COVID lockdown, how people managed and impact of welfare schemes on informal sector workers: Evidence from Delhi slums



2020

सत्यमेव परमो धर्मः

COVID lockdown, how people managed and impact of welfare schemes on informal sector workers: Evidence from Delhi slums*

Saudamini Das¹ Ajit Mishra²

Abstract

COVID-19 pandemic is likely to accentuate poverty and vulnerability of people at the margin for a number of reasons like lockdown, relocation to native places having no scope for gainful employment, health effects, opening of work with many restrictions, future uncertainty, etc. Following the lockdown in March, the central and state governments announced many welfare measures like direct cash transfer, food grain distribution through public distribution system, community kitchen and many others to reduce the negative effect of the lockdown and provide some basic minimum income to the poorer class, though the effects are yet to be assessed.

This paper studies 199 slum households in Zakhira and Kirti Nagar areas of Delhi during April-May 2020 to find out their coping and the benefits they received from these welfare schemes. Sample consisted of people like wage labour, e-rickshaw drivers, auto drivers, people doing small private jobs, street vendors, construction workers, etc. The results show the households to have consumed 2.5 meals per day and have used up their savings or have borrowed from friends. The welfare schemes were marginally helpful. Only 76% of the households were benefited by at least one of the nine schemes announced by the government and the average gain was a meagre Rs984/ per household, with an average family size of 5.8 persons, for one lockdown month. Maximum could not take advantage of the schemes either because they were unaware or did not possess their specific social security entitlement identification documents like ration card, adhar card, job card, vehicle papers, etc. If all eligible households had their social security documents, the average monetary benefit would have been Rs2251/ per households per month, nearly 2.3 times more and the benefits distribution would have been fairer, which highlights the importance of such documents in reducing the vulnerability of poor people.

¹ NABARD Chair Professor, Institute of Economic Growth, Delhi

² Professor of Economics and Director, Institute of Economic Growth, Delhi

^{*}We thank Sanju Yadav for conducting the survey and providing excellent research assistance. This survey was financed from a NABARD grant.

1. Introduction:

COVID-19 pandemic is likely to have hit hard section of the population which are vulnerable to poverty and deprivation. Households are identified as vulnerable when they have a high probability of falling into poverty, in face of shocks.³ The urban informal sector is one of the most vulnerable in this sense. The pandemic generated multiple shocks in the form of loss of jobs and income, possible ill-health, loss of informal insurance since shocks were correlated. Often a marginally non-poor household relies on other relatives and friends for help with coping with the shock, but the shocks are huge and widespread as the current crisis generated, more and more households are likely to fall into serious poverty. The International Labour Organization predicted that about 400 million workers from India's informal sector were likely to be pushed deeper into poverty due to Covid-19 (ILO 2020, 7th April). Using National Sample Survey Organization and Planning Commission data, researchers predict an addition of another 354 million to the number of poor in India, increasing the overall poverty rate to 46.3%, which is more than twice the 2011-12 level (FT, 30th April 2020).⁴

The vulnerability and zero shock bearing capacity of India's poor working class was evident when the covid-19 lockdown-1 elicited an unexpected and immediate response in the form of reverse migration of thousands of informal sector workers from the big cities. Immediate loss of livelihood, the anxiety that lockdown will continue for a longer time and the fear of hunger and trouble in an apathetic urban setting, probably were the reasons to make them take this drastic step even though they knew that they would have to incur some cost for travel.

This pandemic is unique in the way it created uncertainty in an unprecedented scale. There have been many crises and pandemics in this century but the uncertainty level was immense. Faced with this uncertainty, almost all governments adopted lockdowns, however blunt it might be, as tools to fight the virus. India also imposed nationwide lockdown from 25 March. Consequent to the lockdown, both central and state governments announced many welfare measures like direct cash transfer, food coupons, food grain distribution through public distribution system, community kitchen, etc. to provide food to the people and to reduce the negative effect of the lockdown on them. Newspaper reports, anecdotal documents, news channels, social media portals, did present a narrative which put a question mark on whether

³ In most exercises, these households are just above the poverty line (10-20%, WB)

⁴ In another exercise Saini fears doubling of India's poverty rate (30 April FE)

these schemes were helpful and adequate in reducing the adversity of people. This paper does some ground level assessment of the hardships people faced and the role played by these schemes in reducing the hardships. First, we explain the schemes and then describe our study area, the methodology used for assessment, the results and the implications of the results subsequently. We find that while a significant proportion (nearly three quarter) did benefit to some extent, the extent of benefit forgone due to lack of information, documentation, targeting, and ill-timing is very large.

Our findings raise several questions and issues which need further examination. While multiple schemes possibly raise the chance of a poor or vulnerable household accessing some benefit, it is not obvious that they lead to more benefits or transfer to the target population than a single well administered scheme. With a single scheme, there is always the scope of making relatively universal so that eligibility, documentary proof and disinterest towards low benefit schemes do not dent the chances of the scheme's success. Such consolidation of welfare schemes have been considered in other countries too (South Africa, UK: need reference)⁵. Our study also draws attention to the way vulnerability is conceptualised in the development economics literature. While income, job and asset characteristics are taken into consideration while identifying the vulnerable households, their access to information, unbiased intermediation (NGO) and facilitation and ability to present evidence regarding entitlements should also be considered.

1.1 Welfare schemes during COVID lockdown

As mentioned before, multiple schemes were announced by central and state governments to help the poor and marginal non-poor class. Table 1 explains these welfare schemes, available in Delhi, carefully.

Table 1: Welfare Schemes announced for lockdown period

S.N.	Description of schemes	Sponsoring	Frequency	Eligibility criteria
		authority	of	
			availability	
1	Free ration of 7.5 kg grains per	Government	Monthly	Ration card issued by the
	person per family per month	of Delhi		state government, you are
				staying or located in.
2	Non Ration card holders will	Government	Monthly	Adhar card, but no Ration
	get 5kg of grains per person	of Delhi		Card and have to have an E-

⁵ The United Kingdom went for universal credit scheme- which combined various benefit scheme and streamlined the process. This, however, has not been without critiques. In South Africa, studies have been done to evaluate the benefits of combining various social security schemes.

	per month free from fair price shops in Delhi			Coupon through online registration.
3	A transport service provider will get one instalment of Rs.5000	Government of Delhi	One time	Drivers of Autos, E- Rickshaws, RTVs and Gramin Sewa
4	A construction worker will receive one instalment of Rs.5000	Government of Delhi	One time	Job registration card with Construction Workers Welfare Board (CWWB) of the Delhi government
5	AAY family will get 5kg grain per person per month and 1kg Dal per HH	Government of India	Monthly	TPDS (targeted public distribution system) card holder i.e. Antyodaya Anna Yojana
6	3 free LPG cylinders for April, May and June.	Government of India	Monthly	LPG connection under PM Ujjwala Yojana
7	Rs.500 per month from April to June	Government of India	Monthly	Women with bank accounts under the Pradhan Mantri Jan Dhan Yojana (PMJDY),
8	One instalment of Rs.1000	Government of India	One time	National Social Assistance Program (Pensioners, Divyang and widows)
9	One instalment of Rs.2000.	Government of India	One time	Account holder under PM KISAN Yojana

Of the nine programs, four were rolled out by the state government of Delhi and the rest five by the central government. The paper tries to find out if the eligible households took advantage of the programs and received the benefits and if not, what were the reasons.

1.2 The study area and sample:

The paper is based on a sample of 199 households located in Zakhira and Kirti Nagar slum areas of North West Delhi. These households, along with another 100, had been surveyed in 2019 under an IEG-ISI study "Impacts of heat on the incomes of informal sector workers in Delhi", which was sponsored by EfD Initiative, University of Gothenburg. From the stored phone numbers of these households we could contact 199, the rest of the numbers being nonfunctional. Telephonic interview was conducted during 22nd April to 8th of May 2020. All these households were past migrants from different states of India and have been staying in these slums and engaged in informal sector jobs or self-employed. Table 2 and 3 below describes the native states of the sample households and their occupational distribution respectively. More than 50% of the households had come from Bihar (57%) followed by Uttar Pradesh (29%), Rajasthan (5%), and few from other parts of Delhi. They were engaged in informal sector jobs like rickshaws driver, commercial driver, wage labour, street vendors, some private job, etc. Maximum were doing wage labour (32%) followed by self-employed like tailor, tea seller,

carpenter, electrician, etc. (22%), then private job holders like security guard, housekeeping, work in a show room, etc. (14%) and commercial drivers (13.7%). There were two households having no regular income and surviving on pension only.

Table 2: Native states of sample households

State belong to	Total	Whether tried to migrate during lockdown			
	number of	Didn't try	Tried but	Managed to	Didn't
	HHs		didn't go	migrate	respond
Bihar	109	73	29	5	2
Delhi	5	3	1	1	0
Jharkhand	4	2	1	1	0
Kolkata	1	1	0	0	0
Nepal	4	4	0	0	0
Rajasthan	10	7	3	0	0
Uttar Pradesh	57	36	16	4	1
Uttarakhand	1	1	0	0	0
Didn't report name of the state	8	3	2	0	3

Table 3: Occupational distribution of the sample households

Occupation category of	Number of	Share in
household head	HHs	sample
E - rickshaw	6	3.02
Manual rickshaw	8	4.02
Self employed	43	21.61
Shopkeeper	5	2.51
Street vendor	10	5.03
Commercial driver	27	13.57
Private job	28	14.07
Construction worker	7	3.52
Wage labour	63	31.66
Not doing any work	2	1.01
Total	199	100

1.3 Questions asked in the survey: The survey questionnaire had four sections asking about family, migration, food, income, expenditure, benefit from the government schemes, etc. The specific questions examined are: how was the food availability, did anyone remain partially hungry during the lockdown, were any of the households able to earn an income, what was the size of their income loss, what were the sources of their expenditure, how helpful were the welfare schemes, what were the perception of people on management of lockdown period by the Government and how much time they will take to come back to their pre-lockdown economic level if situation returns to normalcy after 4th May 2020, etc. As the survey was on

telephone and people were stressed because of pandemic and lockdown, the questions were kept short so that no one has to spare more than half an hour to answer all questions. After the survey, the participant's (mostly the head of the household) phone was recharged with Rs.50/ to compensate their time.

1.4 Analytical Method: We use simple tabular analysis, t-test, and simple calculus to measure the income loss and gain from government schemes under different assumptions to arrive at the results. We calculate the actual gain to households from the schemes and a counterfactual outcome assuming that all eligible households have availed the benefits of the schemes. As some of the schemes provided free ration and LPG cylinder and some money transfers, we use prices to convert all benefits into money terms.

$$bi \equiv \sum_{j} eij * dij * pj * qij + \sum_{k} eik * dik * mik$$
 (1)

$$Bi \equiv \sum_{j} eij * pj * qij + \sum_{k} eik * mik$$
 (2)

In Eq. 1 and 2, b is actual amount of help received, B is potential amount the household could have received, i represent a household, j is non-monetary support scheme (ration, lentil, LPG cylinders), k is a monetary support scheme (money transfer to transport and construction workers, to Jan Dhan account, PM kisan, Divyang account), e is eligibility of the household to avail the scheme (0, 1), d is whether the household has actually availed the scheme for which he/she was eligible (0, 1), p is the price of the product offered under the non-monetary support schemes, q is quantity offered under jth scheme and m is amount of money offered under the kth scheme. One household can receive the support under any scheme only if $e_{ij} = d_{ij} = 1$, if anyone is zero, the household does not get the benefit.

Eq. 1 gives actual gain from the government schemes to the ith household and Eq.2 is the counterfactual outcome to the ith household under the assumption that all eligible households have availed the scheme, i.e. if $e_{ij} = I$ for the ith household, then $d_{ij} = 1$.

2. Results:

2.1 Economic features of the sample household: All households were migrant workers from different states and engaged in informal sector activities as reported before. Table 4 shows some of their economic features for lockdown and pre-lockdown period. The households were of large family size having 5.8 members on average, though maximum had one earning member for the whole family. The average pre-lock down daily wage rate was Rs. 426 and 98% of the households did not earn anything during lockdown, though they spent Rs. 225 daily, on

average. Some households reported to have spent large amount during the lockdown, probably on some family emergencies. Compared to having three meals per day during pre-lockdown days, they consumed only 2.45 meals per day during lockdown implying that many households skipped one meal per day on average. When asked about the time they will take to return their economic situation to pre-lockdown status if normalcy returns by 17th May, on average, people reported nearly six months, though it varied from half a month to two years.

Table 4: Features of the sample households

	Number of			
Features	respondents	Mean (Std. Dev.)	Min	Max
Family size	198	5.76 (2.61)	1	20
Earning members	199	1.38 (0.65)	1	4
Wage before LD (Rs.)	196	426.12 (302.93)	0	2500
If earning during LD	197	(0.02) (0.16)	0	1
Earning in LD (Rs.)	5	700 (412.31)	200	1000
Average Daily Exp. During LD				
(Rs.)	197	224.97 (210.94)	0	2000
Total Exp. During LD (Rs.)	176	11014.2 (8298.96)	0	80000
Number of meals daily before				
lockdown	186	2.93 (0.28)	1	3
Number of meals daily during				
lockdown	186	2.49 (0.61)	1	3
Approximate recovery period to				
pre-lockdown situation (in months)				
if everything gets normal after LD	131	5.92 (3.67)	0.5	24
Number of days in lockdown at the				
time of survey	199	36.8 (4.52)	28	44

Next, we asked them the source of their expenditure as most of them were not earning during the lockdown, borrowing (37%) and personal savings (36.7%) were reported as the widely used sources followed by help from friends (24.5%) and then help from government (1.6%) (Table-5).

Table 5: Source of expenditure made during lockdown

Sources	Freq.	Percent
Borrowing	70	37.23
Help from friends	46	24.47
Help from government	3	1.6
Personal Saving	69	36.7
Total respondent	188	100

2.2 Food composition and free food distribution: People reported to eat 2.5 meals per day, implying that many did skip one meal per day during this period. We tried to find out what

they consumed during breakfast, lunch and dinner and describe the type of food consumed in table 6. It shows maximum households (66%) skipped breakfast or had just tea (11%) and only 19% had proper food. Some households also skipped lunch (24%) and dinner (26%) and consumed chapatti, rice, vegetables and lentils as main food items. Only 7 households reported to have consumed either tea or tea with some snacks in between the lunch and dinner.

Table 6: Type of food consumed during a day

	Percentage of households having this food during-				
Type of food	Breakfast	Lunch	Dinner		
No food (skipped)	0.66	0.24	0.26		
Chapati, Vegetables					
and lentil	0.13	0.42	0.24		
Rice and lentils	0.06	0.34	0.43		
Khichidi	0.00	0.02	0.07		
Tea only	0.11	0.00	0.00		
Tea and paratha	0.05	0.00	0.00		

Table 7 shows other food related behaviour during the lockdown. Only 32% of the households reported to have saved some food for the lockdown and only 35% (68 households) reported to have gone out to collect free food distributed by the government and in 75% of such households, one member went out and collected food for all. Sadly 21% of the households reported to have remained hungry for at least one day during lockdown. Table 8 shows the number of no food days households have suffered during lockdown. Only 174 households replied to this question and of them, 18 households have remained hungry for at least one day in between 25th March and 8th May 2020. All these households have large family sizes (5.9 members on average) and are seen to have gone out to collect food some of the days, probably problems like long distance, bad quality food, long queue, etc. to collect food have made them to avoid it some of the days. Table 9 describes such problems.

Table 7: Food related behaviour of Households

Food behaviour	Mean	Std. Dev.
Have stored food for the lockdown	0.32	0.47
Family went out to collect free food	0.35	0.48
Whole family went out to collect food	0.18	0.39
■ One member collected food for all	0.75	0.44
Remained hunger at least one day during lock down	0.21	0.41

Table 8: No food days suffered

Number of		Dorcontago
	Number of	Percentage of
hungry	number of	OI
days	respondents	respondents
0	156	89.66
1	11	6.32
2	2	1.15
3	1	0.57
4	1	0.57
5	1	0.57
6	2	1.15
Total	174	100

Table 9: Hassles in collecting free food

Problems in getting free	Number of	
food	respondents	Percentage
Bad quality	21	30.88
Long distance	13	19.12
Long queue	10	14.71
Fear of virus	10	14.71
Demand Adhar card	1	1.47
Feeling shy to collect food	7	10.29
Bad police behaviour	5	7.35
Less food	1	1.47
Total	68	100

2.3 Opinion on government: We had a question on households' perception on the lockdown management by the government. To our surprise, around 76% of the households felt that the LD was managed well by the Government and the rest 24%, who were unhappy with the lockdown management, mostly reported receiving no or little help from the government or were unhappy because the lockdown was not being strictly implemented.

2.4 How helpful were the welfare schemes: As mentioned before, nine different schemes were introduced by government, other than the free availability of food. These schemes had different eligibility criteria and households fulfilling those criteria had to claim the benefits. Table 10 shows the difference between the eligible and actual beneficiaries and in case of all schemes the actual beneficiaries have been less than the eligible ones. Schemes like getting ration with e-coupons, money transfer to Jan dhan account, transporters and construction

workers claiming compensation are seen to have high difference between eligible and actual beneficiaries.

Table 10: Welfare schemes and difference between eligible and actual beneficiaries

Source of	Name of the Welfare Schemes	Frequenc	% of eligible	% of	Differenc
help		y of	households	beneficiary	e
		receiving		households	
		benefit			
State	7.5 kg grains per person per family per	Monthly	0.57	0.51	
Governm	month free.				0.06
ent of	5kg of grains/per person per month free	Monthly	0.43	0.12	
Delhi	after getting E-Coupon through online				
	registration.				0.31
	A transport service will get Rs.5000	One time	0.16	0.02	0.14
	A construction worker will receive	One time	0.18	0.01	
	Rs.5000				0.17
	5kg grain (rice/wheat) per person per	Monthly	0.09	0.07	
	month and 1Kg Dal per HH (Antodaya)				0.02
	3 free cylinders for April, May and June	Monthly	0.19	0.08	
Governm	(Ujjwala).				0.11
ent of	Rs.500 for month from April to June (Jan	Monthly	0.48	0.21	
India	dhan a/c)				0.27
	Rs.1000 to be given to Pensioners,	One time	0.22	0.16	
	Divyang and widows				0.06
	Rs.2000 to PM Kisan	One time	0.11	0.05	0.06

We could find out some of the reasons why the households were unable to collect ration, scheme 1 and 2 of Government of Delhi (Table 11).

Table 11: Reasons for not getting free ration

Reasons for not getting	% of non-receivers	Reason for not getting	% of non-receivers
the 5 kg grain	giving the reason	7.5 kg ration	giving this reason
Did not register	0.43	Did not know about it	0.37
Did not possess Adhar	0.29	Ration got over by the	0.19
card		time we reached the	
		shop	
No knowledge of such a	0.18	Was given less than	0.31
scheme		7.5kg/person, so	
		refused to take	
Register, but could not	0.08	Did not go as location	0.13
generate e-coupon		was far	
Police stopped me on	0.02		
the way			

For other schemes, people either avoided giving the details or said that they are unaware of such schemes or they have not checked their bank account.

2.4.1 Benefits from the schemes

Next, we measured the benefits received from different schemes in monetary terms by monetizing the ration and adding all money transfers received by the households. As some

schemes were monthly and some, one time payments for the three months, we divided the later by three to calculate the monthly benefits received. We used Eq. 1 to do these calculations. We also excluded the 4 national from Nepal who were not eligible to receive any of such benefits. Prices used to value the non-monetary benefits were:

- Grain @Rs25/kg;
- Dal@70/kg;
- LPG cylinder@570/cylinder

Next, we used the same prices and Eq. 2 to measure the counterfactual benefits assuming that all eligible households have actually received their due benefits. The following assumptions were used to measure the counterfactual outcome:

- All households had ration card to get dry ration @7.5kg/person/month
- There was no need to get ration with Adhar card (as Adhar card was used for households without ration card)
- All eligible transport service providers (31= 6 e-rickshaw drivers and 27 commercial drivers) getting transport allowance
- All construction workers having CWWB job card got allowance
- All AAY card holders got ration from central government @5kg grain / person / household / month + 1kg lentil/household
- All LPG holders under Ujjwala scheme got free cylinders
- All PMJDY account holders got Rs.500/ in their account
- All National Social Assistance Program card holders receive Rs1000/ in their account.
- All PM KISAN card holders receive Rs2000/ in their account

Table 12 shows these two average benefits for the households.

Table 12: Average benefit from welfare schemes (in Rs.)

	Number of			
Variable	HHs	Mean (Std. Dev.)	Min	Max
Actual Benefits				
received	195	984.2 (852.77)	0	5395.83
Actual Benefits				
received (excluding				
non-beneficiaries = 46)	149	1288.04 (747.82)	333.3	5395.83
Counterfactual benefits	195	2251.3 (1230.16)	375	6869.17

From these schemes, average benefit to households is Rs984/ and if we exclude the non-beneficiaries, it goes up to Rs1288/, with a minimum of Rs333/ and a maximum of Rs5396/. The average benefit is seen to be Rs2251, with a minimum of Rs375/ and a maximum of Rs6869/ under the counterfactual scenario, i.e. if every family had a ration card and had availed of all

the benefits they were eligible for. Moreover, there would not have been a single non-beneficiary in the counterfactual scenario.

From among the 195 Indian households surveyed in the study, 46 did not receive any benefit from any of the schemes and only 149 (76%) were benefited. These non-beneficiaries are mainly wage labour, self-employed, commercial drivers, etc. (Table 13).

Table 13: Who were the non-beneficiaries?

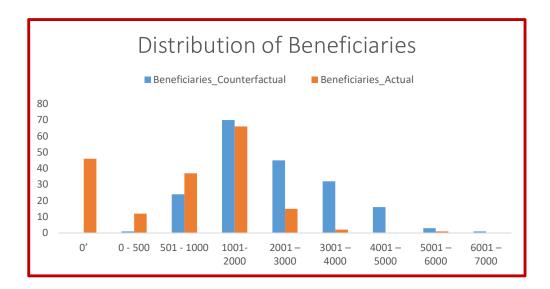
Occupation type	Number of HHs	% of non-beneficiaries
Wage labour	15	32.61
Commercial driver	8	17.39
Manual rickshaw		
driver	3	6.52
Private job	8	17.39
Street vendor	1	2.17
Self employed	10	21.74
Shopkeeper	1	2.17

These households could not take advantage of the schemes either because they were unaware or did not possess their specific social security entitlement identification documents like ration card, adhar card, job card, vehicle papers, etc. If all eligible households had their social security or identity documents, all would have received some benefit and the average monetary benefit would have increased to Rs2251/ per households or Rs.395/ per capita per month for the lockdown period that highlights the importance of such documents in reducing the vulnerability of poor people. As observed from Table 14 and the chart below, the distribution would have been fairer under counterfactual with more people being benefited and higher amount of benefits going to more people.

Table 14: Distribution of benefit and beneficiaries

Range of benefits (Rs.)	Number of Beneficiaries Counterfactual	Number of Beneficiaries Actual	Mean benefit Counterfactual (Rs.)	Mean benefit Actual (Rs.)
0	0	46		0
0 - 500	1	12	375	347
501 - 1000	24	37	733	756
1001- 2000	70	66	1409	1461
2001 – 3000	45	15	2509	2453

3001 – 4000	32	2	3395	3305
4001 – 5000	16	0	4329	
5001 - 6000	3	1	5639	5595
6001 – 7000	1		6869	



3. Concluding Remarks

This study analyses a purely random sample, which is representative of the lowest economic strata of the society as evident from the description of the jobs they do. The sample households were a migrant community from states like Bihar, Uttar Pradesh, Jharkhand, Rajasthan, etc. who did petty jobs for survival. Almost all of them lost their livelihood during lockdown, but most did not mind it as fear of COVID outweighed the economic difficulties at the beginning. The welfare schemes were helpful, but the full potential could not be realized because of many factors. The welfare schemes had the potential to provide Rs.2251/ per household per month on average, but the actual benefit received was a meagre Rs.984/ per household as households did not have the papers to claim the benefit or were not aware or just did not avail the schemes as it involved travelling far or taking lots of botheration. Probably, to some household, the expected benefits were not worth the trouble involved in collecting it!

While multiplicity of welfare schemes raise the probability of reaching out to maximum poor and vulnerable household by giving them some form of benefits- they don't necessarily increase the total benefits to the target population. In our case, three-quarter managed to benefit- but not to the extent they could have. Given the limited administrative capacity and the fact that most of these schemes require administering, it is better to focus on a few schemes, increase the amount under schemes having wider reach like ration card holders and implement them well. This was evident in the very low uptake of some schemes in our sample: 5kg food grain for non-ration card holders (but having an Adhar card), transport service provider scheme.

Given the informal nature, even to expect minimal documentation from these workers (online registration to generate e-coupon for ration under Adhar card or expecting job card registration number from construction workers) was not ideal. This aspect should be factored in while designing the scheme: whether intended beneficiaries are likely to have the necessary papers. During these times, one could consider other forms of universalisation. Some of the ones who did not receive anything for lack of owning documents are the poorest ones like wage labourers or rickshaw pullers. Location or Sector or Occupation could be used for extending universal benefits. It is important to ensure that eligible and needy households receive the benefits even if it meant that non-eligible also expropriate to some extent.

References:

International Labour Organisation (ILO): ILO Monitor: Covid-19 and the World of Works. Second edition.

Saini, S. COVID-19 may double poverty in India. Financial Express, April 30, 2020

Recent IEG Working Papers:

Jha, Brajesh (2020). Farmers' Stress, Income and the role of Non-Farm Business, Working Paper Sr. No.: 408

Brown, Trent(2020). Vocational Training, Extension, and the Changing Landscape of Agricultural Education in India, Working Paper Sr. No.: 407

Kumar, Abhishek and Joe, William (2020). Cost-Benefit Analyses of Nutrition Interventions in India's Policy Framework, Working Paper Sr. No.: 406

Mitra, Arup and Singh, Jitender (2020).COVID-19 Pandemic and Livelihood Loss:Variations in Unemployment Outcomes and Lessons for Future, Working Paper Sr. No.: 405

Maiti, Dibyendu and Singh, Prakash (2020). Finance and Innovation: Country-level Evidence on Role of Firm Size and Competition, Working Paper Sr. No.: 404

Garg, Sandhya (2020). Financial access of unbanked villages in India from 1951 to 2019: A Spatial Approach, Working Paper Sr. No.: 403

Dasgupta, Dyotona and Saha, Anuradha(2020). The Glasses are Tinted: Self-Confidence and Poverty Trap, Working Paper Sr. No.: 402

Mitra, Arup (2020). Services Sector in India: Does It Contribute to Population Movement and Poverty Reduction?, Working Paper Sr. No.: 401

Chowdhury, Samik and Gupta, Indrani (2020). Fiscal Space and Expenditure Priorities post -14th Finance Commission: A Study of Five Indian States, Working Paper Sr. No.: 400

IEG Working Paper No. 409



INSTITUTE OF ECONOMIC GROWTH

University Enclave, University of Delhi (North Campus) Delhi 110007, India Tel: 27667288/365/424 Email: system@iegindia.org