

Rural Employment, Public Policy and COVID-19 Pandemic: A Study of Least Developed Districts of India

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Abstract

India runs one of the world's largest and costliest employment programmes—the Mahatma Gandhi National Rural Employment Guarantee (MGNREGA). This study aims to examine MGNREGA's efficiency at times of crisis and understand the role of publicly funded employment policy in addressing rural employment crises in the least developed districts of India. Calculating the Theil Index from the Government of India's data for MGNREGA makes comparisons of the employment situation between all districts of India and the least developed districts. The results suggest inequalities among the districts with regard to the impact of COVID-19 on employment in general and different groups in particular. The nature of the low statutory wage of MGNREGA and the huge variations between states are the biggest contributors to unemployment inequality in districts.

Introduction

The outbreak of corona virus is much more than a health crisis; its effect is far-reaching. This crisis has transmuted the supply of goods and services and demand for consumption and investment (ILO, 2020). The IMF in July 2020 projected that the global GDP would shrink by 4.9%, which is much more than the reduction at the time of the global financial crisis (2007–09). Different types of macro and micro-level efforts are being made to save the economy. Between March 2020 and May 2021, a total of 3,333 social protection measures have been adopted by 222 countries (Gentilini et al., 2021). The total cost of those policies² was 2.9 trillion USD, which is around 3% of 2021's Global GDP and 4.5 times higher than the global response to the 2010 financial crisis (Gentilini et al., 2021). Among all the different types of policies, wage subsidy is the preferred choice for many countries (58% worldwide opting for it).

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² The figure is for a subset of 119 countries for which data was available.

On the evening of March 24, 2020, when the Government of India announced its nation-wide lockdown, every individual of the country was impacted indisputably. According to the Reserve Bank of India (June 2020), the index of consumer confidence was historically the lowest. Future expectations index also witnessed a sharp decrease. In an environment of growing pessimism, according to the Centre for Monitoring the Indian Economic (CMIE), unemployment rates in April 2020 and May 2020 was around 23%, showing a three times increase (from 7%) from the previous year. Given the nature of the labour market, where the engagement with informal workforce has been more than 90%, employment rate must have been higher than 23%. During lockdown, the urban areas have been more affected than rural India. Due to loss of livelihood, 10.4 million workers returned home from their places of work (Table 1). The inflow of workers, primarily from urban areas, has escalated the long-lasting problem of rural unemployment. According to the Government of India data, labour force participation rate (LFPR) has been one of the lowest in the world (CPR, 2021). Long persistence unemployment could have discouraged workers from participating in the labour market. Professor Richard Layard (2020) suggested that government initiatives guaranteeing permanent job would curb the permanent decrease in labour force participation. Since 2006, India is successfully running a rural employment guaranteed job programme called Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). Many researchers predicted the positive role of MGNREGA in the context of the large-scale return migrations during lockdown (Dr'eze, 2020, Imbert, 2020 a & b). As a strategy to curb down the spread of the virus, rural areas of developing countries pose a totally different kind of challenges in comparisons to developed areas due to lack of infrastructure and strong institutions (Dutta & Fischer, 2021).

Based on the NSS Employment Survey of 2007-08 and Census figures and projections, Srivastava (2020) has estimated that there were approximately 52 million inter-state migrants in the year 2018 and out of 52 million only 43 million are inter-state urban migrants. These figures suggests that the magnitude of the individuals whose livelihoods have high probability of getting affected by the lockdown. Government of India data suggests that out of the total return migrants; more than 70% belonged to the country's poorest region/states, predominately from rural areas (Table 1).

Table 1: State-Wise Number of Migrant Workers Who Have Returned to Their Home State

Sl.No.	Name of the State	No. of Returned Migrant
1	Andhra Pradesh	32571
2	Arunachal Pradesh	2871
3	Assam	426441
4	Bihar	1500612
5	Dadra & Nagar Haveli and Daman & Diu	43747
6	Haryana	1289
7	Jammu & Kashmir	48780

8	Jharkhand	530047
9	Kerala	311124
10	Ladakh	50
11	Lakshadweep	456
12	Madhya Pradesh	753581
13	Maharashtra	182990
14	Manipur	12338
15	Meghalaya	4266
16	Nagaland	11750
17	Pondicherry	1694
18	Punjab	515642
19	Rajasthan	1308130
20	Tamil Nadu	72145
21	Telangana	37050
22	Tripura	34247
23	Uttar Pradesh	3249638
24	West Bengal	1384693
	Total	10466152

Source: Lok Sabha Unstarred Question No. 197, Govt. of India

For a long time, employment through public work has been a well-validated instrument for governments towards creation of jobs and allowance of social protection at the time of recession (Narayanan et al., 2020). Such a policy has been in alignment with J. M. Keynes' suggestion during the Great Depression that governments can play an important role to generate demand and address the problem of unemployment. Several studies have found the effectiveness of the public-funded schemes on long-term economic growth and employment (Mallick, 2006; Abiad et al., 2015). This paper takes MGNREGA as a case study to understand the role of job- guaranteed policy on the poorest regions of India mainly at the time of pandemic. In India, NITI Aayog has been anchoring a programme on selected backward districts, i.e., 'aspirational' districts which can potentially catch up with relatively best-performing districts of the country. Therefore, the aim of this paper is to understand the performance of MGNREGA in aspirational districts during a pandemic. The main focus of this paper is two-fold—understanding the role of public-funded employment-guaranteed policy as a safety net in terms of providing employment at the time of crisis and assessing the role it played in addressing the inequality. This article focuses on regional diversity, gender and social dynamics to understand the inequality.

The study's concepts and context are analysed in the subsequent section. Section 3 pivots around data and methodology; Section 4 depicts the principal empirical

analysis explaining the role of MGNERGA as a shock absorber for the backward rural economy during the pandemic; and the last section presents the conclusions.

Context

Mahatma Gandhi National Rural Employment Guarantee Act

The success of the Maharashtra Employment Guarantee Scheme (MEGS) to address droughts in Maharashtra in 1972 draws the attention of policymakers. With the success of few similar policies like food for work in the past, in 2005, India enacted an Act called Mahatma Gandhi National Rural Employment Guarantee Act with a promise of 100 days guaranteed work in the rural areas. The Act was initially planned as a demand-side policy with two specific characteristics—self-selection to provide the right to work; legal right to work can be claimed by those who demand work within a specific time and with a minimum wage. The scheme was implemented phase-wise. The first phase was introduced with 200 of the most backward districts, the second one on April 1, 2007, including 130 more districts, and the third phase (September 28, 2007) was extended to all the districts of India.

According to Prof. Stieglitz, MGNREGA is one of the largest public-funded employment-guaranteed schemes in the world, a lesson presented before the whole world (Business Standard, 2016). In the wake of the COVID crisis, the government also rightly recognised the role of MGNREGA in rural India and allocated an extra 40,000 crore³ over and above the budgetary allocation of Rs 61,500 crore in the financial year 2020–21 (Table 2). The funds for 2020–21 has been the highest ever allocation in MGNREGA.

Table 2: Funds Release under MGNREGA (Rs in crore)

Year	Fund Release
2014-15	32476.87
2015-16	36644.80
2016-17	48387.16
2017-18	55876.07
2018-19	44598.58
2019-20	71686.70
2020-21	101500.00

Source: Ministry of Rural Development, Govt. of India

Aspirational Districts

In 2018, the Government of India declared 115 districts out of a total of 718 districts as aspirational districts in the country. They are identified on the basis of a composite index.

³ 1 Crore = 10 Million

“The ranking is based on the incremental progress made across 49 Key Performance Indicators (KPIs) under 5 broad socio-economic themes - Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development and Infrastructure.” (NITI Aayog, GoI)

The aspirational district’s primary objective is to focus on development to catch up with the ‘developed’ districts of the respective states. The employment is not included while constructing the composite index. Still, the performances of included sectors like agriculture or infrastructures are directly linked with the employment situation of the area.

Data and Methodology

This paper attempts to understand the inequality of employment among the various aspirational districts of India alongside all the districts of India. This study used the Theil inequality index for 2015–16 to 2020–21 using data on total person-days and labour expenditures. The idea of the Theil index is to measure the gap between the existing income of population and the ‘ideal’ situation where everyone has the same income. The Theil index can be negative and positive as well, with negative value representing a negative contribution to inequality and positive values stand for a higher level of inequality. The study’s data source is the Government of India’s online portal for MGNREGA (<https://nrega.nic.in/netnrega/home.aspx>). The data are collected from 113⁴ aspirational districts.

Theil’s T Statistic for the population (T) comprised two components—the ‘between’ group element (T'_g) and the ‘within’ group element (T^w_g).

$$T = T'_g + T^w_g$$

The index can be expressed by:

$$T'_g = \sum_{i=1}^m \left\{ \left(\frac{p_i}{P} \right) * \left(\frac{y_i}{\mu} \right) * \ln \left(\frac{y_i}{\mu} \right) \right\}$$

Where i indexes the groups, p_i is the population of group i , P is the total employment, y_i is the average labour expenditures in group i , and μ is the average labour expenditure across the entire population (Theil, 1967; Battaglia & Iraldo, 2011).

The main advantage of this index is the use of an upper limit (or maximum), which allows normalising the index, enabling comparison results from different geographical areas and time periods. Instead of individual-district level analysis, the crux of the index focuses on the assumption that the individual districts come from

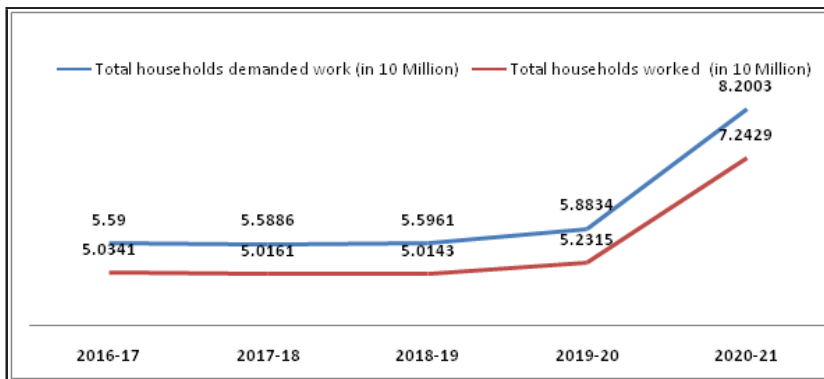
⁴ State of Telangana is not included due to non-availability of data.

a group. Thus, the analysis looks at inequality between groups of individuals and not at inequality between individuals, taking the states as geographic units since this study is interested in the variation in the distribution of employment across states in India. Because the richest group’s labour expenditure share is higher than its number of employment share and the poorest group’s labour expenditure share is lower than its number of employment, the richest group’s contribution to inequality is always positive, and the poorest group’s contribution is always negative (Conceicao, 2001).

Implementation of MGNREGS: All-India Level

During the lockdown, seven states of India officially closed the MGNREGA scheme, but the MGNREGA of others states were also severely affected (Nath, 2020). Notably, as the lockdown was slowly lifted, on April 15, 2020, Indian government explicitly allowed MGNREGA scheme to operate. According to the Centre for Policy Research report, in pre-pandemic India, on average, 90% households, who demanded work, received it. In other words, broadly around 0.5 crore to 0.6 crore households have not received work. The report also suggests that the rate of completion of work has also been decreasing over the period. The completion rate dropped from 97% to 56% between 2016–17 and 2018–19. One of the probable reasons behind the low completion rate was the fund crisis. According to the Centre for Science and Environment (CSE) report, people did not find the programme beneficial beyond the daily wage due to the lack of work completion, which failed to create assets.

Figure 1: MGNREGA in Last Five Years

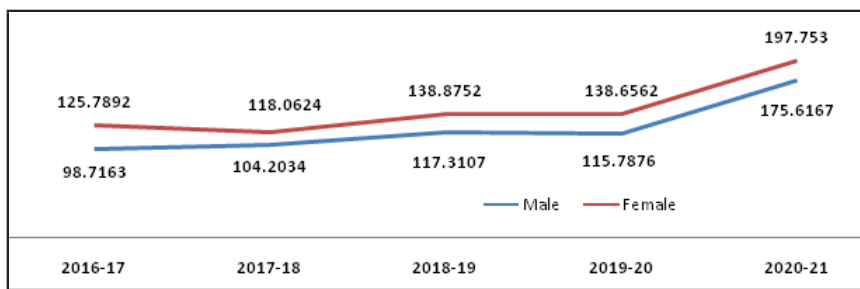


Source: Author’s Calculation

In MGNREGA, the demand for work and household worked both increased significantly. At the household level between 2019–20 and 2020–21, demand for work increased from 5.88 crore to 8.20 crore and the number of the household work increased from 5.23 crore to 7.24 crore. Demand for work and supply of work in MGNREGA is highest in the decade (Narayanan et al., 2020). The pattern is almost the same for all the states in India. The increase in demand in the rural area can be

attributed to the decrease in employment in the country, particularly in the urban areas and return migration (Singh, 2020; Kumar, 2020 Mashi and Slater, 2020). Figure 1 also suggests that the gap between the demand for work and supply of work increased with time, the highest being in 2020–21. Narayanan et al. (2017) observed that the rationing rate⁵ is mordantly pro-poor, and its rate of rationing decreased by almost half between 2009–10 and 2011–12. The recent data also suggest a similar trend, i.e., between 2015–16 and 2020–21, the rationing rate falls from 26% to 0.13%.

Figure 2: Total Person-Days Worked by Gender (in Crore)



Source: Author's Calculation

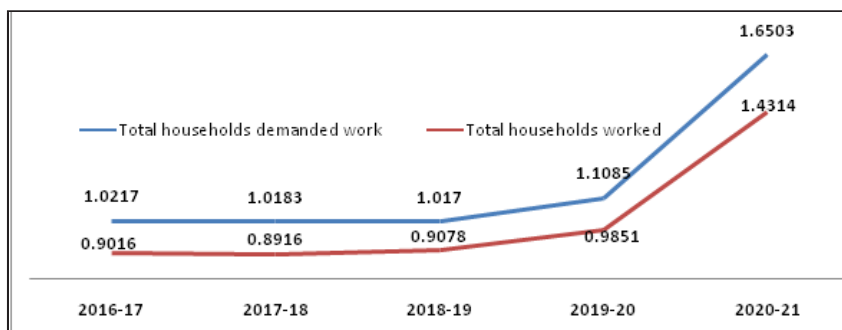
Another notable aspect of the MGNREGA is the gender dimensions of employment. Historically, the number of female workers engaged in the scheme is always higher than that of males (Figure 2). Given different social-cultural and economic barriers that negatively affect women's participation, MGNREGA employs more female labour than any other government scheme (Reddy et al., 2014). As pointed by many scholars that the rural employment guarantee programme is one of the most incredible opportunities for rural women of India to move from unpaid to paid jobs (Mattos et al., 2017). The paid jobs are also closely related to their empowerment (Kabeer, 2008; Agarwal, 1997; Folbre, 1986). However, with huge number of male return migrants, the female to male employment ratio has decreased from 1.20 to 1.13 between 2019–20 and 2020–21.

Impact of COVID 19 on MGNREGA: Aspirational District-Level Analysis

This section focuses on the implications of MGNREGA due to COVID in the aspirational districts and tried to correlate with other indicators. The effectiveness of the rural employment guarantee programme is not homogeneous in the country. For example, the agriculturally developed regions have less preference towards MGNREGA compared to the agriculturally less-developed areas.

⁵ Rationing rate is the total households seeking but not getting work/total households seeking work.

Figure 3: MGNREGA in Aspirational Districts (in Crore)



Source: Author's Calculation

However, similar upward trends are observed in the aspirational districts. The demand for work and household work increased substantially between 2019–20 and 2020–21. As demand augmented, the gap between demand and supply also increased in these districts as evident from Figure 3. The unprecedented increase in the demand for work by household could be due to the enormous labour influx in the rural areas owing to job loss in the urban areas due to the lockdown. The increase in allocation of the fund was also not sufficient to suppress the gap.

Table 3: Annual Growth Rate (%) of Total Households Demanded Work and Households Worked

Year	All India		Aspirational Districts	
	Demanded work	Worked	Demanded work	Worked
2017-18	-0.03	-0.36	-0.33	-1.11
2018-19	0.14	-0.04	-0.14	1.81
2019-20	5.13	4.33	9.01	8.52
2020-21	39.38	38.45	48.88	45.31

Source: Author's Calculation

Annual growth rates for 2017–18 to 2020–21 are presented in Table 3. The comparisons between all-India and aspirational districts suggest that except 2017–18, the growth rate of persons worked in the aspirational districts is higher than that at the all-India levels. Remarkably, 2020–21, the demand for work and person worked was significantly elevated. The demand for work is almost 10% higher in the aspirational districts, i.e., 39.38% at the India level and 48.88% at the districts level.

Table 4 presents the annual growth rate of workers according to age groups. It is clear that with time the distribution of work shifted more towards the young population compared to those above 60 years. In an average year, i.e., between 2018–19 and 2019–20, the growth rate of work is highest in the age group above 60 i.e. 7.58 %. The pandemic year witnessed a striking 118% worker in the age group 18–30 years.

One of the apparent reasons was the impact of migration. Although the primary objective of the MGNREGA has been to reduce poverty, it is also seen as a policy to reduce rural–urban migration. Table 4 also sheds light on the household’s strategies between ‘right to work’ and ‘right to movement’ (Das, 2015; Dodd et al., 2018). Labour migration from less developed to developed regions is a crucial livelihood strategy for many rural households (de Haan, 2011). A household tries to diversify the income source in a typical year through the migration of young members to urban areas and reliance of the elderly on the local labour market for jobs. Table 3 shows the positive relationship between supply of labour and age. The situation in rural India changed dramatically in pandemic times. Due to significant losses of jobs in the urban areas, the young migrants returned to their villages, and MGNREGA became the last resort for their employment.

Table 4: Annual Growth Rate of Worker by Age Group

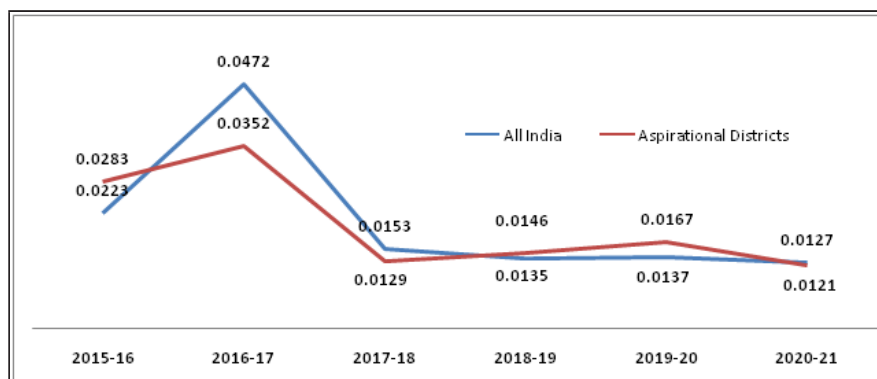
Year/Age Group	18-30	30-40	40-50	50-60	>60	Total
2018–19 and 2019–20	5.47	0.52	4.49	5.51	7.58	3.79
2019–20 and 2020–21	124.13	53.12	40.59	33.22	21.1	48.88
Change	118.66	52.6	36.1	27.71	13.52	45.09

Source: Author’s Calculation

Employment Inequality

In a vast and diverse nation like India, it is crucial to understand the employment dynamics among the aspirational districts vis-à-vis India as a whole. As mentioned above, among the different methods to capture the performances of MGNREGA, the Theil inequality index has been used in this study to understand the degree and source of inequality. The Theil inequality measure was also used to evaluate the performances of different states at the time of the COVID crisis.

Figure 4 :Theil Index



Source: Author’s Calculation

The inequality of employment increased between 2015–16 and 2016–17 and decreased subsequently (Figure 4). The Theil index suggests that the aspirational districts' index value was higher in 2018–19 and 2019–20 compared to the all-India value. In the year 2020–21, the index value for the aspirational districts was 0.012, which is marginally lower than the value at the Indian level. One of the primary reasons behind the relatively high index value of 2016–17 is the demonetisation of the high-value currencies (Jha, 2019).

Table 5: Year-Wise Contributions to the Theil Index: All India

2019-20				2020-21			
State	share of person days	share of Labour Exp.	Index 2019-20	State	share of person days	share of Labour Exp.	Index 2020-21
Karnataka	7.87	8.92	0.023	Karnataka	6.95	7.78	0.015
Kerala	0.34	0.18	0.018	Kerala	0.34	0.47	0.014
AP	2.45	2.61	0.011	AP	2.45	2.53	0.009
Punjab	5.57	5.27	0.003	Manipur	6.12	5.82	0.007
J&K	5.35	4.88	0.003	Odisha	4.93	4.31	0.006
Haryana	0.00	0.00	0.003	J&K	0.00	0.00	0.006
Maharashtra	1.39	1.38	0.002	Haryana	1.29	1.25	0.003
Assam	0.36	0.56	0.002	Punjab	0.48	0.72	0.003
Mizoram	1.02	1.03	0.001	Nagaland	0.90	0.86	0.002
Nagaland	1.23	1.48	0.000	Maharashtra	1.09	1.56	0.002
HP	2.52	2.32	0.000	AR	3.15	2.98	0.001
Sikkim	4.40	6.31	0.000	Assam	3.98	5.26	0.001
Meghalaya	3.15	4.68	0.000	Mizoram	2.74	3.95	0.001
Puducherry	7.59	6.93	0.000	Puducherry	9.17	7.98	0.000
Goa	2.475	2.706	0.000	Goa	1.82	1.98	0.000
Gujarat	0.92	0.54	0.000	Sikkim	0.89	1.44	0.000
Uttarakhand	1.46	1.46	0.000	Meghalaya	1.03	1.02	0.000
Uttar Pradesh	0.76	0.88	0.000	Uttarakhand	0.53	0.59	0.000
Tripura	0.54	0.57	0.000	HP	0.48	0.66	0.000
AR	4.38	4.15	-0.001	Gujarat	5.58	6.18	0.000
Jharkhand	0.03	0.03	-0.002	Tripura	0.03	0.03	-0.001
Odisha	0.92	1.23	-0.002	Jharkhand	1.01	1.25	-0.002
Manipur	12.92	10.52	-0.003	Uttar Pradesh	12.34	10.10	-0.002
Bihar	0.12	0.12	-0.003	Bihar	0.10	0.10	-0.003
West Bengal	9.77	9.29	-0.004	West Bengal	8.94	8.26	-0.004
Chhattisgarh	1.35	1.32	-0.005	Chhattisgarh	1.17	1.07	-0.006
Tamil Nadu	9.61	9.58	-0.005	Tamil Nadu	10.58	10.34	-0.007
MP	0.81	0.78	-0.006	MP	0.81	0.80	-0.011
Rajasthan	10.70	10.25	-0.022	Rajasthan	11.09	10.71	-0.020

Source: Author's Calculation Note: Andhra Pradesh = AP, Arunachal Pradesh = AR, Himachal Pradesh = HP, Madhya Pradesh = MP, Jammu And Kashmir = J&K

Table 5 shows a pan-India analysis of the five largest positive and negative Theil elements for both years. In 2019–20, the top five states with large (most positive) Theil elements were Karnataka, Kerala, Andhra Pradesh, Punjab and Jammu & Kashmir and top five states with smallest (most negative) Theil elements were Rajasthan, Madhya Pradesh, Tamil Nadu, Chhattisgarh and West Bengal. The top five most positive contributors are characterised by higher per capita labour expenditure. In 2020–21, in the top five lists, Karnataka, Kerala and Andhra Pradesh remained at the same sequence, but Manipur and Odisha were replaced by Punjab, and Jammu & Kashmir, while the bottom five states continue to be the same.

Table 6: Year-Wise Contributions to the Theil Index: Aspirational Districts

2019-20				2020-21			
State	share of person days	share of Labour Exp.	Index 2019-20	State	share of person days	share of Labour Exp.	Index 2020-21
Karnataka	6.15	8.12	0.0225	AP	15.12	16.71	0.0167
AP	17.09	18.53	0.0149	Haryana	3.02	4.33	0.0156
Kerala	3.24	4.50	0.0147	Kerala	2.69	3.73	0.0122
J&K	1.15	2.10	0.0126	Karnataka	5.06	6.00	0.0102
Haryana	1.38	1.99	0.0073	Odisha	5.60	6.13	0.0055
Punjab	1.05	1.32	0.0030	Manipur	0.73	1.15	0.0052
Nagaland	0.82	1.05	0.0027	J&K	1.55	1.83	0.0031
Mizoram	1.81	1.94	0.0013	Punjab	1.13	1.33	0.0022
Maharashtra	1.48	1.58	0.0010	Maharashtra	1.33	1.43	0.0011
Assam	1.96	1.99	0.0003	Mizoram	1.34	1.41	0.0008
Sikkim	0.98	1.02	0.0003	AR	0.29	0.35	0.0007
Gujarat	3.79	3.73	-0.0006	Nagaland	0.88	0.88	0.0000
Uttarakhand	1.11	1.03	-0.0008	Sikkim	0.94	0.88	-0.0005
AR	0.33	0.21	-0.0010	Assam	2.06	2.00	-0.0006
Meghalaya	2.10	1.97	-0.0013	Uttarakhand	1.01	0.94	-0.0006
HP	5.27	5.09	-0.0018	Meghalaya	1.99	1.90	-0.0008
Uttar Pradesh	3.92	3.68	-0.0023	Gujarat	4.21	4.06	-0.0015
Odisha	3.77	3.47	-0.0028	HP	4.06	3.83	-0.0023
Jharkhand	2.34	2.03	-0.0029	Uttar Pradesh	4.32	4.04	-0.0027
Manipur	0.84	0.40	-0.0030	Jharkhand	3.17	2.86	-0.0029
Bihar	3.38	2.99	-0.0036	Bihar	4.10	3.71	-0.0037
MP	3.50	3.08	-0.0039	Chhattisgarh	3.47	3.00	-0.0043
Chhattisgarh	3.79	3.30	-0.0045	MP	4.56	3.84	-0.0066
Tripura	6.10	5.56	-0.0052	Tripura	5.36	4.61	-0.0070
Rajasthan	5.20	4.13	-0.0095	Rajasthan	4.91	4.01	-0.0082
West Bengal	10.69	9.61	-0.0102	West Bengal	10.33	9.34	-0.0095
Tamil Nadu	6.74	5.58	-0.0105	Tamil Nadu	6.79	5.71	-0.0099

Source: Author's Calculation. Note: Andhra Pradesh = AP, Arunachal Pradesh = AR, Himachal Pradesh = HP, Madhya Pradesh = MP, Jammu And Kashmir = J&K

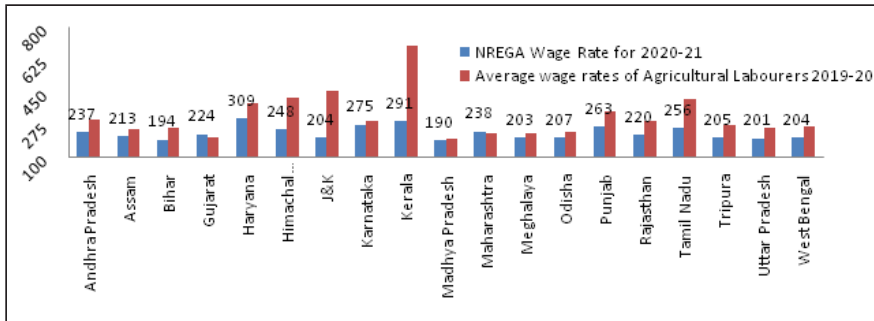
Table 6 shows the state-wise analysis of the index for aspirational districts. The five largest positive contributors of 2019–20 to the index have been Karnataka, Andhra Pradesh, Kerala, Jammu and Kashmir and Haryana. The list is almost the same for the year 2020–21 except Odisha in place of Jammu and Kashmir. Interestingly, although the four states, i.e., Karnataka, Andhra Pradesh, Kerala and Haryana, remain in the top five, their relative ranking has changed. For instance, Karnataka's (highest positive contributor in 2019–20) contribution to Theil has decreased from 0.023 in 2019–20 to 0.010 in 2020–21. Contrary to Karnataka, Haryana's contribution to the index has increased from 0.007 to 0.017 between 2019–20 and 2020–21. The list of top negative contributors has also not changed except that Madhya Pradesh has replaced Chhattisgarh in 2020–21. Another fascinating fact about the bottom three states, i.e., Tamil Nadu, West Bengal and Rajasthan, is that their contribution to Theil decreased between these periods.

It is evident from tables 5 and 6 that the magnitude of inequality of the Theil index depends on the share of employment and share of labour cost. Comparing states at the all-India level and aspirational district level suggest that states with a higher share of cost and lower share of employment, i.e., wage and respective state's share in total employment, are positively contributing to the inequality. Alternatively, it can be said that the source of inequality is the higher cost of per unit employment. A wage difference among the states plays an essential role alongside the supply of the work. The higher percentage of employment with a higher share of labour cost will be more equal compared to a state with higher expenditure on labour but less share of jobs. Therefore, the above analysis suggests two critical factors behind the employment inequality, i.e., wage and supply of work.

The wage⁶ in MGNREGA is decided by the Central Government. According to the latest data (Figure 5), the highest MGNREGA wage is in Haryana (Rs 309), and the lowest is Madhya Pradesh (Rs 190). More than 50% states pay less than the national average MGNREGA wage, i.e., less than Rs 231. The considerable variation of per day wage (standard deviation = 34.62) among the central states is directly linked to employment inequality (tables 4 and 5). According to Mahendra Dev Committee (2014) recommendations, workers should be paid either the minimum wage or the MGNREGA wage, whichever was higher. The committee also recommends that the basis of revision of remuneration should be the consumer price index of rural (CPI-R) instead of the consumer price index of agricultural labour (CPI-AL). The significant advantage of CPI-R is: (1) It captures the price of the whole rural economy, unlike CPI-AL, which only denotes agricultural households (2) The base year for CPI-AL is almost 35 years, i.e., the consumption basket of 1986–87 is used for the calculations (3) The CPI-R gives lesser weight on the food items in comparisons to CPI-AL. The basket of goods in the CPI-AL is primarily food items (almost 72%).

⁶ The total cost of MGNREGA is shared between the central government and respective state governments. The total cost consists of three things namely, wage, material and administrative costs. The central government pays 100% wage of unskilled labour, 75% wage of semi-skilled and skilled labour, 75% of the cost of materials and additional 6% of the administrative expenditures.

Figure 5: Wage Differences between MGNREGA and Agriculture



Source: Author's Compilation of various reports

Table 7: Area-Wise Rates of Minimum Wages of Agricultural Labour (in rupees/day)

Payable w.e.f	Category of worker	Area		
		A	B	C
01-10-2018	Unskilled	355	324	321
	Semi-Skilled /Unskilled Supervisory	389	357	328
	Skilled/ Clerical	422	389	356
	Highly Skilled	467	434	389
01-10-2019	Unskilled	383	350	347
	Semi-Skilled /Unskilled Supervisory	420	385	354
	Skilled/ Clerical	455	420	384
	Highly Skilled	504	469	420
01-04-2020	Unskilled	400	365	362
	Semi-Skilled /Unskilled Supervisory	438	402	369
	Skilled/ Clerical	475	438	401
	Highly Skilled	526	489	438
01-10-2020	Unskilled	407	371	368
	Semi-Skilled /Unskilled Supervisory	445	409	375
	Skilled/ Clerical	483	445	408
	Highly Skilled	535	497	445
01-04-2021	Unskilled	411	375	372
	Semi-Skilled /Unskilled Supervisory	449	413	379
	Skilled/ Clerical	488	449	412
	Highly Skilled	540	502	449

Source: Ministry of Labour & Employment, Govt. of India

Table 7 shows the minimum wage of the agricultural labour. The data is divided into three regions (A, B and C). Category A and B comprise mostly urban areas. In Category C, with reference to rural agricultural labourers, shows that even the

minimum wage of unskilled workers is much higher than the MGNREGA wage (also see Annexure 1). The minimum wage of agricultural labourers in Category C was Rs 362 per day in the year 2020. The gap between wages of the highest paid MGNREGA state, i.e., Haryana, and the minimum wage was Rs 53 per day. In Madhya Pradesh, the wage gap between MGNREGA and minimum wage was Rs 172 per day. For the majority of states, the gap between average agricultural wage (2019–20) and MGNREGA wage (Figure 5) is significant. For instance, the gap is more than Rs 400 for Kerala. In other words, there are discrepancies between MGNREGA wage, Minimum wage and average agricultural wage in rural India. These discrepancies are significant sources for employment inequality either between India's states or between India's aspirational districts, and such inequalities are policy-induced supply-sided ones.

Status of SC, ST and Women in MGNREGA

For more inclusive employments women, scheduled caste (SC) and scheduled tribe (ST) are put in the front. Special provision is made under the scheme to develop land and water resources in the individually owned lands of SC, ST, below poverty (BPL) households. In 2008, it extended to small-marginal farmers with job cards. The provisions are formulated in such a way that it can provide employment to the lowest strata of the population. Usually, these groups are subjected to exploitation and marginalisation for a long time. For instance, according to the NSSO data of the different year, the poverty among the STs is much higher than non-tribal. In 2011–12 (NSSO 68th Round), rural poverty of STs was double than their counterpart. The incidences of the poverty among rural STs are 45.3%, whereas the rate of poverty among the non-tribals was 22.9% (Pal, 2015). At the outset, according to the NSSO rounds, the rate of poverty among the ST has decreased over the period of time. The decrease in the rate of poverty is not uniform across the state. Some states are able to record more decline in poverty than others. Similarly, the paid employments to women also help the rural household perform better in many social indicators like health, nutrition, child education, etc. An attempt was made in this section to understand the role of MGNREGA to bring social inclusion.

Table 8 shows that, over time, the inequality reduced across the groups, except during 2016–17. Overall, the disparity among the aspirational districts is less when compared with the pan-India data. In all the three categories, i.e., SC, ST and women in 2015–16, the Theil value was higher in the aspirational districts but decreased faster than the all-India level. These data suggest a positive development, and all the aspirational districts are coming closer with respect to giving paid jobs to women and social categories (SC and ST). Theil elements for women suggest that employment during the crisis become more inclusive. The Theil value of women in aspirational districts decreases from 0.0159 in 2019–20 to 0.0128 in 2020–21. In other words, the crisis is able to reduce the inequality of employment in general but for ST, SC and women in particular.

Table 8: Theil Elements for the MGNREGA by Social Groups and Women

	SC		ST		Women	
	India	AD	India	AD	India	AD
2015-16	0.0132	0.0162	0.0423	0.0500	0.0206	0.0254
2016-17	0.0530	0.0441	0.0255	0.0212	0.0581	0.0425
2017-18	0.0127	0.0114	0.0269	0.0182	0.0171	0.0149
2018-19	0.0124	0.0104	0.0137	0.0148	0.0170	0.0162
2019-20	0.0124	0.0116	0.0125	0.0161	0.0156	0.0159
2020-21	0.0104	0.0090	0.0151	0.0120	0.0141	0.0128

Source: Author's Calculation

Conclusion

In the presence of a long-standing debate about the nature of public-funded job creation, it is crucial to understand the challenges the process entails, addressing the larger goal of a developing society. The academic nuances of the public-funded scheme on employment also evolved over time. The implication of these becomes all the more relevant at the time of crisis. As many policymakers believed the crisis also comes with the opportunity for bold reform. The study attempts to evaluate the world's most expensive job-guaranteed policy, i.e., MGNREGA, and provides a fresh perspective of the rural employment policy and its implications of inequality. The Theil elements are calculated using government data on variables related to MGNREGA. The variables include expenditure on labour; total number of persons who had worked, total households who demanded work and agricultural wage-related variables between 2015–16 and 2020–21. The results have led to two key findings. First, the paper finds a significant rise in demand for work due to restrictions and lockdown of the economy and return migration from urban to rural. The increase in labour supply is associated with more youth, mainly female workers, demanding work during period of study. The allocation of extra funds from the central government helps to increase the number of employments also. The rationing rate, i.e., the gap between demand and supply, also increased during the crisis time. Though the supply of work could not match with an extraordinary increase of demand for work but many studies finds that the rationing of jobs is more favorable towards the poor (Narayanan and et al., 2017). Second, the construction and decomposition of the inequality index suggest a decrease in inequality. The less developed districts are able to achieve some amount of employment equality. The reductions in the Theil elements are evident of the rise of some degree of equality at the all-India level and in the aspirational districts particularly with regard to women employment and employment of workers in the SC and ST categories. The state-wise comparisons did indicate the inequality between states.

In states like Kerala, Karnataka, Haryana the rate of inequality are higher. On the other hand, West Bengal, Tamil Nadu, Rajasthan are more inclusive in comparisons

to others. One of the main reasons behind employment inequality between and within aspirational districts is wage difference. The MGNREGA wage is decided by the central government using CPI-AL with base year 1986–87. This study also supports the idea of CPI-Rural as a benchmark for the calculation proposed by the Mahendra Deb Committee (2014). As this study proposes, the convergence of MGNREGA wage with the minimum wage of agricultural labourer will provide logical steps towards social justices and will reduce regional inequality of employment. The increase of wages in MGNREGA will be an essential safety net for a rural household in general but more so during the crisis.

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Annexure 1: State-wise Wage Rate for Unskilled Manual Workers (w.e.f. April 1, 2020)

Sl. No.	Name of State/ Union territory	Wage rate in rupees per day (in Rs.)
1	Andhra Pradesh	237
2	Arunachal Pradesh	205
3	Assam	213
4	Bihar	194
5	Chhattisgarh	190
6	Goa	280
7	Gujarat	224
8	Haryana	309
9	Himachal Pradesh	Non-scheduled Areas- 198.00 Scheduled Tribes Areas- 248.00
10	Jammu and Kashmir	204
11	Ladakh	204
12	Jharkhand	194
13	Karnataka	275
14	Kerala	291
15	Madhya Pradesh	190
16	Maharashtra	238

17	Manipur	238
18	Meghalaya	203
19	Mizoram	225
20	Nagaland	205
21	Odisha	207
22	Punjab	263
23	Rajasthan	220
24	Sikkim	205
	Sikkim (3 Gram Panchayats named Gnathang, Lachung and Lachen)	308
25	Tamil Nadu	256
26	Telangana	237
27	Tripura	205
28	Uttar Pradesh	201
29	Uttarakhand	201
30	West Bengal	204
31	Andaman and Nicobar	Andaman District- 267.00
		Nicobar District - 282.00
32	Dadra and Nagar Haveli	258
33	Daman and Diu	227
34	Lakshadweep	266
35	Puducherry	256.00

Source: Ministry of Rural Development, Government of India (March 23, 2020)