



The Status of Self-employed, Contract, and Gig Workers in India: Some Recent Changes

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The measurement of labour input has always been a challenge before the economists aiming to study the contribution of labour in output and productivity. The issue of measurement is also important to understand how the national income is distributed between different inputs, especially labour and capital. The issue of distribution of national income has once again occupied the center stage due to rising inequalities in recent decades and the recent shocks to the economies due to Global financial crisis in 2008 and the COVID-19 pandemic in 2019. Both of these events have led to the waves of anti-globalisation and anti-immigration. In all these happenings, the labour has been the most severally affected and it is the vulnerable among these-the self-employed, the contract workers and the Gig workers, who have borne the maximum brunt of COVID-19.

India has a lot of workers in the informal sector without any social security. These workers are the most vulnerable in any catastrophe. As a result, these self-employed, contract and Gig workers were and still are the worst sufferers of COVID-19. They lost their occupations, and jobs due to severe economic lock downs and restrictions. They did not have alternative employment opportunities. Many of the contract and Gig workers lost their jobs and did not get adequate financial support from the governments. Despite some economic revival, their economic status is still much below the pre-COVID-19 period. However, some policy initiatives have been recently undertaken in India to increase the formalisation of the economy and provide some social security to the workers through changes in the labour laws.

The aim of the paper is to first gauge the exact magnitude of the workers in India in section three, after providing a brief in section two about the data and methodology used in the paper. Then, in section four the paper describes in detail the impact of COVID-19 on the workers, and section five highlights the policy initiatives which have been taken recently to improve the delicate economic status of the vulnerable workers. Based on the outcome of the evidence, policy recommendations have been made in section six to improve the job and income security of these workers.

2. Data Sources and Methodology

The main data sources used for employment are the Employment and Unemployment Survey (EUS) of 2011-12 by National Sample Survey Office (NSSO),¹ Government of India (GOI) and the

¹ NSSO has now been renamed as National Statistical Office (NSO)

recent Periodic labour force surveys (PLFS), which are aimed to bring out high frequency data on employment. The results of the PLFS are not exactly comparable with the earlier quinquennial surveys, and hence have been used with caution. A recent report by Niti Aayog (2022) on India's booming gig and platform economy has also been used extensively.

Based on the activity status of the persons, EUS/PLFS groups them into (i) either in the labour force- either actually working (employed) or are seeking work or being available for work if the work is available (unemployed), or (ii) out of labour force. Those persons who are working are categorized by EUS /PLFS into three broad categories of (i) self-employed- which includes those who worked in household enterprises as -own account workers, or as an employer, or as helper, (ii) worked as wage/salaried employee, (iii) casual labour. The EUS /PLFS also provides several concepts of employment, depending upon the reference period it uses (one year, one week, and each day of the reference week) to determine the activity status. These activity statuses are thus defined as Usual status consisting of principal status and the subsidiary status (UPSS), current weekly status (CWS) and the current daily status (CDS). According to EUS (2011-12) "The usual activity status relates to the activity status of a person during the reference period of 365 days preceding the date of survey and the current weekly activity status of a person is the activity status obtaining for a person during a reference period of 7 days preceding the date of survey."

3. Profile of workers in India

Though the main objective of the paper is to focus on the recent changes in the status of the self-employed, contract (casual) and gig workers in India, but a brief background of the total workforce in India in the recent years is provided for a better understanding.

The workforce participation rate (WFPR) of male and female workers employed in Usual Status (usual principal and subsidiary status or UPSS or UP+SS) in 2011-12 as the benchmark and in all PLFS rounds from 2017-18 to 2020-21 are summarised in Figure 1. It can be observed that there has been a decline in the WFPR for total persons between 2011-12 and 2017-18 and the figure had declined to as low as 34.7 per cent in 2017-18 from 38.6 percent in 2011-12. Even the absolute employment fell during this period from 46.99 crores² in 2011-12 (2011) to 45.5 crores in 2017-18 (2017). Since 2017, there has been a continuous increase in the WFPR in all the subsequent PLFS rounds and the WFP rate has now reached 39.8 in 2020-21 (2020) for total³ persons. The WFPR has also gone up for both total males and total females. However, in general, the WFPR has been much lower among females⁴ than among their male counterparts. It was only

² 1 crore is equal to 10 million

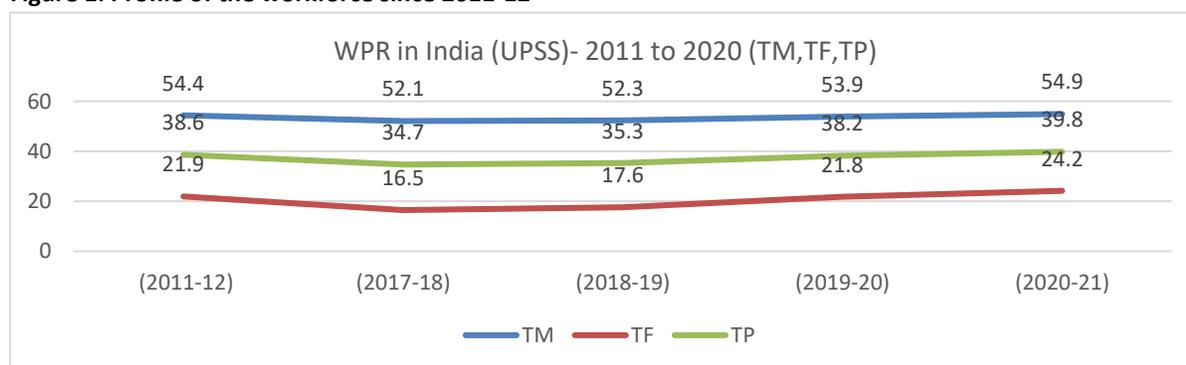
³ Total is of both rural and urban sectors

⁴ It was lower in both in rural and urban sectors as depicted in Appendix Figure A1

16.5 per cent for females against 52 per cent for males in 2017-18, but has increased to 24.2 percent for females and 54.9 percent for males in 2020.

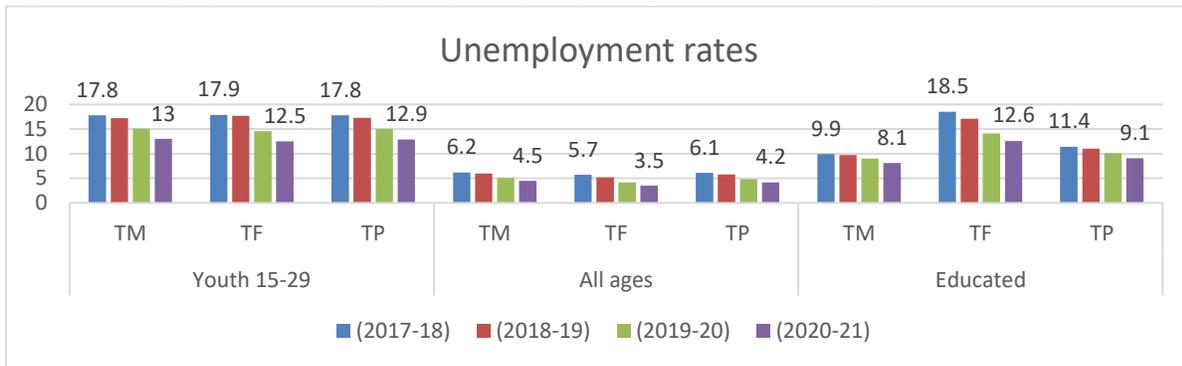
The reason for increased participation by workers in recent years can be attributed to the deteriorating economic conditions in India. The Indian economy has been slowing since 2016-17 with a continuous fall in its GDP growth rate from 8.26 per cent in 2016-17 to 6.8 per cent per annum during 2017-18, 6.53 percent in 2018-19, 4.04 percent in 2019-20 and -8 percent in 2020-21. In a poor economic environment, persons, especially poor and unemployed, cannot afford to wait for ‘good’ jobs and take any job for their sustenance as they may have families to support and their chances of getting any alternative and regular employment are almost nil. It is a ‘distress’ employment because of which the total unemployment rate by usual status which had gone up significantly for total persons from 2.2 per cent in 2011-12 to 6.1 per cent in 2017-18, has come down to only 4.2 percent in 2020 (Figure 2), and is just 3.5 percent for females and 4.5 percent for males. But during the same period, the youth unemployment rate (15-29 years) (Figure 2), though has declined in recent years but still is very high among both males and females and is a great cause of worry because it indicates that India is not able to take full advantage of its ‘demographic dividend’. The unemployment rate among the educated persons (with education of secondary and above) follows a similar trend and is much higher among females in all the years as compared to males. In 2020-21, it is 12.6 percent for females as compared to 8.1 percent for males. So, around 50% of the workforce is not working and a large number is idle and unemployed.

Figure 1: Profile of the workforce since 2011-12



Source: Author’s computations from EUS and PLFS

Figure 2: Unemployment rate for youth (15-29 years), all ages and educated* by UPSS- 2017-2020



Source: Author's computations from EUS and PLFS

*Secondary (10 years of schooling) and above

A number of explanations have been put forward in the literature for significantly lower WFPR among females as compared to males in India. Predominant among them is the 'distressed employment' hypothesis, which argues that females have many household responsibilities -they are the care givers to both the children and the elderly in the family⁵ and tender to many other unpaid household chores. They take up work only during distress and if the economy is doing well, they tend to withdraw from the workforce (Ghose, 2016; Mehrotra and Sinha, 2017). Another plausible explanation is that an increasing number of females are joining and staying in schools and colleges (Mehrotra et al., 2014; Thomas, 2015, Ghose, 2016) or attending to domestic duties (Thomas, 2015). Whatever the reasons, the WFPR of females in India is relatively very low- a mere 27 per cent in 2016, as compared with 80 per cent in Nepal, 67 per cent in Bhutan, 64 per cent in China, 59 per cent in Brazil (Aggarwal and Goldar, 2019).

3a. Employment Status of Workers in India during 2017-18 to 2020-21

It is not only the level and the structure of employment which is key to understand the growth process, but the quality of employment also plays a crucial role. It is true that in India even among those who are employed, there are many who are poor, illiterate, employed as casual labour with relatively low wages, and who are predominantly in the informal sector of the economy where not only they earn lower wages, but have little social security and few days of employment in a year. Basu and Maertens (2009) have raised the issue of insufficient creation of "good jobs" which could help in reducing poverty. Nayyar (2012) has defined quality of employment on the basis of the three parameters—wages, the availability of written job contracts, and the availability of social security benefits. However, wages themselves depend among others, on skills and

⁵ The Niti Aayog is now working closely with ILO to develop the fine print for a care economy and with the Bill & Melinda Gates Foundation as well as with V. V. Giri National Labour Institute to increase the participation of women in the labour force and boost the opportunities for the gig and platform workers (The Economic Times, 16th May 2022).

experience. So, education plays an important role in the quality of employment and one may say that labour with higher educational level is of better quality. Written job contracts and availability of social security benefits are associated with the nature of employment. In regular and salaried jobs, one generally has both, whereas in casual employment especially in informal sector both are missing. Since the quality of employment has been defined on the basis of nature of employment, the written job contract availability, and the social security benefits available in the job (Nayyar, 2012, Papola & Sharma, 2015, Ghose, 2015), based on these parameters it is perceived that the 'best' jobs are regular and salaried ones especially in the formal sector, and the worst ones are the casual jobs in the informal sectors. Some data on quality of jobs in India is presented below.

While Table 1 highlights the distribution of employment in India in the unorganised sector, the Table 2 provides the distribution on the basis of status of employment. Table 1 shows that in 2017-18, more than two-third of total employment was in the unorganised sector and the proportion was almost 70 percent for males. We find an increase in the share of the unorganised sector employment in recent years for both males and females. In 2020-21, three-fourth of the total employed males are engaged in the unorganised sector. Most of the labour in the unorganised sector is contract labour which has the advantage of low cost and flexibility in hiring and firing. Detailed analysis by Goldar (2022) shows that most of the contract workers are hired by plants of size 100-300 workers/or more than 300 workers. The contract workers' share is also high in plants which hire more regular workers. Earlier Singh et al (2019) also found evidence that the large firms, and also the firms producing for export markets are more likely to hire contract workers, whose wages are lower than the regular workers. Chandrasekhar and Ghose (2014) also find that 'contractualisation of work has become a pervasive feature of both public and private sectors in all three major sectors, and is particularly marked in mining, manufacturing industry and some services.'

Table1: Percentage of workers engaged in the Unorganised sector (UPSS)

Period	(2020-21)	(2019-20)	(2018-19)	(2017-18)
Males	75.3	72.9	71.5	71
Females	56.7	56.5	54.1	54.7
Total Persons	71.4	69.5	68.4	68.2

Source: Prepared by authors using PLFS (2020-21) report

PLFS defines informal sector enterprises as proprietary and partnership type enterprises within the non- agriculture and AEGEC sectors. (PLFS, p.58)

Table 2 indicates that the share of workers in regular wage/salaries jobs was just 23 and 21 percent for males and females respectively in 2017-18. However, the share has declined for both between 2017-18 and 2020-21. On the other hand, the share of workers in self-employment has increased for all the workers but the increase is marginal for males from 52.3 percent to just 53.9 percent and is substantial for females and it increased by more than 7 percentage points from

51.9 to 59.4 percent respectively over the same period. However, the opposite trend is observed for casual labour where the share has declined. But still more than three-fourth of the male workers and more than 80 percent of the female workers are in self-employed and casual employment. Most of the self-employed workers are engaged in their own enterprises without hiring any workers. A majority of the self-employed are engaged in agriculture and have very low median monthly earnings, with women earning almost half of a man's earnings.⁶ Thus, taken together the employment in the unorganised sector and in the casual and self-employment categories, one may infer that the quality of employment in India is still very poor.

Table 2: Percentage distribution of workers (UPSS) by Status in employment

Period	own account worker, employer	helper in household enterprises	all Self-employed#	regular wage/salaried employees	casual labour	all workers
Total Persons						
PLFS (2020-21)	38.2	17.3	55.6	21.1	23.3	100
PLFS (2019-20)	37.6	15.9	53.5	22.9	23.6	100
PLFS (2018-19)	38.8	13.3	52.1	23.8	24.1	100
PLFS (2017-18)	38.6	13.6	52.2	22.8	24.9	100
Males						
PLFS (2020-21)	44.8	9.2	53.9	22.7	23.3	100
PLFS (2019-20)	43.9	8.5	52.4	24	23.6	100
PLFS (2018-19)	44	7.6	51.7	24.4	24	100
PLFS (2017-18)	44.1	8.2	52.3	23.4	24.3	100
Females						
PLFS (2020-21)	22.8	36.6	59.4	17.4	23.2	100
PLFS (2019-20)	21.3	35	56.3	20	23.7	100
PLFS (2018-19)	22.5	30.9	53.4	21.9	24.7	100
PLFS (2017-18)	20.2	31.7	51.9	21	27	100

Source: Statement 12: PLFS (2020-21)

A detailed view of the wage/salaried employees however, reveals that a very large proportion of them also do not enjoy the same security of jobs which is generally expected. Table 3 shows that in 2020-21, 64 percent of the wage/salaried employees do not have any written job contract. The proportion is even higher for males than the females. The proportion has however, observed a declining trend – it declined from 71 percent in 2017-18 to 64 percent in 2020-21. Not only this, more than half of the wage/salaried employees were not eligible for paid leave in 2017-18 and despite a small reduction, around 48 percent still are not eligible for paid leave. In regard to the access to social security benefits, the PLFS report shows that in 2020-21 more than half-53.8 percent of the wages/salaried employees are not eligible for any social security benefit⁷ and the

⁶ Mint Report: Stark reality of the Self-employed, 1st October 2019, p. 2.

⁷ For PLFS (2020-21, p.59) survey the following social security benefits were only considered:

proportion has increased since 2017-18 and is even higher for females than males. Thus, from Table 2 and 3, it is observed that not only the proportion of females in wage/salaried employment is much lower than their male counterparts, but also a lower proportion of them are eligible for any social security benefit including health and maternity benefits.

Table 3: Percentage of regular wage/salaried employees who had no written job contract, not eligible for paid leave and not eligible for any social security benefit among regular wage/salaried employees in usual status (UPSS) in non-agriculture sector during PLFS (2017-18), PLFS (2018-19), PLFS (2019-20) and PLFS (2020-21)

Period	percentage of regular wage/salaried employees who had no written job contract				percentage of regular wage/salaried employees not eligible for paid leave				percentage of regular wage/salaried employees not eligible for any social security benefit			
	(2020-21)	(2019-20)	(2018-19)	(2017-18)	(2020-21)	(2019-20)	(2018-19)	(2017-18)	(2020-21)	(2019-20)	(2018-19)	(2017-18)
Males	65.2	68.1	70.3	72.3	49.3	53.1	54.7	55.2	53.1	53.6	51.2	49
Females	61.5	65	66.5	66.8	43.7	49.8	50.6	50.4	55.8	56	54.4	51.8
Total Persons	64.3	67.3	69.5	71.1	47.9	52.3	53.8	54.2	53.8	54.2	51.9	49.6

Source: Statement 16: PLFS (2020-21)

Besides the precarious condition of employment even of the wage/salaried employees, another problem is of the 'poor' among employed, especially among casual and self-employed. The report of the working Group on Employment, Planning and Policy for the XII Five Year Plan (2011) highlighted the problem of the working poor. It pointed out that working poor are not included in the set of unemployed at all. These are the workers who cannot afford to remain openly unemployed and thus fall in to the category of "working poor." Based on consumption expenditure and status of employment, it was reported that in 1999-00 a total of 24.5 percent persons were "working poor" (Report, GOI, 2011) and the proportion was 37 percent among casual labour and 20 percent in self-employed persons. The proportion was higher among rural persons and also among females. In 2004-05 also the "working poor" constituted around 20.5 percent of all persons employed and casual labour still had the highest percent- 31.9. Papola and Sharma (2015, p. 545) states that about one-fourth of the employed are poor and argue that the share may be higher among the casual wage workers because they do not have full time work. So, it is generally low earnings out of their work-either on a self-employed, or on wage basis. Lot of disparities is found in the wages - casual and self-employed in agriculture earned much less than the per capita per day income for the entire population (Papola and Sharma, 2015, p 545). However, according to ILO, the proportion of poor among the age group 15+ population was 21.9 percent in 2011, 13.6 percent in 2015, 8.6 percent in 2019, and 9.8 percent in 2020 and 7.6 in 2021. It is thus clear that the problem of poor among employed still exist but has weakened over

(i) only PF/ pension (i.e., GPF, CPF, PPF, pension, etc.), (ii) only gratuity, (iii) only health care & maternity benefits,

(iv) only PF/ pension and gratuity, (v) only PF/ pension and health care & maternity benefits,

(vi) only gratuity and health care & maternity benefits, (vii) PF/ pension, gratuity and health care & maternity benefits.

Those who were not covered under any of the above social security schemes were considered as not eligible for any social security benefits.

the years, may be due to higher economic growth but we find that the self-employed and casual workers in India are still in a precarious economic condition.

A recent change in the labour market has added to the problems of workers. It is the emergence of new process of production and trade, which has added to a new category of workers namely the 'Gig' workers. We now turn to the status of Gig workers in India.

3b. 'Gig' workers: Nature and Status

Despite its widespread appeal and usage, the term 'gig' is not properly defined. Over the years it has become wider in scope and inclusion of activities. The gig economy can be seen as a part of a wider category of "nonstandard employment" where the work offered is contingent and non-permanent (Kalleberg 2000). Different approaches are adopted in defining the gig workforce, like the length of working relationship, legal classification of workers and the type of work they perform (De Stefano 2016). According to Niti Aayog report (2022, p. 3) "the gig workers are generally engaged in income-earning activities outside of a traditional employer-employee relationship, as well as in the informal sector (Ministry of Labour and Employment, 2020a). When gig workers use platforms – i.e., websites or apps like Ola, Uber, Dunzo, Zomato, Swiggy or Urban Company – to connect with customers, they are called platform workers (OECD, 2019)."

According to Code on Social Security (2020), "Gig workers" means a person who performs work or participates in a work arrangement and earns from such activities outside of traditional employer-employee relationship (section 2(35)), and "platform worker" (section 2(61)) means a person engaged in or undertaking platform work (section 2(60)) which is "a work arrangement outside of a traditional employer employee relationship in which organisations or individuals use an online platform to access other organisations or individuals to solve specific problems or to provide specific services or any such other activities which may be notified by the Central Government, in exchange for payment." Gig workers get the flexibility to work for several employers at the same time. While workers can choose the projects they want to be associated with, companies can manage costs by adjusting their flexible workforce based on the demand. One of the most cited reasons in support of gig work is the flexibility and the freedom from bondage with the employers. While for some the gig economy represents the height of liberty, some others have called it "the new precariat" where the workers are left to fend for themselves.

Gig workers work on various compensation models, such as fixed-fee that is decided during the contract initiation, time and effort, actual unit of work delivered, and quality of outcome or a combination of these. It is also observed that gig workers are relatively younger⁸ and less

⁸ The US had almost 25 percent of gig workers in the age group of 25-34 years, and it was more than 40 percent in Italy and Netherland, about 50 percent under the age of 35 in Germany, UK, Switzerland, & Austria, and 60 percent in Sweden (Mukhopadhyay and Mukhopadhyay, 2021).

educated-low to middle level of education- compared to non-gig workers. They typically work for limited hours in a day and prefer a flexible work schedule. Many of the gig workers may also have a regular job, generally low paying, and may take up gig work as an additional source of income. However, according to the BCG and Michael & Susan Dell Foundation (2021) report 'Gig work is not a new concept in India. With its large informal economy and 'casual workers' segment, India has always had the equivalent of gig work across urban and rural areas - from temporary farm workers to daily-wage construction labourer to household help.' It further adds that 'personal references and offline networks have always operated in India to source and meet the need for on-demand services and what has changed in the past few years is the greater adoption and use of technology to match and deliver on-demand services at scale.'

Broadly, there are two categories of gig work;

- a) those who offer their services as 'Independent contractors' – individuals who consider themselves as self-employed and their 'own boss', and
- b) those who work as 'Contingent workers' and under certain obligations with a company, a bit similar to full-time 'workers' except the right, security and usual benefits.

Researchers have also classified the above two categories into two further classes, gig work in the 'web-based platforms' (e.g., software developers and multimedia, sales and marketing support, professional services) and those who are 'non-platform' or 'location-based (e.g., Airbnb, Uber, Ola, DiDi).

According to the Niti Aayog (2022) 'non-platform gig workers are generally casual wage workers and own-account workers in the conventional sectors, working part-time or full time. Platform workers are whose work is based on online software apps or digital platforms. Location-based platforms allow in-person work at specific locations, such as delivery or driving while web-based platforms enable workers to perform online tasks for clients around the world.' In both groups, however, the service provider invests their own resources (e.g., Uber providing ride-sharing services with the cars owned by the company or shared cars with the passengers), and users pay the fee while the company earns a commission from each payment. Examples of knowledge-based gig workers are largely found under web-based platforms. And 'online reputation' does the marketing for the gig workers since customers read reviews and goes on the basis of rating or scores before deciding to finally make the transaction.

The rise of the gig economy is driven by the emergence of tech-enabled platforms, demand for flexible work arrangements and focus on skills. Gig economy thrives upon the idea of flexibility', allowing people to work as 'independent contractors' who have the 'choice' of working when they want to, how they want to and where they want to. The gig economy encompasses freelancers, online platform workers, self-employed, on-call workers, and other temporary

contractual workers. While the gig economy is prevalent among blue-collar jobs in India, the demand for gig workers in white-collar jobs such as project-specific consultants, salespeople, web designers, content writers and software developers is also emerging. The gig work during COVID-19 also acted as a buffer for income losses arising from unemployment shocks. The gig economy is thus now not only a major part of many economies, including India but is also expected to grow exponentially in future.⁹

However, despite the steep growth in the number of gig workers in the last five to seven years, concerns have been expressed about the presence of control exerted by platforms on gig workers and the lack of rights and status given to these gig workers. They do not enjoy the same social security benefits which are available to other regular employees because they are mostly treated as 'contractors' and not 'employees.' The firms hiring them do not wish to extend these benefits and take responsibility of the extra financial burden and any other liability. The firms argue that increasing cost affects their competitiveness and profitability.

3c. Estimates of Gig Workers in India

Estimates for the 'gig' employment in India have been made by different researchers. According to a report by ASSOCHAM and Primus Partners (2021) India is currently estimated to have more than 15 million freelance workers engaged in projects in different fields of the gig economy. The report by consultancy firm BCG and Michael & Susan Dell Foundation (2021) said that the gig economy can serve up to 90 million jobs in the non-farm sectors in India with a potential to add 1.25 percent to the GDP in about 8-10 years. It finds potential of 35 million skilled and semi-skilled jobs within industry sectors, 5 million in shared services role, around 12 million in the demand for services, and 37 million of unskilled jobs across various sectors of the economy. According to the report, a majority 70 million 'gigable jobs' are in the construction, manufacturing, transportation & logistics, and personal services sectors. The report also added that these jobs will primarily be driven by small business and household demand. The report said its estimates are based on a detailed mapping of job-types across industry sectors to identify opportunity areas and barriers to unlocking demand for gig-based services. A study by TeamLease estimates that gig workers in India increased from 8.5 million in 2016 to 11.7 million in 2017, and 15 million in 2018 (Tiwari, Ram & Roy, 2019). The report further notes that 56 percent of new employment in India is being generated by gig economy companies across both blue- and white-collar workforce. The Taskmo Gig Index report (2022) finds that not only the gig work and employment is expanding rapidly, but it is spreading now to smaller, tier 2 and tier3, towns. It also notes that Millennials and Gen Z (19-25 years) make up to 48 percent of the workforce today. Women, which consist of 28 percent of the gig-force finds it to be a flexible model of work for

⁹ The Niti Aayog also foresees a significant demand for the platform workers in India in the coming years (The Economic Times, 16th May 2022).

India's working women who are able to pick their jobs based on their area of interest, location, availability and experience. Women have been majorly employed in roles related to Customer support, Content monitoring & moderation, Tele-sales, and Audits & Surveys. However, unequal access to digital technologies is a significant hurdle to women's participation in gig work. According to the GSMA Mobile Gender Gap Report 2019, only 16 percent of women in India are mobile internet users. Also, many women are disinterested in joining the gig economy due to the lack of job security and uncertain employment status (Kasliwal, 2020, p.3).

Based on the characteristics of gig workers identified by BCG and Michael & Susan Dell Foundation (2021) report, the Niti Aayog (2022) has also now estimated the number of gig workers in India for the period 2011-12 to 2019-2020. The Aayog has also projected the number for the period 2021-2030. The Aayog has mainly used the supply side and demand side proximate features¹⁰ of the gig workers and has used the employment estimates obtained from the EUS and PLFS.¹¹ The estimates along with some basic features are summarized in Table 4.

Table 4 shows that the total number of gig workers were only 25 lacs in 2011-12 when the gig economy had started taking the present shape and constituted just 0.54 percent of the total employment of 46.99 crores. Of these gig workers, only 26 percent were working in the organised sector¹² and the share was only 16.3 percent of the formal workers.¹³ The picture has changed since then and in 2019-20, the number of gig workers by UPSS has increased to 68 lacs (6.8 million) with a share of 1.33 percent. Simultaneously, the share of gig workers in organised sector and as formal workers has also gone up, indicating that the speed of increase in the number of gig workers is faster in the organised sector as compared to the unorganised sector. It is however noticed that while the absolute number of gig workers has increased continuously in all the three years from 2017-18 to 2019-20, the share of gig workers as formal workers has declined between 2018-19 and 2019-2020. The projected numbers for 2020-21 and 2021-2 are provided in the last two rows of Table 4 and are useful in understanding the impact of COVID-19. The Aayog has also projected the number of gig workers to increase to 23.5 million by 2030.

¹⁰ Some of the characteristics considered are the location-mainly urban, the age-group-mainly 18-45 years, education- between secondary and graduate, income level- below the average, non-agricultural sector, ownership of mobile phones, and having a bank account (Report, pp.14).

¹¹ Please refer to Chapter 2 of the report for detailed methodology of estimation of number of gig workers in India.

¹² Organised sector is taken by Niti Aayog (2022, p.20) to be those workers who work in firms with more than ten employees as is currently the common definition used. The organised sector may have both formal and informal workers.

¹³ Formal workers are those with some social security benefits.

Table 4: Profile of Gig workers in India-2011-2019

Year	Employment	Number of Gig Workers	Share of Gig workers	% Of Gig workers in organised sector	% Of Gig workers as the Formal workers
	(Crores)	(lacs)			
Year	(UPSS)	(UPSS)	(UPSS)		
2011-12	46.99	25.2	0.54	25.9	16.3
2017-18	45.50	52.6	1.16	30.6	18.2
2018-19	46.75	53.9	1.15	35.7	18.6
2019-20	51.10	68.0	1.33	37.6	17.5
2020-21 (Proj)	51.66	77.0	1.49	39.55*	16.43*
2021-22 (Proj)	52.22	87.0	1.67	41.6*	15.43*

Note: Proj is projection by the Niti Aayog and * is projection by the author from the trend in 2018-19 and 2019-20
Source: Niti Aayog (2022)

The Niti Aayog report has also estimated and projected the distribution of gig workers by skill category, and is summarized in Table 5. The Table shows that between 2011-12 and 2019-20, the share of low skill and high skill gig workers has increased and that of the medium skill has reduced. It reflects on the changing nature of work and the skill requirement. While the trend show that the concentration of middle skill workers may continue for few more years but gradually because of the changing nature of work which is becoming more technology based, the demand and share of the high skill work may increase faster. The trend may also be accentuated because of the changing importance of industries and the occupations where the gig workers are employed.

Table 5: Percentage share of gig work employment by skill category

Year	High skilled	Medium skilled	Low skilled	Total
2011-12	17.9	53.4	28.7	100
2019-20	21.9	46.9	31.2	100
2020-21 (Proj)	22.5	46	31.5	100

Source: Niti Aayog (2022), Table 15, pp.25. (2020-21 is projections.)

The summary of the industries and the occupations where the gig workers are at present employed is obtained from the Niti Aayog (2022) and is presented in Table 6 and Table 7. It is evident from Table 6 that the maximum number of gig workers- more than 26 lacs in 2019-20 with a 40 percent share are employed in retail trade, followed by 13 lacs in transportation and storage with a share of 19 percent, and both manufacturing sector and financial & insurance sectors with 6 lacs workers and a share of 9 percent in each. Out of all the four sectors, the maximum increase in the number of gig workers over the previous year 2018-19 has been in trade, and transport & storage. There is however, an expansion in almost all industrial sectors

despite the changing sectoral concentration. From the expansion in different industries and the projections made, it is expected that the gig workers are here to stay and would expand further.

Table 6: Industrial Classification of Gig workers and the percentage share (2017-18 to 2019-20)

NIC-2008	Gig workers in lacs			Change in 2018-19 to 2019-20	The share of Gig workers		
	2017-18	2018-19	2019-20		2017-18	2018-19	2019-20
Manufacturing	5.5	5.4	6.2	0.8	10.50	10.03	9.17
Electricity, gas, steam and air conditioning	0.4	0.4	0.2	-0.2	0.67	0.73	0.33
Water supply, sewage, waste management, etc.	0.3	0.3	0.3	0	0.59	0.49	0.47
Construction	1.2	1.4	2.1	0.7	2.31	2.58	3.06
Retail trade except motor vehicles and motor	19.2	21.7	26.5	4.8	36.48	40.30	38.95
Transportation and Storage	11	9.4	13	3.6	20.86	17.40	19.18
Accommodation and food service activities	3.2	2.8	4	1.2	6.05	5.20	5.94
Information and Communication	4.2	4.2	5	0.8	7.91	7.74	7.39
Financial and insurance activities	4.1	4.8	6.3	1.5	7.78	8.98	9.21
Real estate activities	2	1.5	2.4	0.9	3.77	2.84	3.53
Administrative and support service activities	0.2	0.4	0.4	0	0.36	0.68	0.55
Other education group	0.2	0.3	0.5	0.2	0.38	0.58	0.67
Educational support services	1.2	1.3	1.1	-0.2	2.34	2.44	1.56
Total	52.6	53.9	68	14.1	100	100	100

Source: Niti Aayog (2022)

In Table 7, the occupational distribution of the gig workers highlights the occupations in which the gig workers are broadly engaged. It indicates that some occupations are growing and becoming more important from the perspective of employment of gig workers and one can map the skill requirements of these occupations and accordingly upskill or reskill the existing labour. In terms of occupation, as defined by the National classification of occupation (NOC)-2004, in 2019-20, about 22 lacs are sales and marketing personnel, motor vehicle drivers are 13 lacs, secretary and clerks are 6 lacs, and sales & finance associates are 5 lacs. These four categories together account for around 80 percent of the total gig workers and there has been only a small change in the shares. Out of a total increase of 14 lacs gig workers between 2018 and 2019, the maximum increase of 3.8 lacs has been for motor drivers followed by an increase of 3.4 lacs for Secretaries & clerks, and 1.8 lacs for finance & sales associates.

From the previous discussion of the self-employed, casual, and gig workers it is evident that while the share of self-employed and gig workers has increased in the recent period since 2017-18, the share of casual workers has marginally declined. It is also observed that the social security which is expected to be available to the regular wage/salaried employees, is also not available to more than 50 percent in 2020-21 and the overall status of labour in 2020-21 is precarious.

Table 7: Occupational Classification of Gig Workers in Numbers and the percentage share (2017-18 to 2019-20)

National Classification of Occupations (2004)	Gig workers (lacs)			Change in 2018-19 to 2019-20	share of Gig workers		
	2017-18	2018-19	2019-20		2017-18	2018-19	2019-20
Computing Professionals	1.8	2.2	2.7	0.5	3.44	4.15	3.96
Architects, Engineers and Related Professionals	1	1.6	1.7	0.1	1.88	2.91	2.43
Business Professionals	2.6	3	3.8	0.8	5.00	5.53	5.63
Computer Associate Professionals & Optical and Electronic Equipment Operators	2.6	1.7	1.6	-0.1	4.92	3.16	2.33
Finance and Sales Associate Professionals & Business Services Agents and Trade Brokers	3.3	3.4	5.2	1.8	6.31	6.32	7.6
Secretaries and Keyboard Operating Clerks & Numerical Clerks & Material Recording & Transport	3.4	2.8	6.2	3.4	6.53	5.11	9.05
Cashiers, Tellers and Related Clerks & Client Information Clerks	1.6	1.7	2	0.3	2.97	3.18	3.01
Travel Attendants, Guides and Related Workers	0.7	0.3	0.9	0.6	1.27	0.57	1.27
Housekeeping and Restaurant Services Workers & Personal Care Workers	2.6	3	3.9	0.9	4.99	5.63	5.68
Shop Salespersons and Demonstrators & Stall and Market Salespersons	18.9	22	22.8	0.8	35.98	40.8	33.53
Motor Vehicle Drivers	10.9	9.2	13	3.8	20.80	17.12	19.06
Street Vendors and Related Workers	1.5	1.7	2.6	0.9	2.78	3.19	3.86
Domestic and Related Helpers, Cleaners and Launderers	1.4	1	1.7	0.7	2.68	1.92	2.43
Building Caretakers, Window and Related Cleaners	0.2	0.2	0.1	-0.1	0.44	0.41	0.17
Total	52.6	53.9	68	14.1	100	100	100

Source: Niti Aayog (2022)

4. Impact of COVID-19 on the employment status of workers

COVID-19, caused by severe acute respiratory syndrome coronavirus was detected by China in 2019 and reported to WHO on 31st December 2019- so the name COVID-19. In India, the first case of COVID-19 was detected in Kerala, a southern region of India, on 30th January and then it started spreading to other parts of the country. To restrict the spread of the pandemic, on the evening of 24 March, with 519 confirmed cases and 9 deaths in the country, the Prime Minister of India announced that the entire country would be placed under a "total lockdown" for at least three weeks as a preventive measure against the COVID-19 pandemic. All non-critical businesses and services were ordered closed except for hospitals, grocery stores, and pharmacies, and there was a "total ban" on leaving the home for non-essential purposes. All public transport was suspended. The immediate impact of the lockdown was a complete collapse of economic opportunities and jobs, except for few resulting in a mass exodus of persons on the next day from all the major towns to their native places. It was humungous and was the largest since partition in 1947. With no work and no money, thousands of migrant workers were seen walking or bicycling hundreds of kilometers to go back to their native villages. The lockdown was again

extended on 14th April till 3rd May, and then again extended till 17th May and subsequently till 31st May 2020. So, the total national lockdown remained for 58 days.

The unlocking was gradually and cautiously started from 1st June 2020 and continued till 30th November. The infection rates had started to drop by the end of September 2020 and the daily cases which had peaked in mid-September with over 90,000 cases reported per-day, dropped to below 15,000 in January 2021. However, in February end 2021, India got hit by the second COVID-19 wave.¹⁴ This second wave was very severe from early April 2021 and caused a rapid surge in cases and deaths. Cases started to rise resulting in state-wide lockdowns from April to June 2021. The situation was even worse in US, Europe, and few other countries. More than 6.37 million persons worldwide have died from the start of COVID-19 till July 2022 due to COVID-19, with the highest toll in EU at 1.112 million, followed by US with 1 million deaths, Brazil with 6.75 lacs, and India¹⁵ with 5.25 lacs deaths. Russia, Mexico, Peru, UK, Italy, and Indonesia are the other countries with a heavy death toll. After the widespread use of vaccines in US, Europe, China, Russia, India and few more, the severity of the tolls has reduced but COVID-19 with different strains still exists and infection and number of infected cases are on the rise once again. However, despite the presence of COVID even now, the unlocking of the economies has gradually been done by most of the countries with very few restrictions.

As a result of the COVID-19 restrictions and lockdowns, the disruption was more in the jobs with more physical proximity. Consequently, the most visible impact of COVID-19 was the dramatic increase in employees working remotely. Most impacted industries were education,¹⁶ construction, trade, leisure & travel, tourism, manufacturing, transport, storage, & communication. The impact among the rural non-farm self-employed workers was more on the unskilled workers than the skilled workers (Bairagya, 2022). According to a report by McKinsey Global Institute (MGI) (2020), the women faced more disruption - 1.8 times more than the men due to COVID-19 and left the workforce. Over 52 percent of the pandemic job losses in India were women and more than 22 percent of the female workforce in the unorganised sector were out of the jobs post lock-down (Srinivasan-Mint 26th July 2022, p.6). Using panel data from India, Abraham, et. al. (2022) also find that “conditional on being in the workforce prior to the pandemic, women were seven times more likely to lose work during the nationwide lockdown, and conditional on losing work, eleven times more likely to not return to work subsequently, compared to men.” From the analysis based on the data of a World bank survey

¹⁴ It is cited that due to the decline in the number of cases and the beginning of the vaccination Programme, people started becoming careless, not wearing masks and not following social distancing.

¹⁵ However, the mortality rate varied across the Indian States (regions of India) and was strongly related to the health expenditure as a share of state gross domestic product (Balakrishnan and Namboodhiry, 2021).

¹⁶ It may however be mentioned that the educational institutions-schools and colleges, remained shut for almost two years starting on 24th March 2020. As per the UN estimates the number of crises affected children in the world has increased significantly.

during September 2020, Dutta and Kar (2022) found that “on average, females in rural areas did not have an occupation relative to males in most of the surveyed States.” The reasons cited by the experts for the women leaving the workforce are the burden of both work from home and care giving responsibilities. Also, more women were employed in the industries that were more severely affected by COVID-19 - education, trade, tourism, manufacturing, financial services, etc.

The initially economic impact of the complete lockdown of the economy resulted in the fall in the GDP growth in India to just 3.1 percent in the fourth quarter of 2019-20 as compared to around 6 percent in the corresponding quarter of 2018-19. India was facing the worst recession since Independence. India experienced the highest fall in GDP growth rate of (-) 23.9 percent during April-June 2020. All the crucial sectors like manufacturing, construction, trade, hotel industry saw a decline and slid into negative with manufacturing growth at -39.3 percent, Mining growth at -23.3 percent, Construction growth at -50 percent, Trade & hotel industry growth at -47 percent. With factories and workplaces shut down, millions of migrant workers had to deal with the loss of income, food shortages and uncertainty about their future. Unemployment went up and millions lost employment, while salaries were cut for many others. The incomes just reduced to nil, and it was free food that ensured the survival of the people. Based on a survey of 5000 respondents during the first wave of the pandemic, April and May 20220, the study by Kesar et.al. (2021) also found that during the lockdown nearly two-thirds of the respondents lost their job and those in job experienced a sharp decline in earnings. A report by ILO states that over 400 million informal workers in India may have been pushed further into poverty due to the pandemic. While manufacturing, especially the informal, was the most affected by the strict lockdowns and the migration of labour, the impact on the services sectors varied among different services.¹⁷ Many workers, especially men in the workforce, who could not return to work, moved to self-employment or daily wage work in agriculture, trade or construction, whereas the women had limited options to come back to work (Abraham et.al., 2022).

The agriculture in India had to face the pressure of the migrant labour and it provided shelter to them, mainly through the National Rural employment Guarantee Act (NREGA) scheme.¹⁸ During the COVID-19, the demand and the actual employment under NREGA, which acts a shelter for rural labour and an alternative employment opportunity, went up significantly by the households

¹⁷ Based on their analysis from a survey of 2396 respondents in Ethiopia, Mamo et.al. (2022) found that females more than males, rural persons more than urban, and persons in industry, services, and trade more than agriculture were likely to be unemployed due to COVID.

¹⁸ The objective of NREGA Act is ‘to provide for the enhancement of livelihood security of the households in rural areas of the country by providing at least one hundred days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work’ and ‘Every person who has done the work given to him under the Scheme shall be entitled to receive wages at the wage rate for each day of work’.

and it acted as buffer to the migrant labour for the loss of job and income in the cities.¹⁹ While the employment generated under the scheme in March 2020, just before the COVID-19 was to 15.9 million households with number of person-days work generated at 182.8 million (NREGA web site, July 2022), the figures went up immediately after COVID-19 in May 2020 to 37.3 million households and 542.5 million person-days. The increase in rural employment in May was more than 100 percent and it was made possible by a substantial increase in expenditure under the scheme. The NREGA program is basically demand driven, hence with increase in demand for work under the scheme, the employment was generated and provided. The demand and employment under the scheme fell with the economic recovery and with migration of labour again from rural to urban centers. In November 2020, the employment generated under the scheme was only to 22.7 million households and the person-days of work provided was only 289.2 million. However, these numbers were still much higher than the pre-COVID-19 levels. The same trend continued again with the onset of the second wave of COVID-19 in March- April 2021 which was very severe till at least June 2021 but continued till October 2021. The employment under NREGA was again very high in June 2021 with employment for 29.3 million households and 451.9 million person-days of work but it declined in November 2021 to only 17.5 million of households and 228.7 million person-days, which was respectively almost 23 and 21 percent less than November 2020. The NREGA program thus not only acted as an employer of the last resort for the rural workers but it provided them a job and income security. The employment under it fluctuated with the severity of COVID-19 but the employment under it even in March 2022 and June 2022 at 20 and 27.4 million for households and 245 and 418 million person-days respectively is significantly higher than the pre-COVID-19 days. So, its importance as an employment generation scheme would continue till the total economy- including the rural economy becomes 'normal' and is on the growth trajectory of the pre-COVID-19 years once again.

Different estimates have been shared by many researchers about the exact extent of the impact of COVID-19 on the labour market- i.e., on the structure of employment and unemployment.²⁰ There are however, no direct official estimates of this impact on labour. Besides the use of employment in NREGA as an indicator of distress among the rural labour, we have tried to assess the impact of COVID-19 on urban²¹ labour through the use of quarterly bulletins of the PLFS by NSO, released for the period July-September 2019, approximately three quarters before the first

¹⁹ The Economic Advisory Council to the Prime Minister of India has suggested in May 2022, to the government to launch a guaranteed employment scheme for the urban unemployed also so that the surplus labour is rehabilitated.

²⁰ Among other individuals, CMIE has been bringing out very high frequency estimates on employment and unemployment in India both before and during COVID, but many including the Ministry of Labour and Employment have expressed doubts on its methodology and coverage. Refer to The Economic Times, 27th April 2022 for the detailed criticism by the Ministry of the methodology used by CMIE.

²¹ These quarterly PLFS surveys are restricted to only the urban population and during COVID-19 telephonic surveys were also conducted along with the field surveys. So, the results may be viewed under these limitations.

lockdowns for benchmarking the subsequent changes, to Jan-March 2022 (the latest released results). The period covers the first and the second serious waves of the pandemic.

First, we explore the workforce participation rates (WPR) and the unemployment rates by CWS²² in the urban areas for persons of age 15 and above,²³ which are presented in Table 8. The peak period of the first wave (April to June 2020) and of the second wave (April to June 2021) are highlighted in yellow and green respectively. It is evident that prior to COVID-19, the WPR was around 44 percent for all persons, with more than two-third for males and just 19-20 percent for females. However, the first wave of COVID-19, due to complete lockdown, severely affected the participation of labour in to the economic activities and the WPR fell by more than 7 percentage points- more than 10 percentage points for males and 4 percentage points for females. As a result, the unemployment rates (UR) also went up to the roof and more than doubled to 21 percent in April-June 2020 from 9 percent in the previous quarter. The UR were almost similar for both males and females.

Table 8: WPR and UR (in percent) in CWS in urban areas (of age 15 and above)-before and after COVID-19

S. No.	Quarter	Worker population ratio in CWS in urban areas (age: 15years and above)			Unemployment Rate (in per cent) in current weekly status in urban areas		
		male	female	persons	male	female	persons
1	July- September 2019	68	18.3	43.4	8	9.7	8.3
2	October-Dec 2019	68.4	19	44.1	7.3	9.8	7.8
3	Jan-March 2020	67.3	19.6	43.7	8.6	10.6	9.1
4	April-June 2020	56.9	15.5	36.4	20.7	21.1	20.8
5	July- September 2020	64.3	17.1	40.9	12.6	15.8	13.2
6	October-Dec 2020	66.7	17.9	42.4	9.5	13.1	10.3
7	Jan-March 2021	67.2	18.7	43.1	8.6	11.8	9.3
8	April-June 2021	64.2	17.2	40.9	12.2	14.3	12.6
9	July- September 2021	66.6	17.6	42.3	9.3	11.6	9.8
10	October-Dec 2021	67.8	18.1	43.2	8.3	10.5	8.7
11	Jan-March 2022	67.7	18.3	43.4	7.7	10.1	8.2

Source: Quarterly Bulletins, PLFS

Because of the gradual unlocking of the economy starting June -July 2020, some recovery took place in the economy and few persons started coming back to the urban areas for the job and the WPR slowly recovered from 36.4 percent in April-June 2020 to 43.1 percent in Jan-March 2021. The second wave which was most severe in April 2021, again took its toll on labour and the WPR again lost 2 percentage points -from 43 percent to 40.9 percent and impacted both males

²² Labour force, according to CWS, is the number of persons either employed or unemployed on an average in a week preceding the date of the survey. LFPR is defined as the percentage of the population in the labour force.

²³ The WPR under quarterly bulletin are not strictly comparable with annual WPR because quarterly estimates are (i) only for urban sector, (ii) by CWS instead of UPSS, and (iii) for age 15 and above instead of all ages.

and females. The UR also again went up from 9.3 percent to 12.6 percent. Though the second wave was more severe than the first and casualty were many times more, but its economic impact was less than the first wave because there were no complete lockdowns and people and the government had learnt from the mistakes of the first wave. Since then, there has been some gradual recovery in the economy and in the labour market and both the WPR and the UR have reached to the pre-COVID-19 level in Jan-March 2022 quarter.

The adverse impact of COVID -19 has not, however, been same for all labour and it has varied by employment status. Table 9 summarizes the distribution of persons by broad status in employment for the 11 quarters and it shows that the most severely affected by COVID-19 were the *male casual labour* and their share in total employment shrank by 5.5 percentage points during the first wave and by 2.6 points during the second wave. The impact of COVID-19 was also severe on the male workers in the two sub categories of self-employment- the share of own account workers and employers declined by more than 10 percent points- from 32.5 percent in Jan-March 2020 to 22.3 percent in April-June 2020. The share of the male helpers in HH enterprises also fell from 3.8 percent to just 2.8 percent respectively during the same two quarters. However, despite a sizable decline in the share of these two categories, their combined share -all self-employed did not show any decline because all self-employed includes those self-employed persons also who did not work either due to sickness or due to other reasons though they had self-employment work. On the other hand, the share of the male regular/salaried persons increased by 2 percentage points during the two quarters as many of the displaced persons from self-employment and casual work joined the organised gig economy as gig workers with some of the service providers- like Zomato, Img, Flip cart, etc. because the lockdown accelerated the demand of these online services.

After the first wave, the Indian economy started recovering due to the gradual unlocking of the economy and the share of male self-employed and male casual persons in total employment started to recover and reached almost to the pre pandemic level of Jan-March 2020. The impact of the first wave of the pandemic was more severe on female helper in HH enterprises- a decline of 6 percentage points in April-June 2020, as compared to the own account workers and the casual labour with declines of 2 and 1.4 percentage points respectively. The adverse impact on all persons -males and females, of the first wave of COVID -19 in April-June 2020 was quite strong for own account workers and casual workers with the decline of 10 and 5 percentage points respectively. With the second wave in April 2021, the share of the own account workers and helpers in the HHs enterprises again got the hit, though not as much as during the first wave. The hit was by 4 & 0.4 percentage points respectively for males and 2 & 1.4 percentage points respectively for females. The share of the casual workers declined by 2.6 percentage points but of the regular wage/salaried workers went up by 2 percentage points for male and female workers.

Table 9: Percentage distribution of persons (of age 15 years and above) working according to CWS by broad status in employment in urban areas

		own account worker, employer	helper in household enterprises	Self- employed#	regular wage/ salaried	Casual labour	All
S. No.	Quarter	Males\$					
1	July- September 2019	34.3	4.1	39.4	47.5	13.1	100
2	October-Dec 2019	34	4	39	48	13.1	100
3	Jan-March 2020	32.5	3.8	39.3	48.5	12.2	100
4	April-June 2020	22.3	2.8	42.9	50.4	6.7	100
5	July- September 2020	33.9	4	40.5	47.4	12.1	100
6	October-Dec 2020	34.9	4.1	39.9	46.9	13.2	100
7	Jan-March 2021	35.1	4.1	40	46.4	13.6	100
8	April-June 2021	31.1	3.7	41.7	47.3	11	100
9	July- September 2021	35.3	4.1	40.1	46.7	13.2	100
10	October-Dec 2021	35.4	4.2	40.1	46.4	13.5	100
11	Jan-March 2022	35.5	4.3	40.4	46.1	13.6	100
		Females					
1	July- September 2019	23.9	9.1	34	57.4	8.6	100
2	October-Dec 2019	23.5	9.7	34.4	57.3	8.4	100
3	Jan-March 2020	22.9	9.8	34.8	57.5	7.7	100
4	April-June 2020	20.9	3.8	41	52.7	6.3	100
5	July- September 2020	31.2	5.4	39.2	49.3	11.4	100
6	October-Dec 2020	32.4	5.5	38.9	48.7	12.4	100
7	Jan-March 2021	24.8	11.2	36.7	54	9.3	100
8	April-June 2021	22.7	9.8	37	55.8	7.2	100
9	July- September 2021	24.4	10	35.1	56.4	8.5	100
10	October-Dec 2021	24.3	10.3	35.2	56	8.8	100
11	Jan-March 2022	24.3	10.2	35.3	56.7	8.1	100
		Total Persons\$					
1	July- September 2019	32.2	5.2	38.3	49.6	12.1	100
2	October-Dec 2019	31.8	5.2	38	50	12.1	100
3	Jan-March 2020	30.4	5.1	38.3	50.5	11.2	100
4	April-June 2020	20.9	3.8	41	52.7	6.3	100
5	July- September 2020	31.2	5.4	39.2	49.3	11.4	100
6	October-Dec 2020	32.4	5.5	38.9	48.7	12.4	100
7	Jan-March 2021	32.9	5.6	39.3	48.1	12.7	100
8	April-June 2021	29.3	5	40.7	49	10.2	100
9	July- September 2021	33	5.3	39.1	48.7	12.2	100
10	October-Dec 2021	33.1	5.5	39.1	48.4	12.5	100
11	Jan-March 2022	33.1	5.6	39.3	48.3	12.4	100

Source: Quarterly Bulletins, PLFS,

\$ includes transgenders also.

all self-employed includes those self-employed persons also who did not work either due to sickness or due to other reasons though they had self-employment work.

Thus, it is evident from the available data that the self-employed and the casual labour received a severe jolt due to COVID-19 and many of them lost, may be temporarily their employment and livelihood.

We next examine the change in the industrial structure of employment due to COVID-19 and analyse how the workers had to move from one industrial sector to another during the period from July-Sept 2019 to Jan-March 2022. The results of the quarterly surveys of PLFS are reported in Table 10. It is observed that prior to the lockdown less than 5 percent of the workers of age 15 and above were employed in agriculture in urban areas and more than three-fifth were employed in services. The share of the secondary sector-including manufacturing was restricted to one-third of the total urban employment. However, the first wave of COVID-19 in April 2020 forced many of the workers employed in the secondary sector to leave the jobs due to strict lockdowns and shift to either their family occupation of farming or take any job, especially of gig workers in the services sector. As a result, the share of the male workers employed in secondary sector declined by three percentage points and of services sector increased by around 2 percentage points and of agriculture by one point. The trend for the female workers was similar to males but with a bigger magnitude of change in the shares. After the unlocking of the economy, the share of the three industrial sectors rebounded to their long-term trend. But the second wave of the pandemic in April 2021 again led to migration of workers-both males and females, from the secondary sector to the agriculture sector and the tertiary sector with a lower magnitude than the first wave, as highlighted in green colour.

The lower magnitude of workers movement in the second wave than the first wave was because the lockdown in April 2021 was not as strict as in April 2020. The governments had learnt few lessons from the previous lockdowns and had become more equipped to handle the severe crisis due to the second wave. The beginning of the vaccination, and better preparedness of the health care workers with enhanced medical infrastructure helped face the pandemic. The gradual removal of restrictions after the second wave helped the workers in joining back their original places of employment and by Jan-March 2022 the industrial distribution for all persons was almost back to 'normal' with a marginally higher share in agriculture and secondary sectors.

Table 10: Percentage distribution of urban workers (of age 15 years and above) in CWS by broad industry

S. No.	Quarter	Agriculture sector	Secondary sector	Tertiary sector	all
Males\$					
1	July- September 2019	4.7	34.2	61.2	100
2	October-Dec 2019	4.7	34.6	60.7	100
3	Jan-March 2020	4.6	34.1	61.3	100
4	April-June 2020	5.4	31.1	63.4	100
5	July- September 2020	5.2	34.3	60.4	100
6	October-Dec 2020	5.4	33.8	60.8	100
7	Jan-March 2021	5.2	34.2	60.6	100
8	April-June 2021	5.3	33	61.7	100
9	July- September 2021	5.2	35	59.7	100
10	October-Dec 2021	5.2	35.7	59.1	100
11	Jan-March 2022	5.1	36	58.9	100
Females					
1	July- September 2019	7	27.7	65.3	100
2	October-Dec 2019	6.7	28	65.3	100
3	Jan-March 2020	6.7	26.7	66.6	100
4	April-June 2020	7.5	24.2	68.3	100
5	July- September 2020	7.9	25.5	66.6	100
6	October-Dec 2020	8.6	26.3	65.1	100
7	Jan-March 2021	8.5	27.4	64.1	100
8	April-June 2021	7.8	26.5	65.7	100
9	July- September 2021	8.3	26.6	65.1	100
10	October-Dec 2021	8.5	25.9	65.6	100
11	Jan-March 2022	8	26.4	65.6	100
Total Persons\$					
1	July- September 2019	5.2	32.8	62	100
2	October-Dec 2019	5.1	33.2	61.7	100
3	Jan-March 2020	5.1	32.5	62.4	100
4	April-June 2020	5.9	29.7	64.5	100
5	July- September 2020	5.8	32.5	61.7	100
6	October-Dec 2020	6.1	32.2	61.7	100
7	Jan-March 2021	5.9	32.7	61.4	100
8	April-June 2021	5.8	31.7	62.6	100
9	July- September 2021	5.9	33.3	60.9	100
10	October-Dec 2021	5.9	33.7	60.4	100
11	Jan-March 2022	5.7	34	60.3	100

Source: Quarterly Bulletins, PLFS

\$ includes transgenders also.

Note: 1. agriculture sector includes NIC-2008, codes (01-03), secondary sector includes NIC-2008 codes (05-43), and tertiary sector includes NIC-2008 codes (45-99)

2. code 01-03 are section A-agriculture, forestry, and Fishing, 05-43 are from Mining, manufacturing, utilities, and construction, 45-99 are all services -trade, to public admin etc.

It would however be interesting to use the quarterly data and trace the movement of workers by different activity status. It provides us the information whether the activity statuses are sticky or flexible. Table 11 and 12 provides the summary of the movement of workers from one activity status to another before and during COVID-19 separately for the two waves. The rows in the Tables represent the distribution of population by activity status in the quarter just preceding the COVID-19 wave and the column presents the activity status during the COVID-19 period. What is most noteworthy point from Table 11 is that before the COVID-19, i.e., in the quarter of Jan-March 2020 the share of 'out of labour force' was 51.6 percent but it increased to 54.1 percent (highlighted by green cells) during April-June 2020 when the pandemic had started. It shows that workers not only lost the employment but also lost the hope to get employment and rather than staying in the labour force, opted to be completely out of it. The 'source' to the out of labour force pool was self-employed workers (1.4 percent), and regular wage /salaried workers (1 percent). However, while the annual PLFS indicates (Figure 2) that the unemployment rate for all ages declined between 2019-20 and 2020-21, the quarterly data suggests (Table 11) that due to COVID-19, the share of unemployed increased from 4.3 percent in Jan -March 2020 to 9.9 percent in April-June 2020 (highlighted in yellow). The share of all three -self-employed, regular wage employees, and of casual workers declined during COVID-19 as compared to the pre-COVID-19.

Table 11: Percentage distribution of all persons of age 15 years and above by different activity statuses between adjacent quarters in current weekly status (all-India -urban)- April-June 2020 and July-Sept 2020

activity status in CWS during Jan-March 2020	activity status in CWS during April to June 2020							
	own account worker, employer	helper in household enterprises	All Self-employed#	regular wage/ salaried employees	Casual labour	unemployed	not in labour force	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
own account worker, employer	6.6	0	11.4	0.2	0	1	0.9	13.5
helper in household enterprises	0	1.1	1.7	0	0	0.1	0.4	2.2
Self-employed	7.1	1.2	14.1	0.2	0	1.2	1.4	16.9
Regular wage/ salaried employees	0.1	0	0.3	18.7	0	2.1	1.1	22.2
Casual labour	0	0	0.2	0.1	1.8	2.5	0.5	5.1
unemployed	0	0	0.1	0.1	0.2	3.7	0.3	4.3
not in labour force	0.1	0.1	0.2	0.2	0.1	0.3	50.8	51.6
All	7.3	1.3	14.8	19.2	2.1	9.9	54.1	100

Notes

1. *: Nil or negligible sample size/value of estimates,
2. #: It may be noted that self-employed persons who did not work either due to sickness or due to other reasons though they had self-employment work are included in column 4. Thus, the estimates given in column 4 may be higher than the sum of the estimates in column 2 and column 3.
3. All person includes Transgender
4. The Table gives the distribution of the persons who were surveyed in both the adjacent quarters

The maximum change of more than 6 percentage points from 13.5 percent to 7.3 (highlighted in brown) occurred in the share of the own-account workers, who could not continue with the production process due to the complete lockdowns, and in the share of casual workers (highlighted blue) from 5.1 percent to just 2.1 percent. Thus, lot of displacement of labour happened due to the spread of COVID-19 during the months of April to June 2020.

A similar but mild trend is visible for the second wave of COVID-19 during April-June 2021 from Table 12. The addition to the share of 'out of labour force' and 'unemployed' was lower during the second wave of COVID-19 (Table 12) as compared to the first wave of COVID-19 (Table 11). Still, the unemployment rate went up from 4.2 percent to 6 percent (yellow cells), an increase of almost 50 percent. Also the own-account workers were again the worst hit with a decline in share from 14.4 percent to 11.8 percent (highlighted in brown). As mentioned earlier, the lockdowns during the second wave of COVID-19 in India during April 2021 were not as severe as in the first wave of April 2020.

Table 12: Percentage distribution of all persons of age 15 years and above by different activity statuses between adjacent quarters in current weekly status (all-India -urban)-April-June 2021 and July-Sept 2021

activity status in CWS during Jan-March 2021	activity status in CWS during April to June 2021							
	own account worker, employer	helper in household enterprises	All Self-employed#	regular wage/salaried employees	Casual labour	unemployed	not in labour force	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
own account worker, employer	11.2	*	13.5	0.1	*	0.3	0.5	14.4
helper in household enterprises	*	1.8	2.1	*	*	0.1	0.3	2.5
Self-employed	11.4	1.9	15.9	0.1	0.1	0.4	0.8	17.2
Regular wage/salaried employees	0.1	*	0.2	19.6	0.1	0.6	0.5	20.9
Casual labour	0.1	*	0.1	0.1	3.7	1.4	0.3	5.6
unemployed	0.1	*	0.1	0.2	0.1	3.4	0.3	4.2
not in labour force	0.2	0.1	0.3	0.2	0.1	0.3	51.3	52.1
All	11.8	2	16.6	20.2	4	6	53.2	100

Notes

1. *: Nil or negligible sample size/value of estimates,
2. #: It may be noted that self-employed persons who did not work either due to sickness or due to other reasons though they had self-employment work are included in column 4. Thus, the estimates given in column 4 may be higher than the sum of the estimates in column 2 and column 3.
3. All person includes Transgender
4. The Table gives the distribution of the persons who were surveyed in both the adjacent quarters

4b. Impact of COVID-19 on Gig workers

Since the COVID-19 led to lockdowns in the large parts of the economy, initially complete and later on partial, it led to the demand for the gig workers at a rapid pace with the highest offtake

being recorded for sales and marketing roles. During COVID-19, the surge in demand for gig workers was seen across commerce, healthtech, fintech, and e-commerce sectors. Quick commerce segments, which include the delivery of grocery and everyday essentials, continued to exhibit steep demand for gig workers with a growing number of established players scaling up their hiring especially across top cities.

The companies were increasingly on the lookout for gig workers to fulfil roles in business development, field sales, last-mile delivery, digital promotion, brand promotion, and micro-influencers, said the report by Taskmo (2022). Overall, the demand for marketing and sales jobs saw a triple-digit growth, according to the newly created gig index by Taskmo (2022). Post COVID-19, Gig economy gained foothold in Tier 2 and Tier 3 markets and it was found that Tier-2 and Tier-3 cities experienced improved demand for gig workers given that companies were expanding their geographical footprint beyond metros by setting up secondary offices in smaller towns. Recruiters were also going the extra mile to attract workers from smaller cities through a tech-driven approach, providing multi-language support, job tracking and monitoring solutions, as well as ease of payments. Moreover, location was no longer a deal breaker as many jobs can now be done remotely, which was also in line with the workers' preferences.

On the basis of the above observations and the projections of gig workers by BCG AND Michael & Susan Dell Foundation and by Niti Aayog in section 4, one may conclude that gig workers are not only here to stay but, helped by digitisation, would grow at a rapid pace in many sectors of the economy. The Niti Aayog report (2022) has found the growing demand for the Gig workers and estimated the employment elasticity of gig workers to GDP growth to be greater than one throughout the period of 2011-12 to 2019-20, thus indicating greater future demand for gig workers in all the sectors. MGI (2021) discusses the likely change in the future of work and also expects faster adoption of automation and AI, especially in areas with high physical proximity, leading to the increase in the gig workers. The advent of remote and flexible workspaces with remote work and virtual meetings would speed up the process of 'gigisation' of the economies.

From the above discussion in section 4, one may conclude that both waves of COVID-19 had a severe impact on the life and livelihood of the workers. Many of them were forced out of the labour force, quite a few were rendered unemployed and many had to change their activity status, the industry of work, as well as the occupation of employment due to the complete closure of economic activities during the first wave of COVID-19 in April 2020 and of partial closures in April 2021. The relatively milder economic impact on all persons, especially on labour during the second wave was partially the result of many policy responses adopted by the Government and other agencies during the year 2020-21. The discussion about some of these policy responses is part of the next section.

5. Policy initiatives to meet the challenges faced by workers due to COVID-19

Governments around the World took different initiatives to protect their workers including the platform workers from the disruptive impact of COVID-19. The countries generally adopted the liberal monetary policies by injecting huge amount of liquidity in the economies and used their active fiscal policies to transfer income to the vulnerable population. The income and health security were provided to the platform workers.²⁴ In India, with the detection of COVID-19 in Jan 2020, over 20 states announced relief packages including free and increased ration to the card holders. Just two days after the ‘total lockdown’ announcement, the central government²⁵ announced an economic package of Rs1.7 lac crores (US \$22million) which included food security scheme, and cash transfer primarily for migrant labour and daily wage labour. Free cooking gas cylinder was also released for three months. This was followed by RBI cutting repo rates, injecting liquidity of Rs.3.74 lac crores, and permitting banks to provide a moratorium on all loans for three months. India, under the Atmanirbhar Bharat Abhiyan, also announced a Rs.20 lakh crore package on May 12th, 2020, to cater to various sections including cottage industry, MSMEs, labourers, middle class, among others. Subsequently more financial packages were announced in October and November 2020, with the total stimulus package at Rs.29.87 lac crores. Periodically, the RBI also announced more measures to meet the COVID-19 challenges. The RBI Governor announced more measures on 17th April 2020 to counter the economic impact of the pandemic which also included Rs. 50000 crore (US\$6.6 billion) special finance to NABARD, SIDBI, and NHB. The government also supported the NREGA scheme to provide employment to the migrants who had moved from urban centres to the rural areas because of lockdowns, and increased the outlay on the scheme from Rs.75 thousand crores in 2019-20 to more than Rs.1.18 lac crores in 2020-21- an increase of more than 50 percent, but sensing the fall in the demand for work under NREGA because of the gradual unlocking of the economy, the government reduced its outlay on the scheme to Rs.1.08 lac crores in 2021-22. With the expectation that demand for NREGA work will further reduce, the budgetary allocation was further cut to only Rs.37 thousand crores with a promise that if the demand for NREGA work goes up, the allocation may be revised upward. As a result of the measures taken by the active fiscal and liberal monetary policies, a gradual recovery of the economy was witnessed and by December 2021 India was almost back to the pre-COVID-19 level of GDP.

Many initiatives were also taken by individual firms to protect the workers against COVID-19. Some of the measures taken by platform businesses included:

- a. The businesses supported the livelihood of workers and their families by providing health access and expanding paid leave including paid sick leave,

²⁴ For more details on global best practices, please refer to Niti Aayog Report (2022, Box 6.2.2)

²⁵ The government adopted a four pronged strategy aimed to protect initially the life and later on both the life and livelihood of the population (for details refer to the Economic Survey-2020-21, vol II)

- b. They helped in securing income and livelihood of gig workers and small businesses by extending financial help and delaying the pay-back periods.
- c. The firms also extended many safety and health measures- like use of hand sanitizers and masks, dissemination of information, etc. They helped the workers in adapting to the new work environment and practices, e.g. going digital, cashless payments, and contactless deliveries.

COVID -19 affected not only economically but also physically -the health of the people. The government immediately provided an emergency health fund of Rs. 150 billion. Temporary medical infrastructure was created to save lives and liberal financial assistance was provided to develop and administer vaccine programme. To provide better access to the health facilities, the Indian government announced in April 2022 to extend the Ayushman Bharat health cover to over 40 crores more people who are currently not covered under any government or private health insurance scheme. With it, almost 70 percent of the population is expected to be protected by some health insurance but existing government health insurance plans need to be further expanded to include the hitherto left out persons-the so called 'missing' middle. The scheme will now be a great boon to the gig workers and other such groups who earn between Rs. 15000-25000 per month, as the government wants to include them in the Ayushman Bharat scheme. Another decision which would greatly help the 'part time' workers known as Anganwadi²⁶ workers is a landmark decision by the Supreme Court (SC) of India on 25th April 2022, to extend the benefits of gratuity under the Payment of Gratuity Act, 1972, to all Anganwadi workers. The decision will provide some social security to these workers as and when implemented, and will also help many other similarly placed workers when the same benefit is also extended to them.

5b. Initiatives taken in India to improve the status of gig workers

It is estimated that the current size of informal workforce in India is 92.5 percent (Ramana Murthy, 2019; NCEUS, 2007). With gradual informalisation of the formal/organised sector, the share of informal workers is ever on the rise. The informal workers generally do not have any written contracts and lack social security. Even more than 50 percent of the regular wage/salaried workers in 2020-21 are not eligible for any social security benefit (Table 3). In such a scenario, it is necessary that the workers are provided some job and income security. Social protection coverage for workers in "new" forms of employment also constitute a major challenge for the future of work. ILO in the Centenary Declaration for the Future of Work has also emphasized the need for social security coverage in a universal manner.

²⁶ Anganwadi workers are mainly the health workers but are assigned all pervasive duties, which include the identification of the beneficiaries, cooking nutritious food for school children, conducting pre-schools for children, etc. Therefore, while the Governments consider them as part time workers, the SC rejected this plea and accepted them as full-time workers.

It is in this background, the Code on Social Security 2020 which was passed in the Parliament in September, 2020 after subsuming the existing nine central labour legislation, envisages extending and strengthening of the social protection system by formulating suitable schemes for the unorganised sector, gig workers and platform workers.²⁷ The Code has the wider goal of extending the social security benefits to all employees and workers irrespective of belonging to organised or unorganised sector. Expanding the scope of social security, the Code on Social Security 2020 defines it as “the measures of protection afforded to employees, unorganised workers, gig workers and platform workers to ensure access to health care and to provide income security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner by means of rights conferred on them and schemes framed, under this Code.” The Code acknowledges gig and platform workers outside the traditional employer-employee arrangement. The code also indicates that such workers, albeit not employees, may be provided with certain social security benefits as determined by the central government. These may include life and disability cover, accident insurance, health and maternity benefits, old age protection, crèche and childcare services, and other benefits. The Code proposes for the setting up of a Social Security Fund for social security benefits to them. Also acknowledging the hardships faced by the platform and gig workers during the pandemic, the Union Budget 2021-22, announced that minimum wages will apply to all categories of workers, including the gig and platform workers, and that they will be covered by Employee State Insurance Corporation (ESIC) (Khan, 2021). Ghose (2021) argues that ‘by providing access to ESIC benefits for the gig and platform workers, the Code on Social Security targets many of the social security benefits addressed under the ILO Security (Minimum Standards) Convention, 1952(No.102) and Social Protection Floors Recommendation, 2012 (No. 202).’

In another step taken by the government towards the same objective, the Ministry of Labour and Employment launched the e-Shram portal in August 2021, which will register unorganised workers to create a centralised database and it will be seeded with their identification number- the Aadhaar.²⁸ Now the plans are also afoot to integrate the domicile and ration card details of such unorganised workers from State governments with the existing details on the portal. This will help these workers to avail of the benefits even after the change of location due to migration or reverse migration. The portal would have the following benefits (Ministry of Labour & Employment, 2021):

²⁷ While the Code is perceived to be a first step in the right direction to extend the social security benefits to gig workers, but the Code has been criticized and doubts have been expressed in its ability to protect the vulnerable workers, unless effective implementation is done and the gaps are filled (Deepika M.G. & Mdhusoodhan M (2022), and Narender Thakur & C. Saratchand (2022)).

²⁸ Aadhar is an identification card for the Indian population with a 12 digit number and is now used, among others, for extending the benefits of all the government schemes.

(i) After registering, the worker will get an Accidental Insurance cover of INR 2 Lakhs under the *Pradhan Mantri Suraksha Bima Yojana* (PMSBY) and premium for the first year will be borne by the Ministry of Labour & Employment, and

(ii) in future, all the social security benefits of unorganised workers will be delivered through this portal. In emergency and national pandemic like situations, this database may be utilised to provide necessary assistance to the eligible unorganised workers.

The scheme became very popular and within six months 27 crores informal workers had registered on the portal and it included workers from agriculture (52 percent), domestic and household workers (9.9 percent) and construction workers (9.1 percent). Now the number has increased to 28 crores. In April 2022, the government has also allowed the portability of the e-Shram portal with Employees Provident Fund Organisation (EPFO), which is for the salaried/organised workers. The portability is claimed to be the first step towards the government's plan to provide universal social security to all the workers and it would also help the government to track the movement of workers between unorganised and organised sectors and vice-versa. In July 2022, the government has planned to extend the pension and health benefits to the workers registered on the e-Shram portal. Some of the existing schemes – The Pradhan Mantri Shram Yogi Maandhan Yojana, the National Pension Scheme for traders and self-employed, the Atal Pension Yojana, and the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, among others-may be added to the benefits.

There are thus, the measures which have been taken to extend the benefits of the social security schemes to the workers in the unorganised sector so that their economic conditions may be improved. It is all the more necessary because of the changing nature of work.

6. Policy recommendations for improving the work conditions of workers-especially gig workers

On the basis of the discussion, one may suggest that though there is a scope and need for increasing formalization instead of informalization of the economy, but with the changing nature of work, it is expected that more and more of the new jobs would emerge in the 'Gig' economy. It is therefore imperative that social security benefits are provided to all the workers including the gig workers. The government of India has taken few steps to extend the social security benefits to all the workers, especially under the Social Security Code but it has to ensure an effective implementation of the Code with an assurance of minimum wages to all workers. As also suggested by the Economic Advisory Council to the Prime Minister of India in May 2022, "the government must allocate more percentage of the expenditure towards social services and the social sector to make the most vulnerable population resilient to sudden shocks and stop their descent into poverty" (The Economic Times, 19th May 2022).

Concrete steps also need to be undertaken to remove any bias and hesitancy towards the employment of women workers so that their participation in the labour force goes up. For it to happen, removing the many existing barriers and biases is crucial in facilitating the movement of women workers in the workforce and into gig economy (Kasliwal, 2020). A conducive work atmosphere needs to be created where women have both digital and physical safety and feel as equal partner in the growth of the firms and the economy.

On the basis of the various social protection approaches taken around the world²⁹ for the gig workers, the Niti Aayog (2022) has recommended the government and firms to extend the social security benefit policies to gig workers. It has suggested: (i) to provide for paid sick leave, health access and insurance to all the gig workers, as was done during COVID-19 by few of the platform companies e.g., Ola, Uber, Zomato, Swiggy, Urban Company, etc. , (ii) similar to Indonesia, provide occupational disease and work accident insurance, (iii) As in UK, the 'gig and platform firms need to adopt policies that offer old age/retirement plans and benefits and other insurance cover for contingencies such as injury arising from work that may lead to loss of employment and income' (Niti Aayog, pp. xxiv), (iv) like in UK and USA, income support may be provided to the workers in a situation of 'irregular work' by the gig and platform firms, (v) like during COVID-19, small businesses and entrepreneurs may be supported by extending interest free advances and delaying pay-back periods, etc., and (vi) A corpus fund could be created for offering social security cover to gig and platform workers and other self-employed individuals in case of contingencies. The Aayog has also suggested that the government create 'platform initiatives' along the lines of start up India- which will carry out a census of gig workers to survey and identify them. It also wants this framework to upskill them and help them access loans, etc. Based on a comprehensive study on women gig workers by Ghosh, et.al (2021), the study makes the following important recommendations: (i) a comprehensive mapping of the gig economy and more gender-based data collection may be done, (ii) earnings and wage should be calculated based on the living wage, (iii) ensure safety of women gig workers, (iv) platforms and companies must bring in women specific strategies to involve and retain women in the workforce. (V) upskilling, and collectivisation of women gig workers may be undertaken, (vi) domestic workers must be included in the Code on Social Security in order to avoid overlap of identities between gig and traditional forms of care and domestic work.

None of the moves are however binding on the platforms that hire the gig workers but it is a clear signal that firms just cannot shy away from bearing their responsibility. Since, digital platforms are not well regulated under well-defined and uniform guidelines, there is thus a need for an

²⁹ In 2020, the US congress extended unemployment insurance to gig workers as part of the COVID relief steps. UK Supreme Court in 2021 said that Uber drivers are entitled to minimum wages and holiday pay. In Australia, Uber reached a deal in June 2022 with the powerful Australian union to offer workers more protections (Mint- 30th June 2022).

integrated approach towards workers in the precarious world of platform work. There should not, however be an overkill of regulations and the government should not over burden the sector which has been successful in creating jobs and value generation in recent past. Many of the start-ups have also not favoured the idea of extending all these benefits to the gig workers and face the challenge of cost burden. Also the problem is that many of the gig workers today work on multiple platforms and only for limited time and days, so how shall the social security benefits percolate down to them and who shall be responsible to extend them. The companies also face high attrition and there is little loyalty by the gig workers. But it is possible that once the social security benefits are extended, the workers will have incentive to stay with the companies. However, while the firms have to be mindful of their profits but there should be no trade-off between worker's security and platform's profits.

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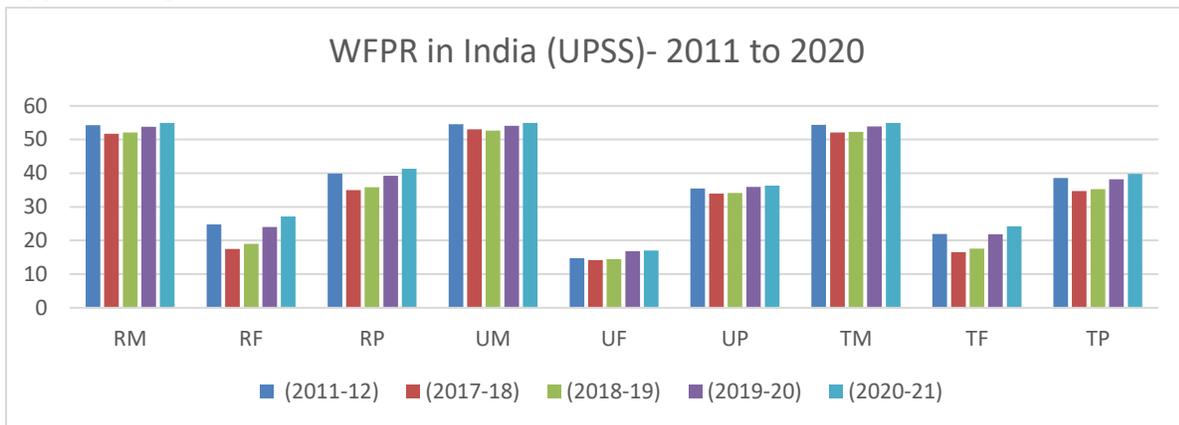
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Appendix Figure A1: WFPR in India-2011-12 to 2020-21



Source: Author's computations from EUS (2011-12) and PLFS, different rounds