



| A street vendor in Ahmedabad. Photo by Marty Chen



The Impact of COVID-19 on Employment in India

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Background and Summary

The coronavirus pandemic and the steps taken by the Government to prevent its spread had significant adverse impacts on employment in India. The annual estimates of employment based on the standard measure of current weekly status, however, do not reveal the real employment loss, as the estimates were the averages of four consecutive quarters of different employment performances. Also, employment loss was masked by increases in those classified as workers but actually not working due to temporary closure of establishments or layoff of workers because of the lockdown declared by the government. The analysis of quarterly employment of those actually working revealed employment loss of millions of workers in India in the second quarter of 2020. The loss resulted from various causes, including outright retrenchment or layoffs from wage employments, the cancellation of orders for subcontracted or platform workers and the inability to pursue self-employed livelihood activities. The

total loss of employment in the second quarter of 2020 as compared to the same quarter of 2019 is estimated to be 86.24 million. The worst-affected population segment was urban men with a total employment loss of 47.43 million. It was followed by an employment loss of 31.16 million among rural men and 10.94 million among urban women. The greater impact on men's than on women's employment is not entirely surprising since there are relatively few women in employment in India. However, there was an increase of 3.29 million workers among rural women. This was primarily due to rural women taking up gainful employment in agriculture as they have typically done during crisis situations.

Agriculture was the only industry sector in which employment grew during the pandemic. All other industry sectors lost employment. Informal non-agriculture employment decreased 39 per cent, and formal non-agricultural employment decreased 34 per cent.

Concepts, Definitions and Measurement Strategy

This brief is based on data from the Periodic Labour Force Survey (PLFS), an annual survey with provision for quarterly estimates conducted by the National Sample Survey Office (NSSO) of India. The PLFS has been the main source of labour statistics in India since 2017-18. The survey period is from July to June. The data sets of the 2018-19, 2019-20, 2020-21 and 2021-22 surveys are analyzed in this brief.

Although multiple concepts and reference periods are used in these surveys for determining the activity status of each of the members in the surveyed households, the Current Weekly Status (CWS) is used for analysis in this paper. As per this concept, any person who has worked for at least one hour during the reference period of the last week is considered as a “worker”. Each worker is further classified as (i) self-employed with subcategories of (a) own-account worker, (b) employer and (c) unpaid family worker, (ii) regular wage worker, (iii) casual worker in government projects and (iv) casual worker in non-governmental activities. Some of the self-employed and regular wage workers may be actually non-working during the reference week due to sickness or other reasons. The shares of such temporary non-working categories constitute a small percentage in normal periods. The workers are thus classified into the following distinct categories in the PLFS.

- (I) Self-employed reported actually working during the week (SE-W)
- (II) Self-employed who had work in household enterprise but did not work due to sickness or other reasons (SE-NW)
- (III) Regular wage workers reported actually working during the week (RW-W)
- (IV) Regular salaried/wage workers who did not work due to sickness or other reasons (RW-NW)
- (V) Casual workers in government projects (CW-G)
- (VI) Casual workers in non-government activities (CW-NG).

As a consequence of the pandemic and the declaration of lockdown on 24 March 2020, the Indian economy experienced two types of employment crisis. First, a number of self-employed were forced to shut their establishments, while many wage workers were permanently laid off, leading to significant

increases in unemployment. Second, some self-employed who were not forced to shut their establishments could not perform their work due to government restrictions, and many regular wage workers were kept away from work through temporary layoffs, leading to significant increases in temporarily non-working self-employed and wage workers. The measurement of loss of employment due to the pandemic, therefore, needs to take into account both the above types of losses.

The **Worker Participation Rates** (WPRs), defined as the percentage ratio of workers to the population, measure the changes in employment. These rates, if computed by using the numbers of actual workers, are more realistic than the usual formulation of WPRs because they take into account *employment losses* of all kinds. A more refined measure is **Work Hour Participation Rate** (WHPR). It is defined as the percentage ratio of *actual hours* worked to total *available work hours* of the population. This measure accounts for an additional approach being adopted by establishments for balancing of production and demand by reducing working hours rather than cutting employment. In preparing this estimate, the measure of available work hours is 48 times the adult population, since the standard work time in India is eight hours per day for six days in a week.

A measure of employment loss between any two periods is the difference between the WPRs of the respective periods. An estimate of the **employment loss** is obtained by multiplying the WPR loss with the estimated population of the more recent period.

In this exercise, quarterly WPRs of actual adult workers, aged 15 and older, were computed for all the quarters of the survey years, specifically: July 2018-June 2019 (the base year) to July 2021-June 2022. The loss/gain in employment is obtained by subtracting WPRs of the given quarter from the WPRs of the respective quarter of the base year. In the Indian context, 2018-19 was a normal year of employment outcome and hence used as the base year. The maximum loss of employment in terms of WPR was in the second quarter of 2020, the quarter immediately after the national lockdown. All loss estimates have been thus developed by comparing the WPRs of the second quarters of 2019 and 2020.

The average hours of work per week across all employed in the second quarter of 2020 was 47.38 hours. It was a drop of 23 per cent from the second quarter of 2019, before the pandemic. The average hours varied across different categories of workers as well as between men and women. Men worked longer hours than women as the burden of domestic duties falls largely on women. Women also were the lowest-paid workers. There was a faster and steady recovery of employment loss in rural areas, while recovery was slower and fluctuating in urban areas.

Four special groups of workers – home-based workers, street vendors, domestic workers and waste pickers – accounted for 15 per cent of total employment in the second quarter of 2019. Nearly 30 per cent of workers in the four groups lost employment in the second quarter of 2020 as compared to the same quarter of 2019. The most affected group was domestic workers, with a loss of 65 per cent over the same period.

The COVID-19 Pandemic in India

In India, a national lockdown for 21 days was ordered on 24 March 2020, when the confirmed coronavirus cases in the country reached about 500. As the rapid spread of the virus persisted, the lockdown was extended a few more times. It restricted people from stepping out of their homes. All transport services – road, air and rail – were suspended, with exceptions for transportation of essential goods, fire, police and emergency services. Educational institutions, industrial establishments and hospitality services also were suspended. Services such as food shops, banks and ATMs, petrol

pumps, other essentials and their manufacturing were exempted. In May 2020, the districts were classified into red, orange and green zones. Red zones were those with high coronavirus cases and a high doubling rate, orange zones were those with comparatively fewer cases than red zone, and green zones were those without any cases in the past 21 days. Normal movement was permitted in green zones, with buses limited to 50 per cent capacity. Orange zones allowed only private and hired vehicles but no public transportation. The red zones remained under lockdown. In the second half of May, state governments were given a larger say in the demarcation of green, orange, and red zones and the implementation road map. Red zones were further divided into containment and buffer zones. The local bodies were given the authority to demarcate containment and buffer zones.

In June 2020, lockdown restrictions were imposed only in containment zones, while activities were permitted in other zones in a phased manner. This first phase of reopening was termed “Unlock 1.0” and permitted shopping malls, religious places, hotels, and restaurants to reopen from 8 June. Large gatherings were still banned, but there were no restrictions on interstate travel. Curfews were in effect from 9 p.m. to 5 a.m. in all areas, and state governments were allowed to impose suitable restrictions on all activities.

In July 2020, inter- and intrastate travel was permitted outside the containment zones, and limited international travel was permitted. Shops were permitted to allow more than five persons at a time. Educational institutions, metros and recreational activities remained closed until 31

July. Only essential activities were permitted in containment zones.

From 5 August 2020, outside the containment zones, night curfews were removed and gymnasiums and yoga centres were allowed to reopen. From 7 September, metro trains were allowed to be reopened in a graded manner. Marriage functions with gatherings of up to 50 people and funeral/last rites ceremonies with up to 20 people also were permitted. Religious, entertainment, political, sports and academic functions and gatherings of up to 100 people were allowed. From 15 October, cinema halls were allowed to be opened, with a 50 per cent seating capacity restriction. By January 2021, educational institutions, including schools and colleges and universities across India, also were allowed to reopen. Lockdown restrictions on all areas outside the containment zones were thus progressively removed through a series of unlocking steps. A second wave of the pandemic hit the country in 2021, but the lockdown from 5 April to 15 June was limited to specific areas in some states, and all such areas reverted to unlock conditions soon thereafter. The impact of the second wave on employment was thus relatively minor, primarily due to the universal vaccination programme of the government and acceptance of the habit of face masking, safe distancing and hand washing by the public.

Estimates of Workers

The annual estimates of workers, including those not working during the reference weeks, obtained from the data sets of PLFS (see Box 1) for the years 2018-19 to 2021-22 reveal an increasing trend from

Table 1. Annual estimates of workers and unemployed (million)

Year	Workers			Unemployed
	Total	Actually working	Not working	
2018-19	437.96	430.55	7.42	35.04
2019-20	468.11	441.86	26.25	38.54
2020-21	488.55	472.31	16.24	36.14
2021-22	494.60	486.53	8.07	30.45

438 million in 2018-19 to 495 million in 2021-22 (**table 1**). However, the average annual addition was much less during 2020-21 and 2021-22 as compared to the additions during 2019-20. It was primarily because of a substantial increase in those classified as workers but not actually working in 2019-20 due to the temporary closure of establishments or layoffs during the second quarter of 2020. The unemployed also increased significantly during 2019-20 as some who had lost jobs became unemployed. The annual estimates, however, do not reveal fully the impact of the pandemic, as employment losses occurred in specific quarters, and employment recovered to some extent in subsequent quarters of the survey years. Further analysis is, therefore, made by deriving quarter estimates of actual workers.

Worker Participation Rates (WPRs)

To assess the real impact of the pandemic in specific quarters, the quarter-wise WPRs of those who were actually working during the reference week were computed from July 2018 to June 2022 (**table 2**). These estimates reveal that the impact had not been uniform across different population segments as per the details given below.

Table 2. Worker participation rates by employment status, rural-urban and sex, 2019-quarter 2 to 2022-quarter 2

Quarter*	Employment Status									
	Rural Men					Rural Women				
	SE_W	RW_W	CW_G	CW_NG	All	SE_W	RW_W	CW_G	CW_NG	All
2019_q2	37.60	10.38	0.74	18.88	67.59	11.68	2.68	1.55	4.53	20.45
2019_q3	41.35	9.65	0.26	18.96	70.22	16.29	2.98	0.31	6.57	26.15
2019_q4	41.86	9.54	0.28	19.31	70.99	16.67	3.03	0.37	7.39	27.47
2020_q1	40.57	9.80	0.25	18.01	68.64	16.71	2.53	0.71	6.36	26.32
2020_q2	37.31	6.35	0.95	13.52	58.12	14.04	1.73	1.05	4.64	21.46
2020_q3	42.62	8.17	0.40	17.74	68.93	17.71	2.38	0.81	5.61	26.50
2020_q4	43.53	9.74	0.19	17.55	71.01	18.42	2.42	0.42	6.52	27.78
2021_q1	42.18	9.78	0.43	19.41	71.80	19.12	3.04	0.69	6.61	29.46
2021_q2	40.21	9.01	0.47	16.95	66.64	16.06	2.72	0.93	5.57	25.27
2021_q3	42.44	9.25	0.43	18.15	70.26	18.45	2.20	0.70	5.68	27.04
2021_q4	43.41	10.59	0.40	17.06	71.46	18.97	2.72	0.87	5.10	27.66
2022_q1	41.01	11.08	0.41	18.33	70.82	18.72	2.74	0.67	5.55	27.67
2022_q2	39.51	10.94	0.56	18.37	69.38	18.22	2.68	1.01	4.83	26.74
Quarter*	Urban Men					Urban Women				
	SE_W	RW_W	CW_G	CW_NG	All	SE_W	RW_W	CW_G	CW_NG	All
2019_q2	25.86	31.39	0.06	9.42	66.73	6.05	9.59	0.11	1.66	17.42
2019_q3	26.63	32.03	0.10	8.75	67.50	6.55	11.69	0.05	1.90	20.19
2019_q4	25.41	33.15	0.07	8.39	67.01	6.68	11.04	0.08	1.33	19.13
2020_q1	24.68	31.79	0.13	8.21	64.80	6.92	11.02	0.11	1.90	19.95
2020_q2	16.06	19.65	0.05	4.79	40.55	3.86	6.11	0.10	0.98	11.04
2020_q3	25.50	27.76	0.08	8.89	62.24	6.44	8.76	0.12	1.62	16.94
2020_q4	25.58	31.85	0.05	9.06	66.54	6.60	9.30	0.06	1.70	17.66
2021_q1	26.67	31.19	0.14	9.58	67.58	7.82	10.74	0.03	1.91	20.50
2021_q2	23.67	25.92	0.06	7.54	57.20	5.48	7.87	0.04	1.49	14.87
2021_q3	25.62	31.63	0.19	8.97	66.41	6.37	9.95	0.12	1.63	18.09
2021_q4	27.25	32.65	0.07	8.75	68.73	7.24	10.38	0.11	1.57	19.30
2022_q1	27.23	30.10	0.06	8.61	66.01	7.27	10.90	0.15	1.36	19.68
2022_q2	26.69	32.51	0.02	8.92	68.14	7.78	9.98	0.06	1.51	19.34

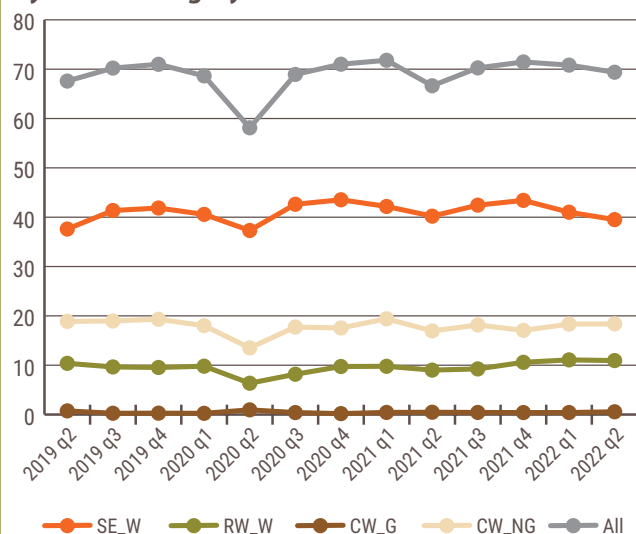
*Key: SE-W Self-employed reported actually working during the week
RW-W Regular wage workers reported actually working during the week

CW-G Casual workers in government projects
CW-NG Casual workers in non-government activities

Men Workers in Rural Areas

The overall reduction in the WPR of rural men in the second quarter of 2020 as compared to the same quarter of the previous year was 9.47 percentage points. This reduction largely occurred among regular wage workers and casual workers (**chart 1**). The WPRs of these two categories of workers declined by 5 percentage points by the second quarter of 2020 but began to recover by the third quarter. Both groups of casual workers attained the 2019 second-quarter level by the first quarter of 2021, though declined by about one percentage point by the next quarter. The decrease of these workers in the second quarter was due to the impact of both the pandemic and the typical drop in agricultural work during this time of year.

Chart 1: Quarterly WPRs of rural men by worker category



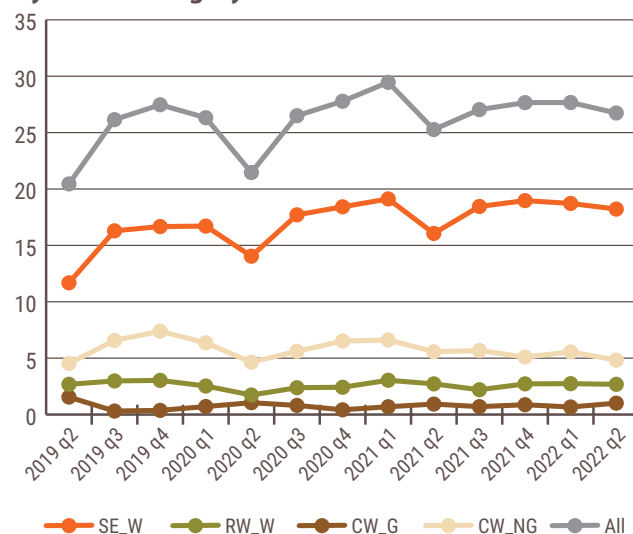
Key: SE-W Self-employed reported actually working during the week
RW-W Regular wage workers reported actually working during the week

The WPR of regular wage workers reached the base levels of 2019 only by the fourth quarter of 2021.

Women Workers in Rural Areas

The WPR of rural women in the second quarter of 2020 was 1.01 percentage points higher than that of the reference quarter in 2019, although the participation rates of regular wage workers and casual workers in government activities declined (**chart 2**). The overall increase was largely due to an increase in self-employed women. In rural India, women are more likely than men to be self-employed, but largely as unpaid contributing family workers. During the lockdown period, there was an increase among men in self-employment in agriculture, and women joined them as unpaid family workers.

Chart 2: Quarterly WPRs of rural women by worker category



CW-G Casual workers in government projects
CW-NG Casual workers in non-government activities



A domestic worker in Delhi. Photo by Avi Majithia

Men Workers in Urban Areas

The participation rates of urban men suffered significantly due to the national lockdown in the second quarter of 2020. The overall loss during the quarter was 26.18 percentage points and the rates did not fully recover until the fourth quarter of 2020 (**chart 3**). All categories of workers, including the self-employed and regular wage workers, lost employments. The reduction was 9.80 percentage points in the case of self-employed, 11.74 per cent among regular wage workers and 4.63 per cent among casual wage workers. Urban men suffered the greatest employment losses of the four main categories of workers in the pandemic. In the second quarters of 2020 and 2021, the dip in the WPRs of regular wage workers and self-employed

reflect the direct effects of the pandemic and the consequent lockdowns.

Women Workers in Urban Areas

The worker participation rates of urban women declined by 6.38 percentage points between the second quarters of 2019 and 2020. The rates included declines of 2.20 points among working self-employed, 3.48 points among regular wage workers and 0.69 per cent among casual wage workers in private employment (**chart 4**). Although the WPRs began to recover from the third quarter, recovery was relatively slow, and there was a further loss of 2.55 percentage points in the second quarter of 2021, primarily due to the partial lockdown imposed to prevent the second pandemic wave.

There was, however, an upward trend in the WPRs of self-employed urban women from the second quarter of 2021.

Loss of Employment in Numbers

The second quarter of 2020 was the period that followed the declaration of a national lockdown on 24 March 2020, with the imposition of several restrictions, including closing of establishments and travel facilities. The estimated loss of employment in the second quarter of 2020 as compared to the same quarter of 2019 was 86.24 million (**table 3**). The loss in the employment of rural men was 31.16 million, including: 17.63 million loss of casual wage employments in non-government activities and 13.26 million loss of regular wage employments. There was, however, a small increase of 0.68 million in the case of casual wage employments in government activities.

As mentioned above, there was an increase in the number of women workers in rural areas, largely due to an increase in self-employed women, especially as unpaid contributing family workers. Rural women in regular wage work, however, suffered a loss of 3.10 million jobs, and those in casual wage work in government suffered a loss of 1.62 million.

Men in urban areas suffered the greatest employment loss: 47.43 million jobs, including 17.76 million self-employed, 21.26 million regular wage workers, and 8.41 million casual wage workers. The aggregate loss of jobs among urban women was 10.94 million, including 3.77 million self-employed, 5.96 million regular workers and 1.20 million casual workers.

Chart 3: Quarterly WPRs of urban men by worker category



Chart 4: Quarterly WPRs of urban women by worker category

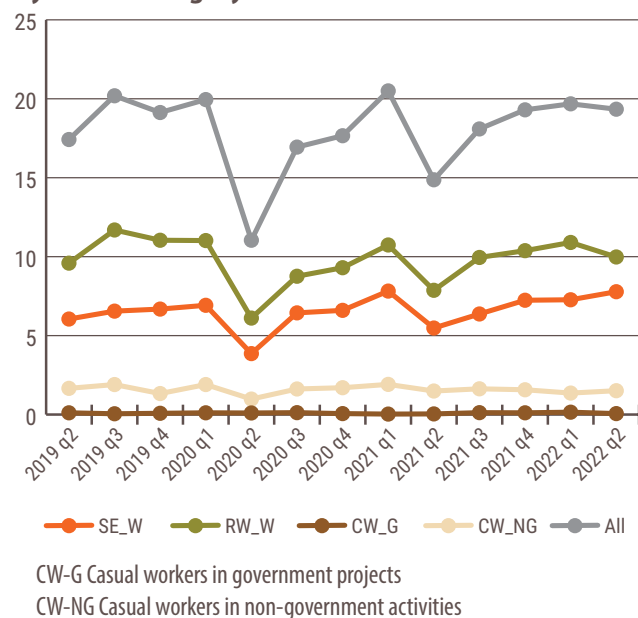


Table 3. Estimates of change in employment between second quarters of 2020 and 2019*

Worker category**	Change in Worker Participation Rate (percentage point)	Change in number of workers (million)	Change in Worker Participation Rate (percentage point)	Change in number of workers (million)	Change in Worker Participation Rate (percentage point)	Change in number of workers (million)
	Rural Men		Rural Women		All Population	
SE_W	-0.29006	-0.95	2.35865	7.64	-0.01475	-14.84
RW_W	-4.02945	-13.26	-0.95496	-3.10	-0.04332	-43.57
CW_G	0.20658	0.68	-0.49996	-1.62	-0.00098	-0.99
CW_NG	-5.35880	-17.63	0.11010	0.36	-0.02669	-26.84
Total	-9.47173	-31.16	1.01382	3.29	-0.08574	-86.24
	Urban Men		Urban Women		** Key: SE-W Self-employed reported actually working during the week RW-W Regular wage workers reported actually working during the week CW-G Casual workers in government projects CW-NG Casual workers in non-government activities	
SE_W	-9.80471	-17.76	-2.19782	-3.77		
RW_W	-11.73585	-21.26	-3.47567	-5.97		
CW_G	-0.01165	-0.02	-0.01590	-0.03		
CW_NG	-4.63277	-8.39	-0.68601	-1.18		
Total	-26.18498	-47.43	-6.37541	-10.94		

*Gains are indicated with no sign and losses in employment in Q2 of 2020 are indicated with minus signs

If there had been no decline in WPR of different categories of workers in the second quarter of 2020 as compared to the same quarter in 2019, the total number of workers was expected to be 439.41 million, including 222.37 million rural men, 66.28 million rural women, 120.87 million urban men and 29.89 million urban women. Thus, the overall loss of employment in the second quarter of 2020 as compared to the expected work force was 19.6 per cent. It was, however, as high as 39.2 per cent among urban men and 36.6 per cent among urban women.

Loss of Employment by Industry Sector

The Indian economy is characterized by high concentration of employment in the agricultural

sector. This did not change even during the lean agricultural season and the national lockdown in the second quarter of 2020. The aggregate estimate of actual workers from the survey data of this quarter revealed that 51 per cent of employment was in the agricultural sector (**table 4**). The other major sectors of employment were construction (12%), trade (11%) and manufacturing (9%). Among rural men, 61 per cent were employed in agriculture with 14 per cent in construction, 8 per cent in trade and 6 per cent in manufacturing. Among rural women, around 75 per cent were employed in agriculture, 7 per cent in construction, 6 per cent in manufacturing and 4 per cent in trade. Among urban men, 24 per cent were employed in trade, 18 per cent in manufacturing, 11 per cent in construction and 10 per cent in transport. Among

Table 4: Distribution of workers by industry sector, rural- urban and sex: second quarter, 2020 (per cent)

Industry Group	Rural Men	Rural Women	Urban Men	Urban Women	All
Agriculture	60.50	75.86	7.81	11.91	50.75
Manufacturing	5.71	5.76	18.31	19.94	8.91
Construction	14.03	7.40	10.66	3.53	11.53
Trade	8.16	4.06	23.92	11.23	10.59
Transport	3.79	0.08	9.81	0.77	4.08
Education, health & social work	1.73	3.90	4.51	17.71	3.52
Workers in households	0.11	0.60	1.15	10.77	0.95
Other Services	5.20	2.26	20.97	22.96	8.61
Others	0.77	0.09	2.86	1.17	1.06
Total	100.0	100.0	100.0	100.0	100.0

urban women, around 20 per cent were employed in manufacturing, 12 per cent in agriculture, 11 per cent in trade, 11 per cent in the household sector (as domestic workers) and 18 per cent in education and health.

The loss of employment by industry group revealed an abnormal increase of 22.48 million in the actual workers in agriculture during the lock down period in 2020 (**table 5**). This included 12.55 million rural women and 8.65 million rural men. This increase is consistent with the general phenomenon of people shifting to agriculture as a survival measure during periods of economic slowdown and employment contraction in other sectors. Men tend to take on subsistence agriculture, and women join them as unpaid family workers.

Table 5. Estimated loss/gain of employment by industry sector, rural-urban and sex: second quarter, 2020 (million)*

Industry Group	Rural Men	Rural Women	Urban Men	Urban Women	All
Agriculture	8.65	12.55	0.82	0.45	22.48
Manufacturing	-5.10	-2.72	-11.65	-3.66	-23.13
Construction	-13.06	-2.47	-5.95	-0.72	-22.19
Trade	-5.76	-0.21	-12.12	-1.58	-19.67
Transport	-5.04	0.00	-4.51	-0.09	-9.64
Education, health & social work	-2.66	-2.15	-3.08	-2.24	-10.13
Workers in households	-0.77	-0.37	-0.66	-0.67	-2.47
Other services	-6.92	-1.03	-10.47	-2.56	-20.98
Others	-0.50	-0.32	0.18	0.11	-0.53
Total	-31.16	3.29	-47.43	-10.94	-86.24

* Gains are indicated without signs and losses are indicated with minus signs

Of the industry sectors, manufacturing suffered the greatest loss – 23.13 million jobs – during the second quarter of 2020. This was followed by construction (22.19 million), other services (20.98 million), trade (19.67 million), education, health and social work (10.13 million) and transport (9.64 million).

Losses of Informal and Formal Employment

Informal employment dominates the Indian labour market. In the year 2021-22, around 88 per cent of the employed were informal: 91 per cent of employed women and 88 per cent of employed men. Any crisis in employment in India will then have a greater effect on informal than

Table 6. Gain/loss of non-agricultural and all employment by informal/formal, rural-urban and sex: comparison of the second quarters of 2020 and 2019 (million and per cent *)**

	Rural Men	Rural Women	Urban Men	Urban Women	All
Non-agriculture informal	-35.71 (-34.8)	-8.52 (-37.3)	-38.57 (-43.3)	-8.95 (-42.9)	-91.76 (-39.0)
Non-agriculture formal	-4.10 (-32.4)	-0.75 (-23.0)	-9.68 (-36.0)	-2.44 (-33.3)	-16.97 (-34.0)
Non-agriculture total	-39.81 (-34.5)	-9.27 (-35.6)	-48.25 (-41.6)	-11.40 (-40.6)	-108.72 (-38.1)
All informal workers	-27.95 (-13.5)	2.54 (4.1)	-37.88 (-40.3)	-8.52 (-37.6)	-71.80 (-18.6)
All formal workers	-3.21 (-21.3)	0.74 (19.3)	-9.55 (-35.5)	-2.43 (-33.6)	-14.44 (-27.2)
All workers	-31.16 (-14.0)	3.29 (5.0)	-47.43 (-39.2)	-10.94 (-36.6)	-86.24 (-19.6)

Note: * Figures in brackets indicate percentage losses and gains

** Gains are indicated without signs and losses are indicated with minus signs

formal workers. However, the abnormal increase in agricultural workers, who are mostly informal, masked the real loss of informal employment. The overall loss of employment in non-agricultural activities due to the pandemic in the second quarter of 2020 was 108.72 million, including 91.76 million informal workers (**table 6**). The percentage loss was 39 per cent among informal non-agricultural workers compared to 34 per cent for formal non-agricultural workers. The loss, both in absolute and percentage terms, was the highest among urban men: 48.25 million (41.6%).

There was a 19 per cent loss of informal employment and a much greater loss of 27 per cent in formal employment, despite the increase in agricultural workers between the second quarters of 2019 and 2020. The overall loss in total employment was about 20 per cent. Excluding agriculture, as noted above, the percentage loss among informal workers was higher than among formal workers.

Employment Losses of Special Groups of Workers

The special groups of workers considered are: (i) domestic workers, (ii) home-based workers (HBW), (iii) street vendors and (iv) waste pickers. These categories accounted for around 15 per cent of the total workers in 2019. More than one-third of urban women workers belonged to these groups of workers and, among them, 22 per cent were home-based workers (**table 7**). Similarly, about one-fourth of the rural women workers belonged to the special groups and, among them, 22 per cent were home-based workers.

Table 7. Share of special groups of workers in total employment by rural-urban and sex: second quarter, 2019 (per cent)

Worker group	Rural Men	Rural Women	Urban Men	Urban Women	All
Home-based worker	6.4	22.0	7.3	22.0	10.1
Street vendor	2.3	0.5	4.8	2.0	2.7
Domestic worker	0.5	1.1	1.3	9.3	1.4
Waste picker	0.3	0.7	0.8	1.5	0.6
All groups	9.5	24.3	14.2	34.8	14.8

Table 8. Gain/loss of work among special worker groups by rural-urban and sex: comparison of the second quarters of 2020 and 2019 (per cent)*

Worker group	Rural Men	Rural Women	Urban Men	Urban Women	All
Home-based worker	-8.5	-13.0	-40.9	-40.0	-21.1
Street vendor	-48.7	-0.3	-41.7	1.0	-41.4
Domestic worker	-89.6	-63.4	-68.5	-55.0	-65.2
Waste picker	-65.9	-51.0	-14.9	38.7	-27.1
All groups	-24.2	-16.1	-42.2	-38.4	-29.2

* Gains are indicated without signs and losses are indicated with minus signs

The aggregate loss of employment among the groups of workers during the second quarter of 2020 was 29 per cent (**table 8**). The highest loss was 42 per cent among urban men followed by 38 per cent among urban women. The category that suffered the most was domestic workers, of whom 65 per cent lost employment: 90 per cent of

Table 9. Average hours worked weekly by informal/formal employment, rural-urban and sex: second quarter, 2020 (hours)

Informality	Rural Men	Rural Women	Urban Men	Urban Women	All
Informal	47.38	39.54	53.52	42.91	46.60
Formal	52.23	43.99	57.78	55.15	53.97
Total	47.68	39.83	54.53	46.01	47.38

rural men, 63 per cent of rural women, 68 per cent of urban men and 55 per cent of urban women.

Average Working Hours, Earnings and Loss of Earnings per Week by Informal/Formal for All Employed

In the second quarter of 2020, the average hours of work per week of all employed workers was 47.4 hours – nearly eight hours per day for a six-day work week (**table 9**).¹ The average hours of work, however, were lower for informal than formal workers. While informal workers worked around 46.6 hours per week, formal workers worked about 54 hours. The average working hours of men and women also differed significantly, with rural women working only 39.8 hours per week compared to 47.7 hours by rural men.

The disparity in average earnings per hour between informal and formal workers was very high, as informal workers earned as low as 37.83 rupees per hour as compared to 104.83 rupees for formal workers (**table 10**). The highest average earnings

Table 10. Average hourly earnings by informal/formal employment, rural-urban and sex: second quarter 2020 (rupees)

Informality	Rural Men	Rural Women	Urban Men	Urban Women	All
Informal	37.66	16.86	57.94	35.62	37.83
Formal	72.76	40.18	137.49	115.80	104.83
Total	40.05	18.57	77.84	59.97	45.97

per hour was 137.49 rupees for formal urban men. There was significant disparity between men and women in average earnings per hour. The earnings gap was far higher in rural areas than urban areas: it was 18.57 and 40.05 rupees for women and men respectively in rural areas, and 59.97 and 77.84 rupees respectively in urban areas.

The aggregate loss of income per week due to the pandemic in the second quarter of 2020 was 288,569 million rupees (**table 11**). The biggest loss per week was suffered by urban men with a loss of 201,302 million rupees followed by rural men, with a loss of 59,505 million rupees. At the same

Table 11: Estimated aggregate gain/loss of weekly income by informal/formal employment, rural-urban and sex: comparison of the second quarters of 2020 and 2019 (million rupees)*

Informality	Rural Men	Rural Women	Urban Men	Urban Women	All
Informal	-47818	1369	-122297	-13781	-182527
Formal	-11687	1061	-79005	-16410	-106042
Total	-59505	2430	-201302	-30192	-288569

* Gains are indicated without signs and losses are indicated with minus signs

¹ The change in hours from the base period (the second quarter of 2019) for men and women in rural and urban areas is shown in section 10 and table 15.



Home-based workers in Ahmedabad. Photo by Jothyraj SAVE

time, rural women did not suffer loss of earnings, but rather, gained due to increased employment.²

Average Working Hours, Earnings and Loss of Earnings per Week for Special Worker Groups

The average hours of work per week of the four special worker groups in the second quarter of 2019 was 49.4 hours. However, it decreased to 45.3 hours per week in the second quarter of 2020 compared to an average of 47.38 hours for all workers (**table 12**). Street vendors and waste pickers worked 49.6 hours per week on average, longer on average than the standard work week, while home-based workers worked for an average of 44.2 hours. The average work hours of men and women in employment differed significantly, since women also had the

Table 12. Average hours worked per week among special worker groups, rural-urban and sex: second quarter of 2020

Worker group	Rural Men	Rural Women	Urban Men	Urban Women	All
Home-based worker	50.10	36.54	52.86	37.58	44.19
Street vendor	51.78	42.36	50.39	38.39	49.55
Domestic worker	55.02	40.42	61.40	41.96	46.74
Waste picker	51.06	40.66	51.38	50.07	49.57
All groups	50.42	36.84	52.30	39.71	45.32

responsibility of domestic work. While rural men worked an average of 50.4 hours per week, rural women worked 36.8 hours, a difference of 13.6 hours per week. Urban men worked for an average of 52.3 hours per week, while urban women worked 39.7 hours, a difference of 12.6 hours.

The average earnings per hour of the special worker groups taken together in the second quarter of 2020 was 33.63 rupees (**table 13**) as against 45.97 rupees for all workers (**table 10**). Thus, the special worker groups earned relatively less, on average, than all workers. In each worker group, men had higher earnings than women. Urban men had the highest earnings among the special worker groups, except for domestic workers, as rural men's earnings were the highest among domestic workers. Rural and urban women home-based workers had the lowest earnings.

During the second quarter of 2020, the total loss of weekly earnings of the four special categories

Table 13. Average earnings per hour of work by special groups of workers, rural-urban and sex: second quarter of 2020 (rupees)

Worker group	Rural Men	Rural Women	Urban Men	Urban Women	All
Home-based worker	35.24	18.00	54.42	21.16	31.97
Street vendor	39.97	29.59	44.44	23.48	40.59
Domestic worker	42.34	28.85	33.84	26.01	29.64
Waste picker	35.37	34.78	47.73	33.77	40.06
All groups	36.09	18.89	49.43	23.90	33.63

Table 14. Estimated aggregate gain/loss of income per week by special worker groups, urban-rural and sex: comparing the second quarters of 2020 and 2019 (million rupees) *

Worker group	Rural Men	Rural Women	Urban Men	Urban Women	All
Home-based worker	-2143	-1300	-10731	-2140	-16314
Street vendor	-5172	-1	-5589	5	-10757
Domestic worker	-2111	-562	-2211	-1709	-6592
Waste picker	-902	-355	-357	297	-1318
All groups	-10328	-2219	-18888	-3547	-34982

* Gains are indicated without signs and losses are indicated with minus signs

workers was 34,982 million rupees, which constituted 12 per cent of the total loss of all workers during the period (**table 14**). The highest loss was suffered by home-based workers (16,314 rupees on average) followed by street vendors (10,757 rupees on average). As higher earners, the absolute losses of men were greater than the absolute losses of women. Urban men in home-based work had the highest loss of earnings followed by urban and rural men in street vending.

² The loss of income is derived by multiplying the loss of employment with average income per week per worker in the respective population segment. The average income per worker of rural women was the lowest, as a large share – though not all – were unpaid family workers. The increase in the number of rural women workers during the second quarter of 2020 was reflected in the aggregate earnings, which were obtained by multiplying the average earnings with the number of workers.

Table 15. Indices of work-hour participation rates by rural-urban and sex: 2019-2022

Quarter	Rural Men	Rural Women	Urban Men	Urban Women	All
2019_q2	100.0	100.0	100.0	100.0	100.0
2019_q3	105.5	130.2	101.7	117.4	108.4
2019_q4	107.2	136.4	101.7	108.5	109.2
2020_q1	101.7	126.4	96.8	113.9	104.3
2020_q2	82.5	103.7	57.6	61.6	76.6
2020_q3	101.0	125.2	91.8	95.4	101.5
2020_q4	106.2	135.2	99.0	97.3	107.3
2021_q1	106.5	138.0	100.9	114.0	108.5
2021_q2	95.4	120.0	82.2	81.6	93.5
2021_q3	101.6	121.8	97.9	100.6	103.5
2021_q4	103.7	124.6	101.7	107.2	106.4
2022_q1	102.1	122.7	96.7	108.2	103.9
2022_q2	99.4	117.8	100.3	107.4	103.0

Change Indices

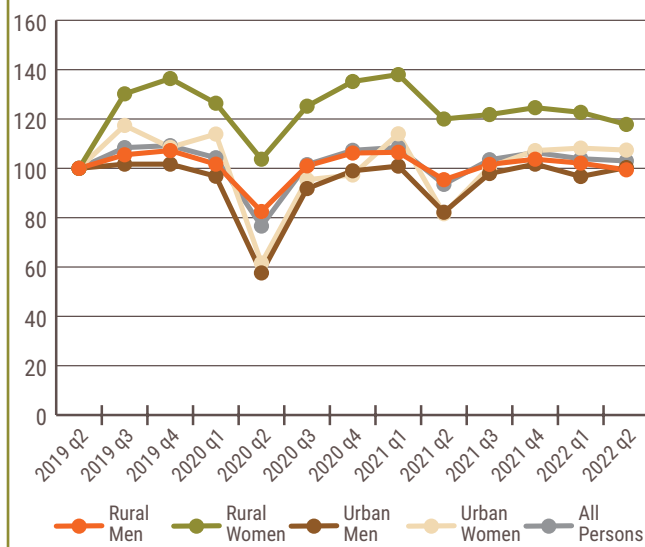
Change indices were computed for assessing the loss and recovery patterns of worker participation across each quarter during the survey years. Work-Hour Participation Rates (WHPR) were used instead of WPR and the second quarter of 2019 was taken as the base period. The formula used for the computation of the indices is:

$$I^t = (WHPR^t / WHPR^0) * 100$$

I^t is the index for the t^{th} quarter

$WHPR^t$ is the work-hour participation rate for the t^{th} quarter

$WHPR^0$ is the work-hour participation rate for the base quarter, that is 2019_q2

Chart 5: Indices of worker-hour participation rates

The change indices for all the workers indicated that the Work Hour Participation Rate declined by 23 per cent in the second quarter of 2020 (**chart 5, table 15**) but recovered by the next quarter. However, it again declined moderately during the second quarter of 2021, the peak period of the second wave of the pandemic, and again recovered by the following quarter.

WHPRs of rural men also followed almost a similar pattern of all workers, except for a marginal decline in the second quarter of 2022. WHPRs of rural women remained significantly above the base level across the three years, though only slightly above the base level in the second quarter of 2020.

The WHPRs of urban men began to decline even in the first quarter of 2020 and declined further by 42 per cent during the second quarter. Then the WHPR rose gradually but remained below the normal



A waste picker in Pune. Photo by Julian Luckham

until the fourth quarter of 2020. There was again a substantial reduction in the second quarter of 2021 and an increase to base level by the fourth quarter of 2021. It again fluctuated below and above the base level in the next two quarters.

There were also fluctuations in the WHPRs for urban women. The decline in the second quarter of 2020 was high at 38 per cent, but employment gradually increased to reach the base level by the first quarter of 2021 as with urban men. Though it again declined in the second quarter of 2021, it quickly recovered and remained above the normal from the next quarter onwards.

The impact of the pandemic on urban men was great, and in 2022 they were still struggling to have employment rates at the level of the second quarter of 2019. The employment rate of rural men also did not improve over the base level.



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Women in Informal Employment: Globalizing and Organizing (WIEGO) is a global network focused on empowering the working poor, especially women, in the informal economy to secure their livelihoods. We believe all workers should have equal economic opportunities, rights, protection and voice. WIEGO promotes change by improving statistics and expanding knowledge on the informal economy, building networks and capacity among informal worker organizations and, jointly with the networks and organizations, influencing local, national and international policies. Visit www.wiego.org

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