
Employment of the Rural Labour Force in India – The Current Trends and Future Prospects*

Rajshree Bedamatta[†]

I

INTRODUCTION

No other decade since the 1950s has seen such diverse and contradictory estimations on employment patterns in India as the just-ended second decade of the 2000s. The period 2011-2020, thanks to a near absence of official estimates on the employment-unemployment situation, has generated various rhetoric-driven opinions. The country's largest and the most robust Employment-Unemployment Survey (EUS) carried out by the National Sample Survey Organisation (NSSO) has been discontinued. The NSS-EUS started in the 1950s and was regularised in quinquennial surveys since 1977-78.¹ Although various other² data sources provide information on economic activity status, the NSS-USS was by far the only comprehensive source of data on employment and unemployment using the same concepts and methods of data collection for more than four decades now. Unfortunately, the run ended with the 68th round in 2011-12. With the discontinuation of EUS surveys, we lose the scope of comparability with the past decades. What we have by way of providing direction are the Periodic Labour Force Survey (PLFS, 2017-18) and the Centre for Monitoring Indian Economy's Consumer Pyramids Household Survey (or CMIE-CPHS) since 2016.

A few scholarly works based on the PLFS 2017-18 and the CMIE-CPHS results show that the decade 2011-2020 may have been a period of massive loss of employment and vigorous transitions of labour in and out of various sectors, particularly in its last stretch due to the COVID-19 induced exogenous shock (Azim Premji University, 2018; 2019; Nath and Basole, 2020; World Bank, 2020). However, India's labour market landscape, and more particularly the rural, had already begun to change in the 2000s with a rapid structural transformation from employment in agriculture to non-agriculture. We began the 2000s with declining employment growth despite being on an increasing growth trajectory. The economic growth of the 2000s created lesser jobs compared to the 1970s-1990s (Azim Premji University, 2018; Kannan and Raveendran, 2019). What is worrying is that while

* Keynote paper presented at the 80th Annual Conference of the Indian Society of Agricultural Economics held under the auspices of for Agricultural and Rural Development Studies (CARDS), Tamil Nadu Agricultural University, Coimbatore (Tamil Nadu) on February 10, 2021.

[†] Associate Professor, Department of Humanities and Social Sciences, Indian Institute of Technology, Guwahati.

employment elasticity with respect to growth was declining in the early 2000s, it turned negative towards the end of this decade. Kannan and Raveendran (2019) refer to this as a shift from a period of 'jobless growth' to 'job-loss growth.'

The results emerging from the National Sample Survey Organisation (NSSO) had shown that between 1999-2000 and 2011-12, labour force participation in India declined unprecedentedly, with the decline in the female labour force being a major contributing factor. The narrative that emerged was that the structural transformation of the Indian economy from agriculture to non-agriculture, and the associated changes in increased standards of living in the rural areas, led to a decline in labour force participation of female workers due to a negative income effect on the employment of women (Himanshu, 2011; Abraham, 2013; Chand and Srivastava, 2014; Mehrotra *et al.*, 2014; Ghose, 2016; Mehrotra and Parida, 2017). However, the fall in overall labour force participation, which showed up disproportionately on women, signifies a rise in the dependency ratio. Such a pattern contradicts the growth story experienced in other parts of the world, wherein increased growth gives way to increased participation of women in economic activities and subsequent reduction in dependency rates.

Between the rural and the urban, fall in employment has been more acute in the former in both the usual principal and subsidiary status (UPSS)³ of employment. In this backdrop, one needs to assess how the rural labour market has changed in India with respect to employment and living conditions in general, and the associated changes affecting the rural employment prospects in particular, as the bulk of the Indian workforce is queuing for employment in this sector. The writing on the wall is that we face massive open unemployment of a kind never experienced before, even during the historically low economic growth period of the 1970s.

This paper is arranged around five broad questions. (1) What is the recent debate on Indian unemployment estimates, and how do we approach it? (2) What do the overall trends tell us about the employment of the rural labour force in India today? (3) What do we conclude about female labour force participation in India from the studies in the 2000s? (4) Why official statistics in India need to spend more research attention on women's work? (5) What is the way forward?

II

THE "LOST DECADE" OF UNEMPLOYMENT STATISTICS – ASSESSING THE SIZE AND COMPOSITION OF THE RURAL LABOURFORCE IN INDIA

The Census of 2011 showed that the number of agricultural workers in the country increased from 234 million in 2001 to 263 million in 2011. The NSSO however threw divergent estimate that between 2005 and 2011, the number of workers in agriculture fell by 37 million. Both ways, vulnerability of agricultural workers and their reduced productivity in agriculture, sharply highlighted the brewing crisis in agriculture. The second decade of the 2000s witnessed transformative changes in the Indian agricultural sector, particularly concerning employment.

Population growth and labour growth projections emerging from the 1980s and 1990s have already shown that the decade of 2000s and henceforth would see serious employment challenges in Indian agriculture. In the earlier decades, labour force growth had outpaced population growth, but labour absorption in non-agriculture was mostly into rural non-farm enterprises. India's manufacturing sector has not been able to absorb the excess labour supply from the rural areas (Hazellet *al.*, 2011, cited in Binswanger-Mkhize, 2013; Binswanger-Mkhize, 2013).

Until the time of writing this paper, three key reports have put the macroeconomic statistics on employment together. They are the India Employment Report 2016 (Ghose, 2016), the State of Working India Report 2018 (AzimPremji University, 2018), and the State of Working India Report 2019 (AzimPremji University, 2019). It is beneficial to put the broad findings of these key reports into perspective given the discontinuation of NSS-EUS surveys.

Based on the 68th Round data of NSSO Ghose (2016) concluded, the size of our labour force was about 473 million, of which 91 per cent were in the working-age (15-59 years) population. Of those in the working-age population, 78 per cent were males and 68 per cent females. There were about 2 million children (less than 15 years of age) in the labour force and 39 million older workers (greater than or equal to 60 years of age). Between the decades of 1983-1999/2000 and 1999/2000 – 2011/12, the growth of labour force fell (from 1.8 per cent to 1.4 per cent). One of the primary reasons for this decline was reduced child labour due to the overall poverty decline. However, the working-age labour force's growth also declined during this period (from 1.9 per cent to 1.5 per cent). The significant reason attributed was the decline in labour force participation of working-age women. The demographic transition did not seem to have translated into a demographic dividend. The dependency ratio increased from 2.6 in 1983 to 2.8 in 2011-12. Overall between 1999/2000 and 2011/12, both labour force and employment grew at 1.5 per cent per annum. However, the unemployment rate was stable at around 3 per cent.

The overall assessment of the India Employment Report of 2016 was that between 1999/2000 and 2011/12, India's employment structure underwent a favourable change in terms of increased earnings per worker and movement of workers within different types of employment. There was a movement from informal to formal jobs, from casual employment to regular employment, from wage employment in the unorganised sector to wage employment in the organised sector. The underemployment of the employed declined in all types of employment. Despite the improvements, there was the growing importance of informal employment in the organised sector, and the conditions of overall employment remained low in 2011/12. Self-employment and casual wage employment still accounted for 78 per cent of the total employment in the economy.

The State of Working India 2018 put the key labour market statistics for the period 2011-2015 together based on all the available comparable sources of data (NSS-EUS, 2011 and Labour Bureau, 2011-2015). The report concluded that the

workforce or quantity of employment did not keep pace with the labour force growth giving rise to a widening gap resulting in unprecedented levels of unemployment (Table 1).

TABLE 1. KEY LABOUR MARKET INDICATORS (2011-15) REPORTED BY THE STATE OF WORKING INDIA 2018

Year (1)	Population > 15 years (millions) (2)	LFPR (per cent) (3)	Labour Force (millions) (4)	Unemployment rate (per cent) (5)	Unemployed (millions) (6)	Workforce (millions) (7)
2011 (NSS)	850.2	51.6	438.7	2.7	11.8	426.9
2011 (LB)	850.2	52.9	449.8	3.8	17.1	432.7
2012 (LB)	883.6	50.9	449.7	4.7	21.1	438.6
2013 (LB)	900.4	52.5	472.7	4.9	23.2	449.5
2014 (LB)	917.2	-	-	-	-	-
2015 (LB)	926.0	50.3	465.8	5	23.3	442.5

Source: AzimPremji University (2018).

The State of Working India 2018 extended the analysis on unemployment estimates based on the CMIE-CPHS data for 2016 and 2017 to address a controversy surrounding the employment estimates provided by Bhalla and Das (2018). While the overall trends pointed to the loss of employment throughout the period from 2011 onwards, Bhalla and Das (2018) showed that the economy added 13 million new jobs. The CMIE-CPHS data, on the contrary, was reporting job loss and a drastic decline in labour force participation rates. Although between 2016 and 2017, CMIE-CPHS data showed mild improvements in male and female LFPR, but still much lower than in 2011 (Table 2).

TABLE 2. TOTAL EMPLOYMENT AND LABOUR FORCE PARTICIPATION RATES IN INDIA FROM 2011-17 REPORTED BY THE STATE OF WORKING INDIA 2018

Year (1)	Bhalla and Das (2018)				CMIE-CPHS			
	Employment (millions) (2)	LFPR (all) (3)	LFPR (male) (4)	LFPR (female) (5)	Employment (millions) (6)	LFPR (all) (7)	LFPR (male) (8)	LFPR (female) (9)
2011	447.9	52.6	80.4	23.2	-	-	-	-
2013	443.3	51.3	75.6	25.5	-	-	-	-
2015	442.7	50.4	76.0	23.4	-	-	-	-
2016	450.8*	49.8*	76.5*	21.6*	403.5	46.7	72.6	12.0
2017	464.3*	49.9*	76.5*	21.6*	404.9	43.9	74.6	15.5

Source: AzimPremji University (2018)

Note: See AzimPremji University (2018), p.38 for details on the shortcomings of Bhalla and Das (2018) estimates; * are assumed estimates.

The AzimPremji University (2018) contended Bhalla and Das (2018) by arguing that between 2013 and 2015, the total employment in India shrank by seven million. The rate of unemployment among youth and higher educated is very high (16 percent). They also reported an increase in unemployment across all Indian states but more severe in northern states. Since 2011, India's unemployment is no longer that of underemployment but high open unemployment. Between 2010 and 2015, real wages

grew at 2 per cent for organised manufacturing, 4 per cent for unorganised manufacturing, 5 per cent for unorganised services, and at 7 per cent for agriculture. However, agriculture growth has collapsed since 2015. The report also argued that while there has been wage growth in the country, labour productivity and wages are not growing together. The labour share in overall income is low in the country. The gender and caste disparities in the labour market are reducing but still high. The women labour force is 16 per cent of all service sector workers but 60 per cent of domestic workers. Overall, women earn only about 65 per cent of men's earnings. The scheduled castes are 18.5 per cent of all workers but 46 per cent of leather workers. However, the caste earnings gap was larger than the gender earnings gaps pointing to barriers of entry in the Indian labour market.

Post-2011-12, there is an absolute and unprecedented decline in workforce. Different scholars have reported this fall differently based on the reference periods considered and the methods of population estimation. However, even if we ignore the methodological differences, there is a fall, and the estimations range from a low of 6.2 million to about 15.5 million workers (Himanshu, 2019; Kannan and Raveendran, 2019; Mehrotra and Parida, 2019; Nath and Basole, 2020). Such a massive decline has put the entire rural sector in disarray. Unemployment has risen steadily since 2011 based on whichever household survey⁴ we examine, and the higher educated, and youth are vastly over-represented among the unemployed. Between 2011-12 and 2017-18, the working-age population growth outpaced the overall employment growth, with employment by UPSS for rural females registering negative growth. The rural male working-age population grew by 2.5 percent, and the employment growth was 1.4 per cent. For females, the corresponding growth percentages were 2.4 per cent and -3.17, respectively (Nath and Basole, 2020).

Whichever household survey we consider, rapid rise in unemployment since 2011 is uncontentious (Table 3). Unemployment affects the higher education, youth, women and scheduled caste population disproportionately. Women are worse off than men with respect to levels of unemployment as well as a reduced LFPR.

TABLE 3. UNEMPLOYMENT RATE IN INDIA, 1999-2000 TO 2018

(1)	NSS 55th 1999-2000 (2)	NSS 61st 2004-05 (3)	NSS 68th 2011-12 (4)	LB 2011-12 (5)	LB 2015-16 (6)	CMIE 2016 (7)	CMIE 2018 (8)
Overall unemployment rate							
Overall	2.7	3.1	2.7	3.8	5.0	8.2	6.0
Male	2.9	2.7	2.4	2.9	2.9	5.5	4.9
Female	2.4	4.2	3.7	6.9	8.7	22.4	14.2
Unemployment rate among educated (degree/diploma beyond Class 12)							
Overall	10.3	10.7	10.3	9.0	15.2	16.2	12.7
Male	8.4	7.5	8.4	5.9	11.4	12.1	9.7
Female	21.1	24.3	21.3	25.8	30.6	40.1	34.0

Source: AzimPremji University, 2019

The uneducated and the low-educated rural working-age population seem to be experiencing a discouraged worker effect. They are not just out of the agricultural

sector due to growing distress but shut out of the labour market altogether due to an educated workforce's preference. Such a phenomenon also explains the increasing privatisation of school education in rural areas. Rural families' education aspirations are directly related to labour market outcomes in terms of being available for and the quality of employment. We now have evidence that the most significant job losses are among men and women having below secondary level education in both self-employment and wage employment categories and the rural and urban (Kannan and Raveendran, 2019). Rural women, however, suffer more severely. By industry classification, net job losses are the highest in the agricultural sector followed by mining and quarrying (overall 13 percentage points fall between 2011-12 and 2017-18 in agriculture and 24 percentage in mining and quarrying).⁵

What are the implications of such changing dynamics on the rural labour market? Chand and Srivastava (2014) argued that the changes in the rural labour market are driven by factors such as structural transformation of the economy, rising wage rates, inter-sectoral differences in worker productivity, higher levels of educational attainments, government programmes creating pull factors and other socio-cultural factors. Based on the NSSO data from 1993-94 and 2009-10, they showed that the share of agriculture in total net domestic product (NDP) in the rural sector declined (from 56 per cent to 36 percent). Further that the shares of industry, construction and services went up (by 3.06 per cent, 3.67 per cent, and 11.03 per cent). The services sector surpassed the agricultural sector and became the top contributor to rural NDP. Due to this structural transformation in rural output, the employment share of agriculture declined, and widened the gap between employment and output shares of agriculture and non-agriculture. Such a transformation also implied that there was an excess workforce in agriculture which started to withdraw and this was mostly seen among female workers. The reasons highlighted by Chand and Srivastava (2014) were:

- (I) Technology displacing women workers from agriculture
- (II) Wage-push movement of workers from agriculture to non-agriculture
- (III) Pull-factors generated by government programmes such as the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)
- (IV) Low productivity in agriculture but slow movement into non-agriculture due to skill and education level mismatch, location of rural industrial units which impacted female labour participation adversely, and the limited capacity of non-farm sector to absorb the surplus from agriculture.

III

RURAL WOMEN'S UNEMPLOYMENT AND LOSS OF AGENCY

Mehrotra and Parida (2017) cited structural and behavioural reasons for declining female labour force participation rates (LFPR) in India. The structural transformation

of the Indian economy since 2004-05 is such that there is an absolute fall in agricultural employment with a switch to the labour intensive units of construction and manufacturing. In respect of female labour force participation rates, the traditionally low-income and agrarian states seem to have contributed more to such a switch (Mehrotra and Parida, 2017). While female LFPR has been declining over time, the rate of decline during the period 2004-05/2011-12 has outpaced all previous decades, adding to the country's dependency burden. Three individual characteristics – age, education, and marital status – seem to have significantly affected the choice of female LFPR in both the rural and urban areas. The age group wise female labour force participation rates from 1993-94 to 2011-12 is in Table 4.

TABLE 4. FEMALE LABOUR FORCE BY AGE GROUP, 1993-94 TO 2011-12

	<i>(million)</i>				
Age group	1993-94	1999-2000	2004-05	2009-10	2011-12
(1)	(2)	(3)	(4)	(5)	(6)
< 15 years	6.1	4.9	4.0	2.0	1.5
15 – 29 years	44.0	43.2	49.1	37.8	36.3
30 – 59 years	66.7	72.1	91.1	81.0	84.3
60 years and above	6.2	6.6	8.6	8.5	8.8
15 – 59 years	110.6	115.3	140.2	118.8	120.7

Source: Mehrotra and Parida (2017).

Note: Size of female labour force calculated by Mehrotra and Parida (2017) based on Usual Principal and Subsidiary Status from NSS unit level data.

Kannan and Raveendran (2019) argue that the ability of India's economy to absorb the incremental working age population into the workforce has been declining since 2004-05, with the period 2011-12 to 2017-18 showing a negative trend. They go as far as to argue that the period 2011-12 to 2017-18 has been a period of "dynamic process of job creation and job destruction". Those out of the workforce was 40 per cent in 2004-05 and 105 per cent in 2018. The potential demographic dividend never translated into an actual demographic dividend. However what is unique about this process of declining absorption of additional working age population (the potential labour force) is that it has strong gender and social dimensions. From a gender perspective, rural women workers are the net losers and from a social point of women, muslims and hindu other backward classes. Kannan and Raveendran (2019) speak of rural India in distress.

While female work participation rates has been declining throughout the 2000s, the other side of the story is the substantially high proportion reporting their activity status as attending to domestic duties (Table 5). A few scholars have interrogated this matter at length and depth (Thomas, 2020; Usami et al., 2020; Swaminathan, 2020; Swaminathan et al., 2020).

In an elaborate paper on female labour participation in India Kapsos *et al.* (2014) interrogated the question *why is female labour participation declining so sharply in India?* They performed an empirical exercise based on the NSSO data using an augmented work participation rate formula. They estimated that between the period 2005 and 2010, 18 per cent of the total decline in female labour participation could be

TABLE 5. DISTRIBUTION OF FEMALE POPULATION BY ACTIVITY STATUS,
1993-94 TO 2017-18

(1)	(per cent)									
	Population					Population aged 15 years and above				
	1993- 94	1999- 2000	2004- 05	2011- 12	2017- 18	1993- 94	1999- 2000	2004- 05	2011- 12	2017- 18
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Labour force	33.1	30	33.3	25.3	18.2	49	45.2	49.4	35.8	24.6
Workers	32.8	29.7	32.7	24.9	17.5	48.6	45.7	48.5	35.2	23.7
Unemployed	0.3	0.3	0.6	0.4	0.7	0.4	0.5	0.9	0.6	0.9
Students	14.8	18.4	21.3	25.1	24.5	3	4.1	4.9	8.5	10.3
Domestic duties (activity status 92+93)	29.1	29.4	27.3	35.3	43.2	42.4	43.8	39.8	49.9	57.8
Total working age population	77	77.8	81.9	85.7	85.9	94.4	94.1	94.1	94.2	92.7
Population	100	100	100	100	100	100	100	100	100	100

Source: Thomas (2020) based on estimates from NSS-EUS (various years) and PLFS (2017-18).

attributed to the effects of increased education and higher levels of consumption, 42 per cent to a general lack of employment opportunities, and 40 per cent to changes in measurement methodology between the various NSSO survey rounds. Between the period 1994 and 2010, increased education and household consumption levels accounted for 38 per cent of the decline, diminished employment opportunities and other factors explained 62 per cent of the fall (Kapsos *et al.* 2014). Ghose (2016) through the India Employment Report of 2016 argued that rising incomes were the only possible explanation for all the decline in the female labour force participation. Mondal *et al.* (2018) argue that women have moved from paid work to unpaid work with disproportionately larger burdens arising out of the care economy. However, even in spite of the decline in LFPR of women reported, an overwhelming 86.6 per cent of rural women are still categorised as workers based on the Time-use Survey Report of 2019. Of those reporting their status as unemployed, 30 per cent had participated in economic activities for about 40 minutes to 2 hours in a day (Swaminathan, 2020).

Mondal *et al.* (2018) argue that the economic definition of what constitute work needs to be revisited as ‘work’ is often linked to production of good and services for the market to the exclusion of work on account of ‘domestic work’ and ‘care work.’ They go as far as to argue that if we count NSS activity codes (92 and 93)⁶ as the principal occupation of women, then women’s LFPR will be higher than men, with no differences over time. This problem is meticulously interrogated by Usma *et al.* (2020) using the augmented work participation rate approach. This approach includes women’s work in specified activities (such as animal husbandry) to the existing definition of workers based on usual principal and subsidiary activity status. Usami *et al.* (2020) first calculated an augmented work participation rate for women based on the NSS-EUS surveys (Table 6) and then compared using the same method with panel data from three West Bengal villages for comparison. Their augmented definition gives a higher work participation rate for women. Such a methodological

improvement gives us a reason to believe that India's statistical system needs a rehauling with regard to valuation of women's work.

TABLE 6. SELF-EMPLOYED FEMALE WORKERS IN AGRICULTURE WHO ARE ALSO ENGAGED IN A SPECIFIED ACTIVITY (ANIMAL HUSBANDRY) AND NON-WORKERS PARTICIPATING IN A SPECIFIED ACTIVITY (ANIMAL HUSBANDRY), 1993-94 TO 2011-12, IN NUMBER AND PERCENT

Year	USS workers			Non-workers	
	Self-employed in agriculture	Participants in animal husbandry as specified activity	Share	Number of participants in animal husbandry as specified activity without USS work	Proportion of women engaged in domestic duties
(1)	(2)	(3)	(4)	(5)	(6)
1	2	3	4=3/2	5	6
1993-94	17.9	11.6	64.9	24.9	30.1
1999-2000	15.9	10.3	64.6	24.8	26.6
2004-05	21.5	14.9	69.6	23.3	25.3
2009-10	13	8.3	63.7	26.1	21.3
2011-12	16.1	8.1	50.4	24.2	18.4

Source: Usami, Patra and Kapoor (2020) based on NSS-EUS estimates (various years); authors note that figures

Table 6 shows women in USS and as non-workers. Women in each of these categories participating in animal husbandry as a specified activity is also shown. As can be seen, a majority of USS workers were also engaged in animal husbandry as a specified activity. For e.g. in 2004-05, out of 21.5 million USS women workers, 14.9 million or 70 per cent were also engaged in animal husbandry as a specified activity. Usami and his co-authors point that it is not clear how the women were categorised as USS workers or even as non-workers when they have surely worked for more than 30 days in animal husbandry or as workers in crop cultivation, but also engaged in household poultry or dairy activities.

In this context, the ILO resolution concerning statistics of work, employment and labour underutilisation passed in its 19th International Conference on Labour Statistics (ICLS) in 2013 needs mention. Based on the resolution, work was defined as "any activity performed by persons of any sex and age to produce goods or to provide services for use by others or for their own use." This resolution distinguishes five forms of work.

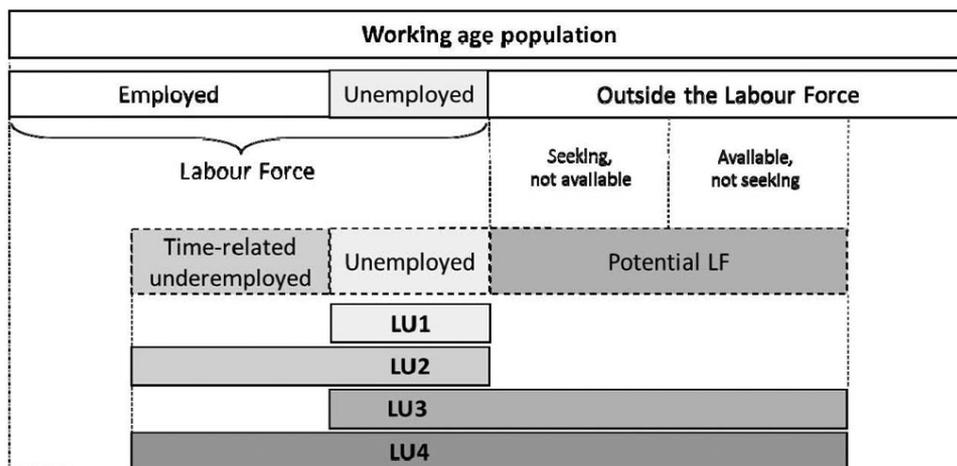
- (1) Own-use production work (of goods and services)
- (2) Employment work
- (3) Unpaid trainee work
- (4) Volunteer work in (a) market and non-market units and (b) households producing goods and services
- (5) Other work activities

In the above classification, (1) involves production for own final use whereas (2), (3), (4) and (5) involve final use by others. The ILO resolution of 2019 is a remarkable achievement as it mandates formal recognition of women's unpaid services as 'work' (see also Hirway, 2020). In effect, it makes it mandatory for governments to collect data for policy-making. Hence, going by this broadened definition of work, if we count unpaid services of female labour in the principal activity status, as is argue by few scholars, the female labour force trends will need re-interpretation.

The new measures of labour under-utilisation, if adopted, will indeed give us a better understanding of the potential labour force and the discouraged workforce, particularly in the context of Indian women. Let us understand the new measures (also see Habiyakare, 2013). The total working age population is divided into three categories.

- (1) Employed
- (2) Unemployed
- (3) Out of the labour force

However, of those out of the labour force, there is a sizeable proportion that are potential jobseekers and hence are the 'potential' labour force. This section may also contain a large number of discouraged workers which has a huge bearing on how we count women workers. Four measures of labour under-utilisation (LU) are identified. LU1 is a strict operational definition of unemployment which includes working age persons who (a) were not employed in the reference week (b) carried out activities to seek employment in the reference month and (c) were available to start a job/business in the reference week or in the subsequent two weeks. The LU2 measure includes those who are unemployed as well as those who satisfy the scenario of being in time-related underemployment. It reflects a situation of when the working time of persons in employment is insufficient in relation to alternative employment situations they are willing and able to engage. This component of labour underutilisation is to be captured along with LU1. This measure however, does not capture other dimensions of underemployment due to skills mismatches or low remuneration. The LU3 measure counts the potential labour force, defined as all persons of working age group, who during the short reference period were neither in employment nor in unemployment. So, where can they be? They maybe in two places (a) They may carry out activities to 'seek employment' but are not currently available. So they are *unavailable potential jobseekers* (ii) they did not carry out activities to seek employment but wanted employment and were currently available. So they are *available potential jobseekers*. In the Indian context, they will undoubtedly contain a large majority of discouraged workers. The LU4 is a sum of all the above measures which gives us the total rate of labour under-utilisation (Figure 1).



Source: Habiyakare (2013)

Figure 1. The Measures of Labour Under-utilisation Based on the 2013 ILO Resolution.

The informalisation of employment in public services and rise in contractual workers or “volunteer workers” is one of the important contributing factors explaining the under-representation of women in the labour force (see Ghosh, 2009; 2018 a; 2018 b; Nigam, 2018; Swaminathan, 2020). Additionally, there are millions of “scheme workers” who are not officially counted as workers in official statistics (Hemalata, 2020). If one is to summarise the female labour force debate in India, there appear three threads: (i) income effect and rise in education enrolments (ii) slowdown of employment and discouraged worker effect (iii) limitations in official statistics’ measurement of women’s work. Broadly however, we must acknowledge that there is a severe crisis of employment as far as the women labour force is concerned.

The evolving gender dynamics of rural India are such that they are stacked against women’s agency. A majority of the women labour force with low or no education are caught in the vicious cycle of a debilitating agricultural sector, unpaid work, burden of the care economy, unequal gender relations in the private and public sphere, and thus deficient human development achievements. The growth story of the 2000s shrouded in the tone of increased family incomes leading to a macro-economic change in women’s employment due to preference for leisure than work is seen as a temporary phenomenon that will self-correct in the long run. However, what is not being emphasised is the discouraged worker effect on women and the complete loss of autonomy and agency that came with the limited access to employment. It will be too simplistic to assume that while the economy is taking time to adjust to shocks and stimulus, the crease of female unemployment will clear on its own without state intervention.

IV

THE RURAL NON-FARM SECTOR AND SKILL GAP

What comprises the rural non-farm sector (RNFS) in India? The major sectors are manufacturing, construction, services and trade, transport, and communication. The rural industries comprise traditional artisanal activities such as rope making, basket-making that require raw materials locally available; or the more non-traditional type such as tailoring, iron and steelworks, carpentry, flour milling, service and repair units (Mehta, 2002). A more structured definition of rural non-farm activities is available from Saith (1992). The rural non-agricultural sector is a more comprehensive term that includes the rural industrial sector as well as various services, household-based petty production activities, and non-agricultural labour (public works programmes and works creating public infrastructure). We can identify non-farm activities by location (geographical spread) or development linkages (rural located-rural linked; rural located-urban linked; urban located-rural linked; urban located-urban linked). The rural population linkage through either rural or urban locations can result in a wide variety of activities and enterprises (Saith, 1992). Accordingly, we may have a range of activities listed, such as household and non-household manufacturing, handicrafts, processing, repairs, construction, mining and quarrying, transport, trade and communication, and personal or community services. In terms of employment types, non-farm activities are in regular salaried, casual wage employment, and self-employment. In terms of the distribution of major non-agricultural establishments in rural areas, the Indian Economic Census of 2005 reported the retail sector as the most prominent employment provider, followed by manufacturing. The construction sector comprised only about one per cent of the total (Mukhopadhyay et al., 2008).

A significant number of RNFS activities are in self-employment, of varying income and productivity levels, for which NSSO household surveys do not collect income data. However, wage incomes from regular salaried and casual workers provide us a sense of demand for RNF activities, and the sense is that they are rising over time. The MGNREGA programme contributing to rural areas' construction sector constitutes one of the biggest enterprises in itself. Since the late 2000s, the programme has converged with the rural public works programmes leading to a boost in the number of days available for work and wage levels.

The rural non-farm sector holds the key to the revival of the rural economy. However, there are implicit and explicit entry barriers. The most significant implicit barrier is the socio-economic inequality that affects the labour force's supply in this sector. Studies highlight a lack of general and technical education, age and gender, credit constraints, and stunted social banking, as well as wanting social capital requirements (Jatav and Sen, 2013; Kumar *et al.*, 2020; Drall and Mandal, 2021). Without adequate public investment bridging this demand and supply gap, the non-farm sector can neither create work opportunities nor absorb the low-skilled

workforce shut out from the rural labour market due to falling productivity in agriculture.

The 2011 census had seen a surge in the number of census towns. The structural transformation towards rural non-farm enterprises is both a cause and an effect in transforming villages into urban centres. These census towns can create immense employment prospects (Mitra and Tripathi, 2020). Based on an analysis of 2328 census towns, Mitra and Tripathi (2020) show that these rural urban continuums are primarily associated with large cities' infrastructure provision. In this context, a call for an urban employment guarantee programme has much relevance (AzimPremji University, 2019).

The AzimPremji University 2019 proposal for creation of a national urban employment guarantee programme so as to strengthen small and medium towns is a policy imperative. Training and stipend based apprenticeships will bridge the glaring gap between demand and supply of labour. The gaping open unemployment among the educated youth and the discouraged workers of the rural areas will create hopes of gainful work opportunities. The list of works – building and maintenance of roads, footpaths and bridges, sustaining urban commons, creating apprenticeship programmes for trained workers in the public schools and health centres, provisioning services to the care economy - suggested by the AzimPremji University, 2019 are sustainable and will have long term implications in multiplying benefits to the economy. Since we have a body of experience in strengthening rural institutions by way of a rural employment guarantee programme, we need only look inward for putting in place structures of transparency and accountability for the emerging small towns and urban centres that can provide much needed relief from the stagnation in rural areas.

V

INDIA'S NORTHEAST CONTINUES TO LANGUISH

Between 2011 and 2015, the usual principal status unemployment rate increased in all the northeastern states except Mizoram and Nagaland. The unemployment rates are higher than the Indian average in both the periods (Table 7).

TABLE 7. UNEMPLOYMENT RATE IN THE PRINCIPAL STATUS, NORTHEASTERN STATES, 2011-2015

State (1)	2011 (2)	2015 (3)
Arunachal Pradesh	2.3	8.9
Assam	5.1	6.1
Manipur	4.8	5.7
Meghalaya	0.9	4.8
Mizoram	3.7	3
Nagaland	25.6	8.5
Sikkim	1.2	18.1
Tripura	14.5	19.7
All-India	2.7	5.0

Source: AzimPremji University, 2018; calculated from NSS-EUS and LB-EUS

The AzimPremji University, 2018 calculates that between 2004 and 2011, employment growth in agriculture was negative in all the states except in two northeastern states of Sikkim and Nagaland (Table 8). Employment growth in non-agriculture was positive. Between 2011 and 2015, employment growth in non-agriculture was negative for at least 11 of the 29 states considered in their analysis. The northeastern states were exceptions that showed positive employment growth in agriculture and non-agriculture, although there were variations within the northeast. Sikkim, which saw positive growth in agriculture in agriculture in the first phase, became negative in the second phase. Meghalaya, which saw positive employment growth in non-agriculture in the first phase, had turned negative in the second phase. For all the other northeastern states, employment growth in agriculture was positive. However, the results for the northeastern states should be read in the context of very high rates of overall unemployment.

TABLE 8. EMPLOYMENT GROWTH IN AGRICULTURE AND NON-AGRICULTURE, NORTH EASTERN STATES, 2004-2015

State (1)	2011 to 2015		2004-2011	
	Employment Growth in Agriculture (2)	Employment Growth in Non- Agriculture (3)	Employment Growth in Agriculture (4)	Employment Growth in Non- Agriculture (5)
Sikkim	-13.8	14.8	5.1	0.7
Arunachal Pradesh	14.9	18.4	-1.4	4.1
Nagaland	17.8	12.5	0.2	3.2
Manipur	5.3	8.1	-3.9	5.5
Mizoram	3.0	7.5	-0.6	7.9
Tripura	2.0	6.1	-0.1	5.0
Meghalaya	4.7	-2.8	-3.0	7.7
Assam	3.6	6.2	-3.4	3.2

Source: AzimPremji University, 2018 Figure 3.3 data; based on NSS-EUS 2004, 2011 and LB-EUS, 2015. Growth rates are compounded annual rate of growth.

VI

CONCLUSION

The PLFS and CMIE household survey results indicate that job losses have intensified post-2016 and are continuing. The COVID 19 exogenous shock came at the most inopportune time when non-agriculture held opportunities for a discouraged workforce. The reverse migration of workers from towns and urban centers to villages due to draconian lockdowns will spell disaster for the rural areas as there is no work. Agriculture has stagnated to a point where it has no chance of revival without appropriate and significant public support programmes ranging from technology adoption, extension services, price support mechanisms, training programmes, and income subsidies. Female labour force participation needs immediate and urgent policy attention. The female labour force statistics need adequate attention beginning with the implementation of the ILO resolution of 2013

in Indian employment-unemployment statistics. There is a dire need to restore the NSSO employment-unemployment rounds with improved methodologies.

We face massive open headline unemployment in India today with wide variations across states. The Indian labour force is moving towards education like never before but without gaining the appropriate skills required to join the labour market—the very high rates of youth unemployment point to a failed demographic dividend. Skilling the labour force should be the central focus. The call for a comprehensive National Employment Policy cannot be ignored.

NOTES

1) The quinquennial round data are available from 27th Round (1972-73), 32nd Round (1977-78), 38th Round (1983), 43rd Round (1987-88), 50th Round (1993-94), 55th Round (1999-2000), 61st Round (2004-05), 66th Round (2009-10), 68th Round (2011-12).

2) Some of the other sources of data that provide information on economic activity status are the Census of India, Economic Census, reports of the National Commission of Labour, Annual Survey of Industries, the Employment Market Information Programme of Directorate General of Employment and Training, and Employment Exchange Statistics.

3) The standard method of calculating workforce participation is by the Usual Principal and Subsidiary Status based on the NSSO employment unemployment surveys (EUS). However, the recent debates surrounding estimations of workforce is partly due to some scholars overtly emphasising on Usual Principal Status (UPS) employment going by which there is an overall increase in the workforce (such as Bhandari and Dubey, 2019) and partly due to the non-appearance of NSS-EUS data post 2011-12. However the PLFS 2017-18 can be compared using the UPS and UPSS definitions. Workforce estimation by UPS alone may not capture the severity of the current unemployment problem because job losses are more acute in the subsidiary status and among women employed in the subsidiary status (Nath and Basole, 2020).

4) The AzimPremji University 2018 and 2019 released by the Centre for Sustainable Employment, AzimPremji University, calculate labour force by NSSO-EUS (2011-12), Labour Bureau EUS (2011-2015), Periodic Labour Force Survey (2017-18) and the employment-unemployment estimates based on CMIE-CPHS (2016 onwards) data.

5) Macroeconomic estimates of employment based on nationally representative surveys have definitional limitations of worker categories and hours and days of employment reported in the rural areas. For example, Dhar (2012) shows that the National Sample Survey-Rural Labour Enquiry, which is the only source of information on days employed, can overestimate or underestimate actual employment days. Supported by evidence from village studies carried in Andhra Pradesh, Maharashtra, Rajasthan, and Uttar Pradesh, Dhar calculates NSS-RLE-designed differences between half-day/full-day category of work and the actual work hours reported. The study finds substantial differences

6) The NSS broad category “not in labour force” includes: (1) attended educational institutions (code 91) (2) attended to domestic duties only (code 92) (3) attended to domestic duties and engaged in free collection of goods (vegetables, roots, firewood, cattle feed etc.), sewing, tailoring, weaving etc. for household use (code 93), (4) rentiers, pensioners and remittance recipients (code 94) (5) not able to work due to disability (code 95) (6) Others (including beggars, prostitutes, etc.) (code 97) (7) did not work owing to sickness (for casual workers only) (code 98) and (8) children of age 0-4 years (code 99) (see Modal *et al.* 2018).

REFERENCES

- Abraham, Vinoj (2013), “Missing Labour or Consistent “De-Feminisation”?”, *Economic and Political Weekly*, Vo. 48, Issue no. 31, August 3, Sameeksha Trust.
- AzimPremji University (2018), *State of Working India 2018*, Centre for Sustainable Employment, Bengaluru, available at <https://cse.azimpremjiuniversity.edu.in/state-of-working-india/swi-2018/>
- AzimPremji University (2019), *State of Working India 2019*, Centre for Sustainable Employment, Bengaluru, available at <https://cse.azimpremjiuniversity.edu.in/state-of-working-india/swi-2019/>
- Bhalla, Surjit S. and Tirthatanmoy Das (2018), “Population, Education, and Employment in India: 1983-2018”, A background report submitted to the Economic Advisory Council to the Prime Minister, November 28,

- available at <https://ssbhalla.org/wp-content/uploads/2018/07/population-education-and-employment-in-India-1983-2018-omega.pdf>, accessed on 14th March 2021.
- Bhandari, Laveesh and Amaresh Dubey (2019), “Emerging Employment Patterns of 21st Century”, Indicus Foundation White Paper, based on a paper submitted to the Prime Minister Economic Advisory Council, available at <https://www.indicus.org/pdf/Emerging-Employment-Patterns-in-21st-Century-Indiav-181019.pdf>, accessed on 14th March 2021.
- Binswanger-Mkhize, Hans P. (2013), "The Stunted Structural Transformation of the Indian Economy: Agriculture, Manufacturing, and the Rural Non-Farm Sector", *Economic and Political Weekly*, Vol.48, No.26/27, 29 June, Review of Rural Affairs (June 29-July 6), pp. 5-13.
- Chand, Ramesh and S.K. Srivastava (2014), “Changes in the Rural Labour Market and Their Implications for Agriculture”, *Economic and Political Weekly*, Vol. 49, Issue no. 10, March 8, Sameeksha Trust.
- Dhar, Niladri Sekhar (2012), "On Days of Employment of Rural Labour Households", *Review of Agrarian Studies*, Vol. 2, No. 2, available at http://www.ras.org.in/on_days_of_employment_of_rural_labour_households.
- Drall, Anviksha, Sabuj K. Mandal (2021), “Investigating the Existence of Entry Barriers in Rural Non-Farm Sector (RNFS) Employment in India: A Theoretical Modelling and an Empirical Analysis”, *World Development*, Vol. 141, Elsevier.
- Ghose, Ajit (2016), *India Employment Report 2016 – Challenges and the Imperative of Manufacturing-Led Growth*, Oxford University Press.
- Ghosh, Jayati (2009), *Never Done and Poorly Paid: Women’s Work in Globalising India*, Women Unlimited, New Delhi.
- Ghosh, Jayati (2018 a), “Women’s Work in India”, Net work ideas, <https://www.networkideas.org/featured-articles/2018/09/womens-work-in-india/>, accessed on 1st February 2021.
- Ghosh, Jayati (2018 b), “Why Clubbing Employment and Work in India is misleading”, September 07, Hindustan Times, available at <https://www.hindustantimes.com/india-news/why-clubbing-employment-and-work-in-india-is-misleading/story-6OXHFBZybpJ6d1dFcudgHP.html>, accessed on 31st January 2020.
- Habiyakare, Tite (2013), “Overview of the 19th ICLS “Resolution Concerning Statistics of Work, Employment, and Labour Underutilization”: Changes and Main Implications”, International Labour Organisation, available at www.ilo.org/documents/presentation/wcms_549055, accessed on 3rd February 2021.
- Hazell, Peter B.; Derek Headey, Alejandro Nin Pratt and Derek Byerlee (2011), "Structural Imbalances and Farm and Nonfarm Employment Prospects in Rural South Asia", Report for the World Bank, Washington D.C., U.S.A.
- Hemalata, K. (2020), “Conditions of Work among “Scheme Workers””, in Madhura Swaminathan, Shruti Nagbhushan and V. K. Ramachandran (Eds.) (2020), *Women and Work in Rural India*, Tulika Books.
- Himanshu (2011), “Employment Trends in India: A Re-examination”, *Economic and Political Weekly*, Vol. 46, Issue No. 37, September 10, Sameeksha Trust.
- Himanshu (2019), *Opinion: The Seriousness of the Problem of Unemployment in India*, August 1, Livemint, available at <https://www.livemint.com/opinion/columns/opinion-the-seriousness-of-the-problem-of-unemployment-in-india-1564679281965.html>, accessed on 30th January, 2020.
- Hirway, Indira (2020), “Work, Employment, and Labour Underutilisation: What the ILO Resolution Means for India”, in Madhura Swaminathan, Shruti Nagbhushan and V.K. Ramachandran (Eds.) (2021), *Women and Work in Rural India*, Tulika Books.
- Jatav, Manoj and Sucharita Sen (2013), “Drivers of Non-Farm Employment in Rural India – Evidence from the 2009-10 NSSO Round”, *Economic and Political Weekly*, Vol.XLVIII, Nos.26 and 27, 29 June, Review of Rural Affairs, Sameeksha Trust.
- Kannan, K.P. and G. Raveendran (2019), “From Jobless to Job-loss Growth – Gainers and Losers during 2012-18”, *Economic and Political Weekly*, Vol. 54, Issue no. 44, November 9, Sameeksha Trust.

- Kapsos, Steven, Andrea Silberman and Evangelia Bourmpoula (2014), "Why is Female Labour Force Participation Declining so Sharply in India?", ILO Research Paper no. 10, International Labour Office, available at https://ilo.userservices.exlibrisgroup.com/discovery/delivery/41ILO_INST:41ILO_V2/1245308160002676?lang=en, accessed on 31st January 2021.
- Kumar, Anjani; Nijara Deka, Seema Bathla, Sunil Saroj and S.K. Srivastava (2020), "Rural Non-farm Employment in Eastern India: Implications for Economic Well-being", *The Indian Journal of Labour Economics*, Vol. 63, pp. 657-676, Springer.
- Mondal, Bidisha; Jayati Ghosh, Shinee Chakraborty, Sona Mitra (2018), "Women Workers in India: Labour Force Trends, Occupational Diversification and Wage Gaps", Background Paper 03, *State of Working India 2018*, Centre for Sustainable Employment, AzimPremji University.
- Mehrotra, Santosh and Jajati Parida (2017), "Why is the Labour Force Participation of Women Declining in India?", *World Development*, Vol.98, pp.360-380, Elsevier.
- Mehta, G.S. (2002), *Non-Farm Economy and Rural Development*, Planning Commission and Government of India, available at https://niti.gov.in/planningcommission.gov.in/docs/reports/sereport/ser/stdy_nfeco.pdf
- Mitra, Arup and Sabyasachi Tripathi (2020), "Rural Non-Farm Sector: Revisiting the Census Towns", Working Paper number SAUFE-WP-2020-007, South Asian University.
- Mukhopadhyay, A.K.; D. Gangopadhyay, Saswati Nayak (2008), "Non-Farm Occupation in Rural India", *India, Science and Technology*, available at [https://www.nistads.res.in/all-html/Non-Farm%20Occupation%20in%20Rural%20India.html#:~:text=Rural%2DNon%2DFarm%2DSector%20\(RNFS\)%20includes%20all.in%20rural%20areas](https://www.nistads.res.in/all-html/Non-Farm%20Occupation%20in%20Rural%20India.html#:~:text=Rural%2DNon%2DFarm%2DSector%20(RNFS)%20includes%20all.in%20rural%20areas).
- Nath, Paaritosh and Amit Basole (2020), "Did Employment Rise or Fall in India between 2011 and 2017? Estimating Absolute Changes in the Workforce", Centre for Sustainable Employment Working Paper no. 29, AzimPremji University, Bengaluru.
- Nigam, Aditi (2018), "Two-Day Sit-In by Flagship Scheme Workers from 25 States in Delhi", *The Hindu Business Line*, originally appeared on November 24, 2012 and updated on March 12, 2018, available at <https://www.thehindubusinessline.com/news/two-day-sit-in-by-flagship-scheme-workers-from-25-states-indelhi/article20532113.ece>, accessed on 31st January 2021.
- Press Information Bureau (2017), "DAY-NRLM – Transforming Lives through Livelihood Thrust", Ministry of Rural Development, Government of India, 6 April, accessed on 2nd February 2021.
- Saith, Ashwani (1992), *The Rural Non-Farm Economy: Processes and Policies*, Geneva, International Labour Organisation.
- Swaminathan, Madhura; Shruti Nagbhushan and V.K. Ramachandran (Eds.) (2020), *Women and Work in Rural India*, Tulika Books.
- Swaminathan, Madhura (2020), "Time-Use Survey Report 2019: What Do We Learn About Rural Women?", *Review of Agrarian Studies*, Vol.10, No.2, available at <http://ras.org.in/e0b4f51bf0390e368bdb2159fb53cb99>.
- Thomas, Jayan Jose (2020), "Sectoral Shifts and Declining Labour Participation Rate of Women", in Madhura Swaminathan, Shruti Nagbhushan and V.K. Ramachandran (Eds.) (2020), *Women and Work in Rural India*, Tulika Books.
- Usami, Yoshifumi; Subhagit Patra and Abhinav Kapoor (2020), "An Augmented Definition of Work Participation in Rural India", in Madhura Swaminathan, Shruti Nagbhushan and V.K. Ramachandran (Eds.) (2020), *Women and Work in Rural India*, Tulika Books.
- World Bank (2020), *Beaten or Broken: Informality and COVID-19 in South Asia*, South Asia Economic Focus, available at <https://openknowledge.worldbank.org/bitstream/handle/10986/34517/9781464816406.pdf?sequence=7&isAllowed=y>