Ministry of Rural Development, Government of India

Another component under this program is the Unique Land Parcel Identification Number (ULPIN) i.e., having 14-digit identification number based on the land parcel’s longitude and latitude coordinates, which is made possible by extensive mapping. When loading the geo-referenced shape file into BhuNaksha, the ULPIN or Bhu Adhaar system is created utilising the Electronic Commerce Code Management Association (ECCMA) and Open Geospatial Consortium (OGC) guidelines which helps to keep transparent and updated records of land and easily sharing of the database across the stakeholder while protecting government land.

Till May 2023, total of 97.55 million land have been assigned ULPIN or Bhu Adhaar number. Maharashtra has the highest number of electronically registered land followed by Jharkhand, Madhya Pradesh, Bihar, Gujarat, Andhra Pradesh etc. As an outcome, the system would formalize land records in India, which is a continuous process aimed



at developing a comprehensive and precise system of documenting property ownership and rights. It is a necessary step towards establishing a more transparent and equitable land market in India.

f. SVAMITVA

SVAMITVA has been a major factor in formalizing the rural sector. The program successfully ends land ownership conflicts and creates transparent records for future transactions by giving rural property owners formal titles. To guaranteeing security, this official acknowledgement of property rights makes it easier for landowners to get loans from banks and other financial organizations by leveraging their property as collateral.

This improves their access to credit. As a result, investing in small enterprises, agriculture, and other economic endeavors is more advantageous for rural populations, leading to the promotion of economic growth. It further increases openness and lessens the possibility of false claims and disputes by creating accurate and current land records using drone technology and GIS mapping. These thorough land records increase money that may be used for public services and infrastructure by helping local governments properly assess and collect property taxes. The design and execution of infrastructure projects, including as roads, water supply, and sanitation, which are crucial for boosting the local economy and raising living standards in rural regions, are also made easier by the clear land records.

By integrating more economic activity into the official sector, the SVAMITVA Yojana reduces reliance on informal institutions and practices by formalizing the ownership of property while boosting the economy as a whole and widens the tax base. The SVAMITVA Yojana plays a critical role in augmenting the economic capacity of rural regions and fostering wider economic expansion.

3. Boosting Administrative Process with Formalization

a. E-governance initiative e-Office for transparency

e-Office was initiated as a Mission-Mode project as an e-Governance initiative which intends to promote an efficient way of government's day to day activities in much transparent, clear and responsive manner. The technology also improves productivity, quality, data security and integrity over the manual and age-old procedures in government offices with an electronic files system. Various departments under the Central and state governments are part of this project. It includes some important features such as creating, uploading modifying the document, online form submission, MIS reports, online service books, instant messaging and email, e-sign, citizen interface etc.

b. Government e Marketplace

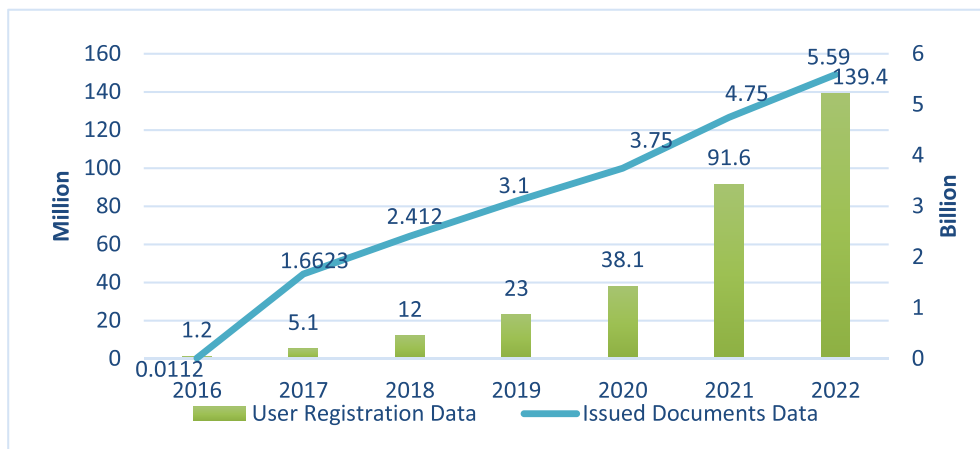
Through a number of mechanisms, the Government e Marketplace (GeM) greatly improves the formalization of the economy. Platform creates an efficient and transparent platform for public procurement that helps to reduce corruption and increase accountability. It also makes sure that all procurement transactions are carefully documented and traceable, which lowers the possibility of fraudulent activities. By standardizing the purchasing procedures across different government departments and public sector units, GeM ensures uniformity and consistency which minimizes discrepancies and improves procedural cohesiveness. Additionally, the platform's promotion of digital payments lessens reliance on cash transactions, making tracking and auditing easier and more effective. Due to its ability to provide small and medium-sized businesses (SMEs) access to market, it is essential to their integration into the formal economy. By helping numerous SMEs that may have functioned unofficially to become officially recognized, this inclusion helps to grow the formal marketplace. GeM's procurement workflow automation lowers

administrative expenses and delays which in turn promotes formal operations and wider commercial engagement in government procurement. GeM’s broad data collecting and analysis capabilities improve policy development and governance by providing insightful information on market trends, supplier performance, and procurement efficiency. Moreover, GeM encourages lawful adherence and fair competition, strengthening the cornerstones of the structured economy by guaranteeing equal opportunities.

c. Digi-Locker for safe digital document storage

In keeping with the agenda of Digital India, the Ministry of Electronics and Information Technology (MeitY) has led the creation of DigiLocker, a cloud-based platform designed to serve as a flagship programme for safe digital document storage which collaborates with internet giants like Dropbox and Google and aims to offer residents with readily accessible digital copies of their private data that can be downloaded. It acts as a centralised digital store for a variety of papers, including Aadhaar cards, PAN cards, lab results, passports, insurance policies, vaccination certificates, educational records, certifications etc. DigiLocker, which is accessible at all times and from any location using a user’s mobile number, enables individuals to carry their important papers with ease. The platform has a broad network of 1783 issuers who actively contribute to its enormous content. DigiLocker’s crucial goal is to offer citizens a single, complete digital wallet that contains all of their private documents. To do this, the platform is constantly incorporating new government-issued citizen-centric papers.

Fig. 2.8: Year wise User Registration and Issued Documents



Source: Digilocker Statistics.

DigiLocker has emerged as a pivotal attempt within the Digital India programme to play a major role as an e-formalization process, striving to empower citizens with safe and convenient access to their necessary documents, thereby optimising bureaucratic procedures and encouraging a digital ecosystem.³⁷

4. Computerization of Judiciary

a. National Judicial Data Grid (NJDG) for speedy case disposition

NJDG is an integrated Mission Mode project that was developed as part of the e-Governance Plan for the Indian Judiciary System based on the “National Policy and Action Plan for Implementation of Information and Communication Technology in the Indian Judiciary-2005” with objectives of improved decision making, transparency,

³⁷ Pib, 2022 <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1811368#:~:text=DigiLocker%20aims%20to%20empower%20citizens,issued%20citizen%2Dcentric%20proof%20documents.>



efficiency, accountability, better coordination, single data source. It acts as a means of monitoring and evaluating pending cases while reducing the judgment timing. It assists in providing timely inputs for policy choices to eliminate delays in case disposition and case pendency. Additionally, it enables greater oversight of judicial operations and institutional challenges, making it an effective resource management tool.

The Department of Justice's e-Committee and the Supreme Court of India are partners in its execution and currently, it is being implemented in all three tiers of judiciary. It was planned to launch into different phases. The first phase began in 2007 with the installation of modern technology that provides a basic computerized environment in the courts including LAN, hardware, Case Information Software (CIS) etc in the judicial complexes and concluded in 2015. More than 14000 courts were computerized. Another phase (Phase II) began in 2015 with the implementation of 18735 districts and subordinate courts around the nation, including 99.4 per cent of court complexes interconnected via WAN. The project included the implementation of WAN, Case Information Software (CIS), Live streaming of court proceedings, Video Conferencing, e-filing, e-Sewa Kendra, SMS, email and eCourts App services etc. This is a significant advancement toward the eFormalization of judicial services, with enhanced transparency along with faster justice delivery while reducing paperwork and manual process.

5. Transforming the Health Sector through Formalization

a. Ayushman Bharat Digital Mission (ABDM)

The flagship programme Ayushman Bharat Digital Mission (ABDM) was initiated in 2021 to make the health sector digitally inclusive by promoting the e-Formalization of health records. Accordingly, the Scheme advocates for ABDM integration with health locker applications so that people have additional options for organizing and preserving digital records.

It aims to achieve completely paperless medical consultations and, consequently, greater accuracy in any interaction between the patient and the medical service provider by maintaining our focus on the digitalization of health records. Further, through digital health records, ABDM may also facilitate to access financial inclusion. From its launch date, within two years, more than 49 crores of ABHA IDs in almost all states have been generated with 2.28 lakh healthcare professionals brought under ABDM.

Fig. 2.9: Numbers of Ayushman Bharat Health Account created (in million)

State/UT	ABHAs Created	State/UT1	ABHAs Created
Uttar Pradesh	58.97	Delhi	7.78
Madhya Pradesh	41.66	Jharkhand	7.00
Andhra Pradesh	41.09	Uttarakhand	6.31
Maharashtra	40.36	Himachal Pradesh	4.69
Gujarat	38.99	Puducherry	1.03
West Bengal	29.54	Chandigarh	0.67
Odisha	25.88	Meghalaya	0.65
Rajasthan	25.36	DNHDD	0.62
Karnataka	24.99	Nagaland	0.57
Chhattisgarh	18.87	Manipur	0.56



Bihar	18.20	Tripura	0.55
Assam	17.29	Goa	0.51
Telangana	16.62	Andaman And Nicobar Islands	0.43
Kerala	14.68	Mizoram	0.42
Not Yet Updated	13.13	Sikkim	0.39
Haryana	10.15	Ladakh	0.37
Jammu And Kashmir	9.27	Arunachal Pradesh	0.32
Punjab	8.47	Lakshadweep	0.09
Tamil Nadu	8.18		

Source: Ayushman Bharat Digital Mission, National Health Authority, Government of India.

Note: Data in the table included as of Oct, 2023

Various entities such as CoWin, eHospital, Reproductive and Child Health (RCH) under the Ministry of Health and Family Welfare, PM-JAY, Government of Andhra Pradesh and many other public and private entities have contributed to ABHA related health records. Through this, the Indian government can make great progress towards formalizing the healthcare sector by executing a holistic approach that solves the problems of informality and utilises the promise of ABDM

6. Digitization of Academics

a. SWAYAM: Single Window Services of Educational Resources

Study Webs of Active Learning for Young Aspiring Minds (SWAYAM) Portal was launched in 2017 by the Ministry of Education in order to provide various educational resources free of cost at a single window where anyone can access and reap the knowledge. It includes courses from 9th class to postgraduation in specific areas of expertise to enhance the Gross Enrolment Ratio (GER) and guarantee that each learner in the nation is entitled to the highest education possible at an affordable cost. Portal offers resources into multiple Indian regional languages i.e., Hindi, Kannada, Malayalam, Tamil, Bengali, Telugu, Gujarati, Marathi etc. Several benefits of the portal are empowering candidates with knowledge and skills, time-to-time progress records, credit transferring, enhanced effectiveness of MOOCs, etc.

The portal is being coordinated with several educational units such as AICTE, NPTEL, UGC, IIM-Bangalore, NCERT, NIOS, IGNOU etc. offering more than 10 thousand courses (431 courses of NIOS and 257 courses of NCERT available).³⁸ Looking at the overall course enrolment for a session of January 2023, around 3.54 million candidates were enrolled while in the next session, it was increased to more than 3.64 million. Portal also includes 4.1 lakh students' enrolment for NCERT courses, while more than 34 lakh students have registered for NIOS courses.³⁹

b. Academic Banks of Credit (ABC) Portal

The service was implemented by the Ministry of Education in the wake of the National Education Policy, 2020. It has been designed to make it easier for students to move between higher education institutions (HEIs) within the nation and pursue a variety of degrees and diploma courses therefore reducing already existing strict barriers and offering new options for life-long learning for them. This is accomplished through a

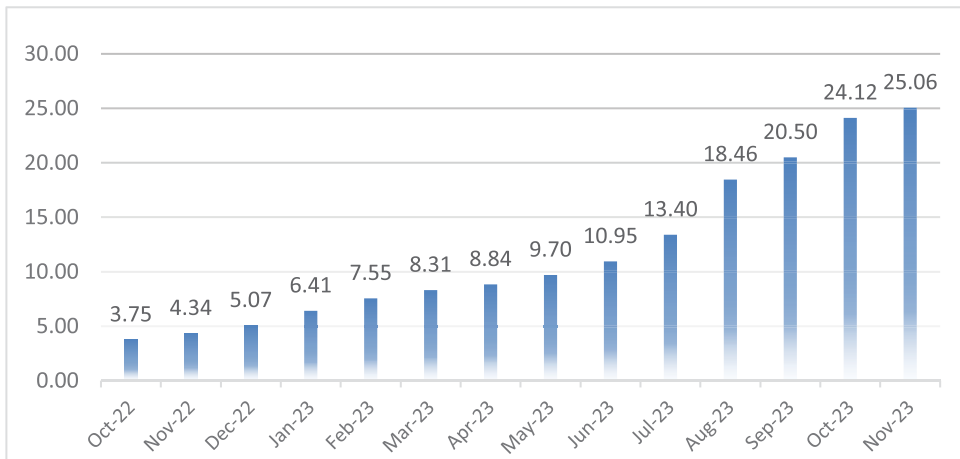
38 PIB 2023, <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1945057>

39 Ibid.

proper credit verification, accumulation and transfer system from one programme to another. A student has a variety of admission and departure choices and can obtain a degree from any Higher Education Institution. Also, students can easily transfer from one institution to another, saving themselves the three-year commitment for which they must have a specific number of credits in their account in order to graduate. It cuts out the need for traditional transcripts/certificates/degrees while also allowing for simple verification and exchange of academic information enabling real-time credit monitoring, reducing handling of paperwork, and enhancing openness for both institutions and students.

After its launch last year in 2022, the number of registered candidates on the portal has seen tremendous growth over the period. As of the latest, November month recorded the highest total registered candidates with 25.06 million students while the overall registration of 166.47 million candidates from the date it was initiated. More than 1650 educational institutions such as AICTE, Central University, Deemed University, State University and its Colleges, Private and Autonomous institutions etc have been connected with the ABC portal till the end of 2023.

Fig. 2.10: M-o-M ID created on the Academic Bank of Credit portal (million)



Source: Academic Bank of Credit, Ministry of Education, Government of India

These few instances of government efforts highlight the ongoing e-formalization process in India, which is assisting in the transformation of the whole structure by moving towards formal economy while delivering efficiency and saving the time and money of the general public.

c. PENCIL (Platform for Effective Enforcement for No Child Labour)

Launched as part of the “Digital India” initiative, the Pencil Portal is an online platform by India’s Ministry of Human Resource Development that attempts to improve transparency and accountability in the world of employment, with a focus on the issues pertaining to child and bonded labor. By monitoring and reporting incidents, this platform is essential in controlling child labor, helping to end this unlawful activity and guaranteeing children’s enrollment in school.

The portal also serves as a complete database for the informal sector workforce, which makes it easier to formulate policies and provide benefits. In addition, the Pencil Portal acts as a grievance redressal system, allowing employees and concerned individuals to express their voice over child labor-related issues which improves openness and guarantees that illegal employment practices are promptly addressed. It also facilitates the execution of skill development programs by detecting the needs and skill gaps in the



workforce. This improves employability and aligns workers' abilities with the needs of the marketplace.

Moreover, it promotes fair employment practices, lessens exploitation, and keeps businesses accountable by requiring registration and adherence to labor regulations. By providing targeted initiatives and plans, the data gathered through the portal helps policymakers integrate the informal sector with the formal economy. By taking these steps, the Pencil Portal makes a major contribution to improving working conditions, formalizing the economy, and promoting economic inclusion.



Chapter 3 : Impact of Pandemic on Accelerating the Use of e-Formalization Practices

3.1 Background

More than two billion workers worldwide depend on jobs in the informal economy for their livelihoods. The COVID-19 pandemic has had a substantial impact on nearly 1.6 billion of these workers, resulting in a significant decrease in their earnings¹. The pandemic has been a global tragedy, causing a huge loss of life and posing immense challenges to our health, food systems, and employment by inflicting havoc on our economies and societies. Millions of people were in danger of becoming extremely poor due to the increasing crisis of job and income loss, decreased decent work and the large number of populations facing food insecurity during this period. In 2021, there were an estimated 828 million people facing food insecurity, marking a record high for global hunger. This alarming number indicates a whopping 150 million cases since the start of the COVID-19 pandemic and a notable rise of 46 million from 2020. This was especially hard for those who worked as informal labourers and did not have access to sick leave, enough savings for the future or the option to work from home. The problem mainly persists in low and lower-middle-income countries as most of the people working in these nations are informal. According to the ILO, the total loss in working hours was 3.5 per cent and 4.7 per cent in lower-income and lower-middle-income nations respectively.² This pandemic economic impact has generally impacted women more than males.³ Further, individuals who already endured a disadvantage in the job market, such as women, young people, the elderly, and migratory workers, have seen bigger employment losses than other groups.

Despite the Indian economy experiencing significant growth for almost four decades⁴, most of its working population still depends on jobs in the informal sector. Caste, class, and gender disparities that already existed both spatially and socially were made worse by the pandemic. Some studies⁵ argue that the job losses experienced by the lowest rank of scheduled castes were three times as great as those experienced by the upper castes. Low human capital individuals who held precarious jobs were more susceptible to losing their jobs and experiencing extreme discomfort.⁶ Additionally, the effects of the pandemic were not gender-neutral. It is well known that women have historically had low labour force participation rates in India;⁷ the pandemic extended the gender wage gap even deeper. It affected their health adversely and raised the fatality rate as well as led to lower wages, job losses, and increased poverty, especially among informal women workers. However, during the period, technology and digitalization created new job opportunities like gig and platform economy leading to the idea of e-formalization, where governments set up digital platform policies for a better future and to prevent during pandemics.

The rapid adoption of various e-formalization practises is one noticeable change, particularly in post-pandemic. Businesses and individuals quickly shifted to digital platforms and technologies to maintain continuity when lockdowns and social seclusion measures became

1 International Labour Organization, 2022.

2 ILO, 2021. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_767028.pdf

3 International Labour Organization, 2021. https://www.ilo.org/employment/Whatwedo/Publications/WCMS_824865/lang--en/index.htm

4 Reserve bank of Australia <https://www.rba.gov.au/publications/bulletin/2020/dec/economic-developments-in-india.html>

5 Deshpande and Ramachandran (2020)

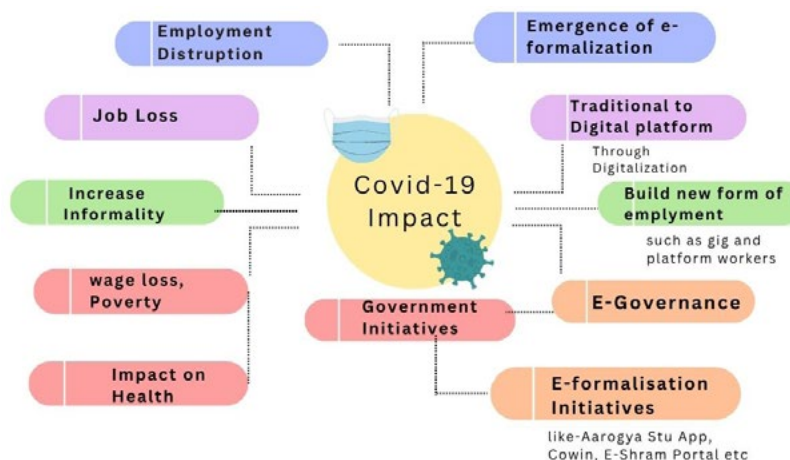
6 *ibid*

7 ILO, 2017 https://www.ilo.org/newdelhi/info/public/fs/WCMS_546764/lang--en/index.htm

essential for public health. The change sped up the formalization of the earlier informal economy and made remote work and Internet transactions much easier. It is impossible to overstate the contribution that Information and Communications Technology and digitalization have made to reduce the effects of the COVID-19 pandemic. Their widespread use has facilitated the delivery of essential services, distribution of life-saving information, assisted social protection delivery when human contact was challenging, enabled cashless transactions, and supported the continuation of some economic activities during lockdowns.

This chapter focuses on informality, unemployment and poverty, the emergence of new forms of employment and digitalization and also examines the pandemic’s significant contribution to the adoption of e-formalization practises. As a response to the pandemic, the Government of India implemented numerous digital platforms in existing or newly started initiatives aiming to save lives and secure the future. The final section of this chapter shows different initiatives in detail by the government to enhance the e-formalization process.

Fig. 3.1: e-Formalisation: A Response to COVID-19 impact



Source: Conceptualized by Author

3.2. Informality during Pandemic

The COVID-19 pandemic had a significant influence on labour markets, aggravating existing imbalances between the informal and formal sectors. During the early phases, informal wage workers faced a higher chance of job loss than their formal employees. This difference was most likely caused by the intrinsic weaknesses of informal labour, such as a lack of social safety nets, low negotiating power, and reliance on industries frequently impacted by lockdowns. While the subsequent economic recovery saw re-employment in formal sectors, informal wage earners continued to suffer, with pre-crisis employment levels still out of reach in a ten-country sample of middle-income nations. According to data from nine emerging nations in Asia, Africa, and Latin America, living standards have declined, with a median income loss of 70 per cent documented throughout these regions. With a median share of 45 per cent, between 9 per cent and 45 per cent of people have had to reduce or skip meals⁸.

On the other hand, those informally self-employed, who experienced the most significant job losses in the second quarter of 2020, have seen a relatively rapid recovery. By the second quarter of 2021, there was a noticeable reduction in their job deficit. This suggests that some individuals who lost their jobs are turning to informal work arrangements to make ends meet financially. Even though the Indian economy has experienced rapid expansion in the past,⁹ the

8 Nath et.al. 2023

9 International Monetary Fund, 2023



informal economy provides income for the far majority of the country's working population. The big impact we are seeing is due to a combination of many factors.¹⁰

3.3 Unemployment and Poverty during Pandemic

India has achieved great progress in poverty reduction in the past few decades, but the global financial crisis caused by the COVID-19 epidemic is expected to significantly worsen inequality as well as poverty.¹¹ Nath researched to analyse the influence of lockdown measures on labour market participation. Before the lockdown, the labour market was strong, with 93.8 per cent of respondents working, 3.6% without employment, and a mere 2.6 per cent not actively involved with the workforce. However, the introduction of lockdowns resulted in a considerable drop in employment (65 per cent), as well as an increase in unemployment (57 per cent) and those outside the labour force (7 per cent). While later relaxation of constraints led to considerable recovery, levels before lockdown were not entirely restored. Employment rates increased by 51 per cent, while unemployment declined by 53 per cent. Notably, the share of people not actively engaging in the labour force grew by 1 per cent, indicating a possible shift in labour market dynamics beyond re-employment.¹² The negative consequences of the pandemic have been felt even more sharply in developing countries since they are low-income economies and have been unable to rely on social safety nets for recovery due to high levels of informality.

The percentage of working individuals living in poverty has been consistently decreasing globally, dropping from 26.1 per cent in 2000 to 6.7 per cent in 2019. However, the COVID-19 pandemic interrupted this progress. In 2020, the worldwide proportion of workers residing with their families below the international poverty threshold rose for the first time since 2000, reaching 7.2 percent resulting in an additional 8 million workers experiencing poverty compared to 2019.¹³ During the lockdown, people earned only half of what they used to before the lockdown or pandemic. In the urban areas, things were even worse, with people making only 40 per cent of what they used to earn. 60 per cent of those who were employed in regular salaried positions before the lockdown transitioned to self-employment and casual work in the post-lockdown period.¹⁴ However, due to the pandemic, many migrant workers working in the informal economy went back to their hometowns or villages since they couldn't find any source of earnings.¹⁵ Many of them survived on the borrowed money from their friends, family and even their employers making their financial status and standard of living even worse. For most of these individuals, they were already living in poverty before the lockdown. This increase in indebtedness among the most impoverished segments of society indicates a heightened vulnerability that is likely to persist even as employment conditions gradually improve.

3.4 e-Formalisation during Pandemic

e-Formality encompasses governmental initiatives that leverage new technologies to simplify and streamline the shift from informal to formal economic activities.¹⁶ Human

10 ILO, 2022 https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_834081.pdf

11 IMF, 2023 <https://www.imf.org/en/Publications/WP/Issues/2023/07/20/Inequality-and-Poverty-in-India-Impact-of-COVID-19-Pandemic-and-Policy-Response-535908#:~:text=First%2C%20India%20has%20made%20significant,temporarily%20increased%20poverty%20and%20inequality.>

12 Nath et al 2023

13 SDG Extended Report 2020, UN Statistics Division https://unstats.un.org/sdgs/report/2022/extended-report/Extended-Report_Goal-1.pdf

14 Nath, 2023

15 MacArthur Foundation 2022 <https://www.macfound.org/press/grantee-stories/migrant-workers-from-east-uttar-pradesh-where-are-they-now>

16 Golman and Ernst, ILO 2022 https://www.ilo.org/employment/units/emp-invest/informal-economy/WCMS_855420/lang--en/index.htm



Development Report, 2019 emphasises how e-formalization may pave the way for formality, increase productivity, and improve equity, hastening the accomplishment of the Sustainable Development Goals.¹⁷ The implementation of other e-formalization initiatives pertaining to the tax system has occurred separately and concurrently. e-Formalization policies that simplify tax and registration procedures, increase access to financial institutions, support mobile payments, and enable e-procurement may also encourage people to formally register for employment.¹⁸ It involves using digital technologies and online platforms to integrate informal economic activities and workers into the formal sector. This transition encompasses electronic record-keeping, online registration and licensing, digital tax reporting, and access to formal financial services as well as encouraging participation in e-commerce platforms and providing training in digital skills. Clear legal and regulatory frameworks are crucial for recognizing and enforcing digital transactions. The initiatives adopted by the Indian government of e-formalization are a deliberate effort to increase efficiency, transparency, and growth in the economy. By incorporating a wider spectrum of economic endeavours into the formal sector, e-formalization can provide new possibilities for both people and businesses, resulting in an even more inclusive and robust economy for all.

3.5 Employment Transformations and Digital Divide

The pandemic has exposed a widening digital divide by quickening technological transformation. The business environment is becoming unpredictable as a result of intense and protracted supply chain shocks, which also increase the possibility of a severe reconfiguration of the geography of production. Due to COVID-19, workers with low skills and based on temporary work lose their employment such as construction, retail and hospitality¹⁹ but simultaneously, because of technological advantages the digital platform creates new jobs.²⁰ The gig economy was rising and becoming a boon for these workers to generate their income. These changes have paved the path for the rise of e-commerce and expanding platform-based businesses. They allow economic transactions to carry on, even during lockdowns, while also reshaping how work is done. In the retail sector, for instance, the job of workers has shifted from interacting with customers during the entire process to primarily just delivering goods. Because of low entry barriers and flexibility most of the workers enter the sector, particularly from developing countries. While this dynamic may reduce overall joblessness, it does raise concerns about the quality of jobs being created during the recovery period.²¹

3.6 The Surge in Remote Work

The COVID-19 pandemic has dramatically impacted the work landscape, causing a considerable shift towards working remotely.²² This tendency, which was first motivated by the need to prioritise public health and physical separation, has long-term ramifications for career flexibility and physical freedom. Certain industries, most notably education and information technology have proven especially adaptive to remote work arrangements.

17 Kring and Leung, ILO, 2021 https://www.ilo.org/employment/areas/e-formality/WCMS_826464/lang-en/index.htm

18 Divald, ILO 2021 https://www.ilo.org/employment/areas/e-formality/WCMS_826464/lang-en/index.htm

19 OECD, 2020 <https://www.oecd.org/coronavirus/policy-responses/from-pandemic-to-recovery-local-employment-and-economic-development-879d2913/>

20 IMG Blog, 2023 <https://www.imf.org/en/Blogs/Articles/2023/03/21/how-pandemic-accelerated-digital-transformation-in-advanced-economies>

21 McKinsey and Company, 2023 <https://www.mckinsey.com/industries/retail/our-insights/adapting-to-the-next-normal-in-retail-the-customer-experience-imperative#/>

22 Marcus, 2023 <https://www.emerald.com/insight/content/doi/10.1108/978-1-80262-049-820231003/full/html>



This success is dependent on two main factors: first, the intrinsic task-oriented nature of many roles in these disciplines, and second, the availability of reliable digital infrastructure and collaborative tools. Internet access and platforms for online interaction and sharing of documents have become critical facilitators of this transformation. Working from home can help balance taking care of home and earning money, especially for women who usually do more at home. However, because of the pandemic, women have an additional burden of task of household work apart from their regular jobs, making it more difficult for them.²³

However, it is critical to recognise that not all occupations are easily adaptable to remote environments. Industries that need physical presence or real-time engagement, such as healthcare and manufacturing, present logistical issues concerning efficiency. The pandemic has certainly increased the trend towards freelance employment, emphasising its benefits for both firms and people. While acknowledging the practical constraints and continual necessity of adaptation, it is obvious that this transition represents a permanent transformation in the working environment, with the potential for increased flexibility, inclusion, and a larger range of job options in the post-pandemic era.

3.7 Post-Pandemic Policies: “Rebuilding for a Stronger Future”

Post-pandemic policies are now focusing on not only immediate relief but also long-term resilience.²⁴ The evolving new technologies in countries like India and China offer opportunities for less-developed nations to engage in simplified industrial activities. With the rise of the digital economy, care economy, and green economy, there are prospects for formalizing work from informality.²⁵ The ILO Global Commission emphasizes the need for sustainability and inclusivity in emerging sectors. Policies for e-formalization, part of broader e-government initiatives, play a crucial role in this transition.²⁶ Stringent measures introduced by the government during the pandemic introduced various digital initiatives such as websites and applications to manage the crisis prioritising the safety of the citizen, and showcasing their proactive use of technology for public welfare.

During the pandemic, the initial step by the Government of India was the launch of a website and app-based COWIN²⁷ for real-time tracking of vaccination delivery to its citizens. Countries’ crucial health system was connected with commercial vaccination centres, administrators and even vaccine recipients, its makers. The portal is also linked with government mobile applications such as the UMANG²⁸, and Aarogya Setu, an online tool intended by the Government for reaching out and monitoring hotspots and aids in the prevention of virus spread. The digital vaccination certificate obtained through the app serves as valid proof of immunization²⁹. Overall, the impact of COWIN on India’s economic recovery is diverse, with one possible component being its indirect influence on formalization. Another application of Aarogya Setu was available in 12 Indian languages which also helped in registering the diverse section of the people. The app provided an extensive choice of access control and formal health clearance, public health monitoring, communication and awareness to avoid any other health issues related to the pandemic.

23 Harvard Business Review, 2021 <https://hbr.org/2021/04/to-keep-women-in-the-workforce-men-need-to-do-more-at-home>

24 OECD Policy Response to Coronavirus, 2020 <https://www.oecd.org/coronavirus/policy-responses/building-back-better-a-sustainable-resilient-recovery-after-covid-19-52b869f5/>

25 ILO, 2019 https://www.ilo.org/wcmsp5/groups/public/--ed_emp/documents/publication/wcms_855420.pdf

26 BSG Working Paper, University of Oxford, 2022 <https://www.bsg.ox.ac.uk/sites/default/files/2022-12/BSG-WP-2022-049%20Indian%20state-level%20policy%20responses.pdf>

27 PIB, 2020 <https://pib.gov.in/PressReleasePage.aspx?PRID=1683001>

28 an interface which enables citizens to utilise numerous government functions on a single application.

29 Ministry of Health and family Welfare. <https://www.cowin.gov.in/>



Another major breakthrough step the Government took during COVID-19 was the RT-PCR application. Developed by the National Informatics Centre, a crucial tool for monitoring the COVID-19 pandemic nationwide was developed to standardize sample data format during the onset of the pandemic. Alongside the Specimen Referral Form by ICMR, NIC created the RT-PCR and RATI mobile apps for Android, iOS, and Windows. These apps aid medical staff at sample collection centres in sending specimens to ICMR labs for COVID-19 confirmation. The app also allows for advance notification to ICMR upon sample collection, providing essential tracking details³⁰.

During the outbreak, the movement of labour was another major challenge not only for workers but also for authorities, workers from urban regions were seen re-migrating in mass toward their hometowns in rural areas. As the virus spread, many migrant workers' jobs were abruptly terminated, leaving them with no income source. Hence, leaving no choice, unaccounted numbers of workers, especially unorganized, migrated towards their place of origin which made it difficult for authorities to make and implement the welfare scheme resulting in exclusion. Hence, the Ministry of Labour and Employment introduced the e-Shram Portal, a verified national database of unorganized workers linked to their Adhaar Card which formalized informal labour, enabling better tracking, social security, and legal safeguards. The initiative has been already discussed in detail in the previous chapter. Along with this, the SAMADHAN Portal, a one-stop online platform launched by the Ministry of Labour assures the security of each worker transparently under one roof by integrating all the stakeholders including employee organization, Government officials, Conciliation Officer (discussed in the previous chapter). SWAGATAM and SU-SWAGATAM streamline the process for the public to meet with government officials, eliminate the need for complex appointment requests and simplify the visitation process encompassing various types of visits, including daily and periodic passes and is operated on a secure, cloud-based platform developed by NIC, featuring an intuitive graphical interface. It can be easily set up in any government office with minimal configuration which automatically stores all pertinent visitor information in a database³¹.

The National Single Window System (NSWS) allows for the identification, application, and monitoring of approvals from all participating State and Central Departments, thus serving as an effective National Single Window System³². Another initiative is PRAYAS which represents a transformational endeavour in India's governance structure using information analysis to enable better decision-making and monitor the progression of different significant government initiatives. At its heart, PRAYAS serves as an integrated system for tracking the execution and reach of over 175 programmes across 63 departments/ministries. This unified view removes disparities and inconsistencies, resulting in an integrated trustworthy source of information for multiple government agencies. PRAYAS also offers useful insights beyond bare statistics by electronically collecting authenticated data from multiple programs' IT systems. Its complex approach examines data across multiple domains, comprising different states, districts, sectors, departments and periods, to reveal critical developments and patterns.³³

With reference to the effective and continuous provision of education to children, the Government during COVID started the DIKSHA platform an e-content platform, where all three stakeholders i.e., children, teachers and parents can be present at the same time called one nation, one digital platform. NISHTHA 2.0 Online, a flagship programme available on the DIKSHA, is an important step towards e-formalization in the Indian education system. It is a rich curriculum that includes twelve general courses and seven pedagogy

30 Indian Council for Medical Research. <https://covid19cc.nic.in/icmr/Login.aspx>.

31 <https://swagatam.gov.in/public/Index.aspx>.

32 <https://www.nsws.gov.in/about-us>

33 National Informatic Centre https://informatics.nic.in/uploads/pdfs/0647ac9d_23_26_eps_prayas_compressed.pdf



courses, giving high school teachers a comprehensive educational experience. The program includes multiple courses that cover a wide range of topics related to education and teacher development covering important topics such as curriculum development, inclusive education, technology integration, personal-social skill development, art-integrated learning, recognising adolescent learners, well-being and health, leadership in schools, vocational education, gender sensitivity in education and assessment practices. This comprehensive curriculum provides instructors with the information and skills needed to manage the difficulties of secondary school while also encouraging holistic growth in their pupils.³⁴

To address the economic disruptions created by the COVID-19 pandemic, the Indian government efficiently used its already existing Direct Benefit Transfer (DBT) mechanism to distribute financial relief to affected groups. This prompt response gave critical help to millions of people affected by loss of employment and income declines, resulting in immediate alleviation and minimising the pandemic's socioeconomic consequences. The DBT programme was especially useful because of its pre-existing structure increasing the government's improved accountability and efficacy, and eliminating leakages by channelling financial aid right into individuals' bank accounts, as opposed to traditional cash-based procedures.³⁵ This focused strategy efficiently served individuals in most need while reducing administrative costs and potential abuse of money. In addition, the pandemic's dependence on DBT has expedited the e-formalization process in India, as stated in the preceding chapter. The rising use of digital platforms for transmitting and receiving help has raised interest in and use of digital banking services amongst formerly without a bank account population. Beyond the current crisis, greater access to finance and proficiency with technology have the potential to create job opportunities and strengthen disadvantaged people. Overall, the swift implementation of DBT during the pandemic not only offered vital assistance but also aided the continuing e-formalization process, demonstrating the possibilities of digital solutions to reinforce social safety nets and encourage financial inclusion in India.³⁶

The Open Network for Digital Commerce is a strategic effort launched after the pandemic with a focus on promoting free and open networks for the comprehensive interchange of goods and services across online platforms. The ONDC structure is built on common-source methodology, open standards, and platform-agnostic protocols for networks. Similar to foundational protocols, ONDC aims to create freely available protocols that cover every aspect of activities associated with the exchange of goods and services. This novel strategy involves the building of public digital services, such as open databases and networking gateways, to facilitate the smooth exchange of data among service providers and users.³⁷ Additionally, allowing both suppliers and customers to use suitable apps of their preference for transactions as well as data sharing enhances flexibility and customer freedom in selecting preferred local enterprises. ONDC develops as an innovative force with the capacity to redefine digital commerce patterns by standardising procedures, encouraging regional vendor involvement, optimising transportation, and, ultimately, increasing customer value.³⁸ Many of the previously discussed (in Chapter II) initiatives also can be included in the post-COVID initiatives in India.

34 PIB, 2022 <https://pib.gov.in/PressReleasePage.aspx?PRID=1849885>

35 World Bank, 2021 <https://documents1.worldbank.org/curated/en/404061625000764344/pdf/Intent-to-Implementation-Summary-of-Lessons-from-Tracking-India-s-Social-Protection-Response-to-COVID-19.pdf>

36 PIB, 2020 <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1616555>

37 PIB, 2023 <https://pib.gov.in/PressReleasePage.aspx?PRID=1941487>

38 PIB, 2022 <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1814143>



Chapter 4 : Summary and Way Forward

The report sheds light on the persistent challenge of informality and also the acceleration of e-formalisation in BRICS countries, with a particular focus on India. Despite India being the fifth largest economy, the major share of its businesses operate in the informal sector. It's crucial for sustainable development and inclusive growth with the transition of these enterprises into the formal economy. The International Labour Organization's recommendations, R204, offer a framework to guide this transition. Various initiatives have been put in place, such as demonetization, which pushes for a shift towards a cashless economy, prioritizing digitally recorded financial transactions. The introduction of BHIM-UPI, Direct Benefit Transfer (DBT), Goods and Services Tax (GST) etc. plays a key role in enhancing transparency and efficiency in the financial system while platforms like the e-Shram portal, National Career Service help to arrange an organized and structures way of the labour database system which will further help to take various steps in making social security and other benefits for them.

The economies of BRICS countries (Brazil, Russia, India, China, and South Africa) significantly impact the global economic landscape and these countries' economic integration demands a broader method of transmuting the informal economy into a formal economy to achieve sustainable and inclusive development. In India, the informal economy comprises a significant share of the workforce involved in agriculture and low-skill sectors. This sector's massive size obscures national accounting and excludes many labourers from social protection and benefits. Hence, the Indian government has executed proactive measures to formalise the informal sector, following Recommendation 204 ILO guidelines. Moreover, in the wake of the COVID-19 pandemic, the country witnessed unprecedented changes, notably the rapid adoption of e-formalization practices across various sectors.

National e-Governance Plan (NeGP) was one of the key strategies leveraging digital initiatives to revolutionise government functions by facilitating service delivery, transparency and efficiency. Many programs including SDC, SWAN and e-Pramaan, assist digital inclusion and ultimately e-governance. The Digital India initiative, facilitated the formalisation process through efforts like the e-Shram portal for unorganized workers, the National Career Service (NCS) portal for job seekers etc.

It is also evident that the Bharat Interface for Money-Unified Payment Interface (BHIM-UPI) and Direct Benefit Transfer (DBT) initiatives have promoted Financial inclusion in India. Moreover, financial transparency and economic formalization also increased with the introduction of the Goods and Services Tax. E-Formalization efforts cover various other sectors, including education (SWAYAM and Academic Bank of Credits), health (Ayushman Bharat Digital Mission) and judiciary (e-Courts project), guaranteeing inclusive digital transformation throughout the nation.

Despite various challenges, it is also evident from the previous chapters that the COVID-19 pandemic accelerated the adoption of digital technologies and promoted e-formalization. Notably, to combat COVID-19, the government implemented commendable initiatives such as the COWIN app for vaccination tracking, Aarogya Setu for contact tracing, and the e-Shram Portal for registering informal migrant workers to mitigate the pandemic's effect and help economic resilience. These inclusive initiatives emphasise the government's obligation to formalise the Indian economy, guaranteeing its ability to continue over a long period, and also encouraging inclusivity.

Way forward

E-formalisation is critical since it holds enormous potential in driving the transition from informal to formal sectors. Adopting digital literacy offering tailored education and enhancing



skill development are indispensable steps. To continue this evolution, persistent efforts must be made to bridge the digital divide and encourage inclusive policies. This includes targeted interventions for vulnerable groups, as well as investments in digital infrastructure, technology and literacy programs to support vulnerable groups, including young people, women, the elderly, and migrant workers, in transitioning from informal to formal employment. Investing in training and skill advancement is crucial for supporting unskilled and low-skilled workers to successfully engage with new technologies and digital platforms.

Moreover, ongoing dialogue and collaboration between civil society, industry, and government need to facilitate an enabling environment for formalization. Strengthening regulatory and legal frameworks, together with effective enforcement instruments, is critical in safeguarding the success of the various initiatives of formalisation. Enhancement of data collection techniques will definitely enable better policy formulation and evaluation, and the evaluation of the effects of these policies will provide valuable information to optimise strategies. Through these concerted efforts, India can chart a sustainable and inclusive path towards a formalized economy, driving long-term growth and prosperity for all.



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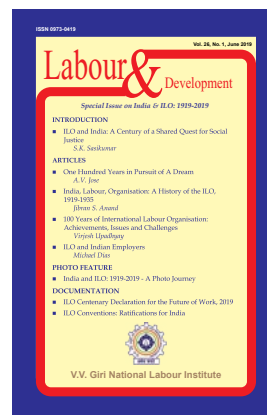
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