Covid 19- Likely impact on poverty and role of DBT

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CSE

Agenda of the Presentation

- **Impact of Covid 19 on Indian poverty-** results presented from a state-wise and occupation-wise analysis based on unit-level NSSO (2011-12) data analysis
- DBT and pre-income shock expenditure (income) levels
- Experience with DBT in PDS
- State readiness index
- Summary

Methodology used

- Unit-level MPCE data for 2011-12 used as base- 2017-18 data is still pending for release
- Poverty thresholds and methodology of *erstwhile* Planning Commission followed
- Three income shocks- 10 percent, 25 percent and 50 percent introduced
- Poverty impact estimated for 2011-12
- Using 2019-20 population estimates, the shock is extrapolated to bring to current levels
- Three simplifying assumptions
  - A uniform shock across each 12 MPCE fractiles;
  - Things return to pre-lockdown levels after the turbulent times and
  - That no one loses his/her job or if job loss is the case then that individual lands up in a similar paying job after the turbulent times get over

Illustrative example (Uttar Pradesh- urban and rural)

Fractile Classes of MPCE (MRP)

	0-5%	5-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-95%	95-100%	All
Actual MPCE 2011-12 (INR)	483	595	685	782	879	975	1094	1245	1467	1874	2749	4790	1330
Poverty line* (INR)	807												
Fractiles under poverty	29.4%												
MPCE after 25% decrease	362	446	514	587	659	731	820	934	1100	1405	2062	3592	998
Poverty line* (INR)	807												
Fractiles under poverty**	57.7 %												

- Poverty ratio was earlier about 29.4 percent

- After 25 percent income shock, the ratio increased to 57.7 percent

- Upon applying 2019-20 population, 71 million more poor people would fall below poverty

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4

***Source:** Upcoming paper Saini and Khatri (2020)*

UP example extended: occupation-wise (urban only)

UP (Urban)	Self Employed	Regular wage salary	Casual Labor	Others	Total
Total Population under occupation 2011-12 (million)	22.9	12.8	6.3	2.3	44.5
% Share of occupation in total population (NSS 2011-12)	52	29	14	5	100
Existing Poverty Line (INR)	941				
Poor Population under occupation 2011-12 (million)	6.1	2.0	3.1	0.4	11.6
Poverty Ratio	26.5	15.67	49.16	18.3	26.09
Poverty Ratio after income shock	55.3	29.6	73.1	26.9	48.9

- "self-employed" and "casual labourers" worst impacted
- More than 70 percent of casual labourers in urban areas now poor

*Source: Upcoming paper Saini and Khatri (2020)*

Results

- A 25 percent income shock:

    - Is likely to push poverty ratio up to 46.3 percent from 21.9 percent (2011-12);

    - Push an additional 354 million people into the poverty trap

    - Three occupations, namely (a) **casual labourers employed in agriculture**, (b) **casual labourers employed in non-agriculture** sectors and (iii) those **self employed in agriculture** appear to be worst affected;

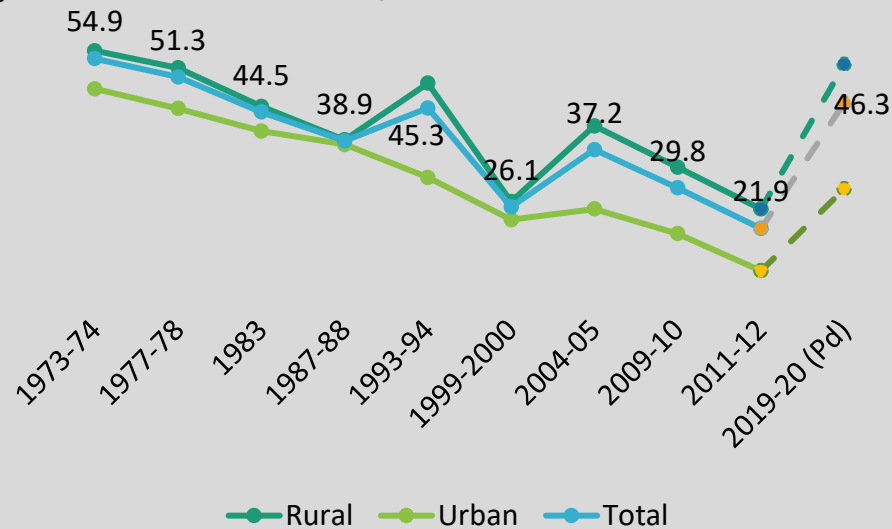   - Poverty levels is likely to double in 27 of the 35 studied states

Impact on Poverty

Impact of 25 percent income shock
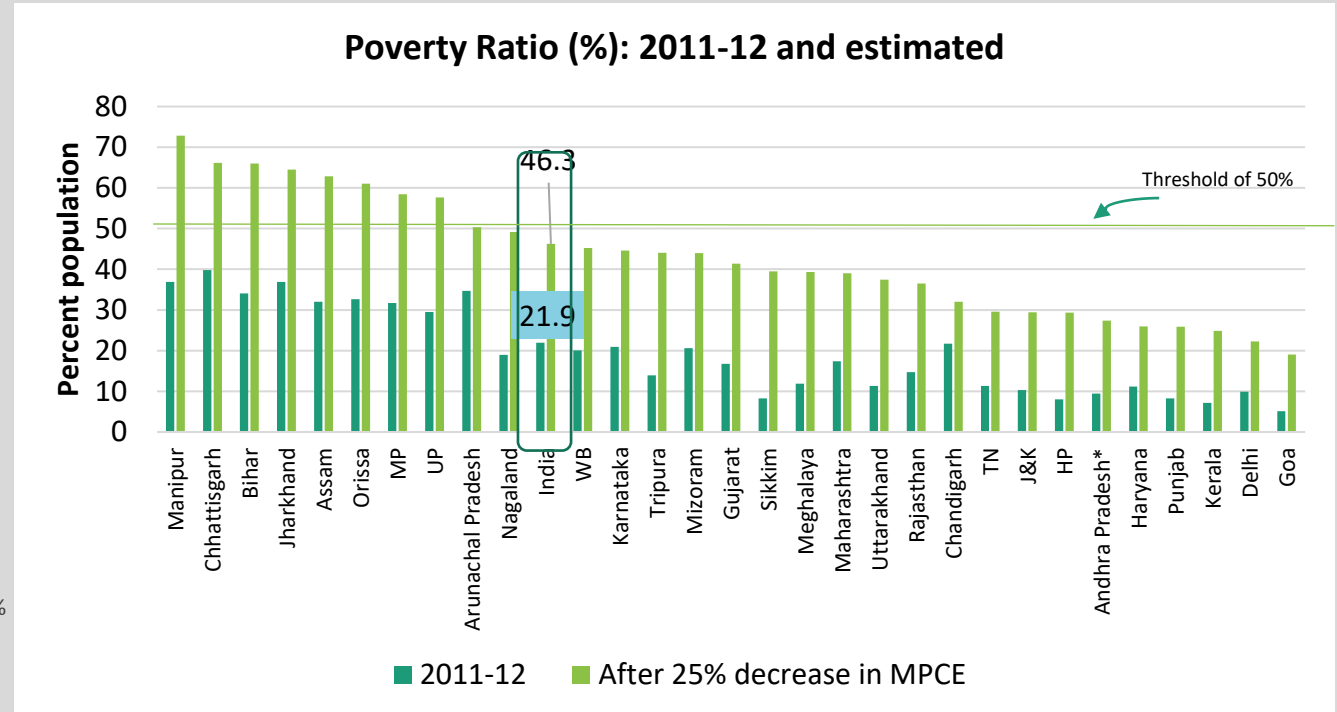
Number of Indian Poor (in millions)
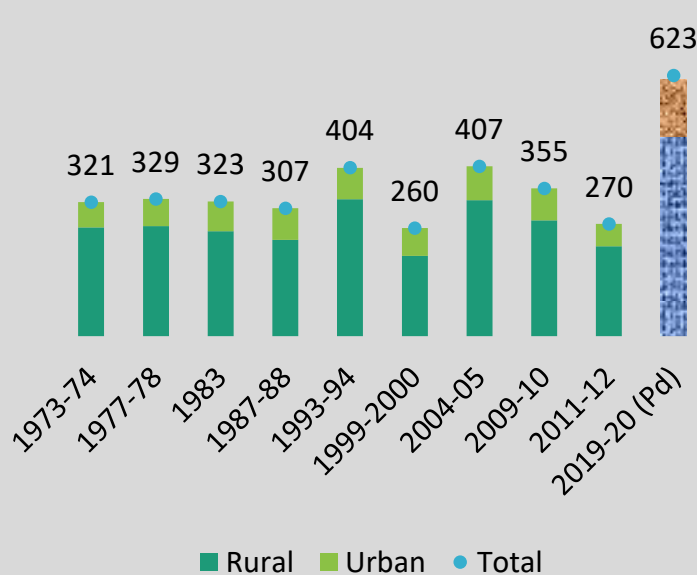
Poor as share of Indian Population (in percent)

All India Poverty Ratio (Percent)

- Depending on the level of shock, poverty ratio is estimated to worsen from about 21.9 percent to anywhere between 30.3 (10 percent income shock) and 75.3 percent (50 percent income shock)
- Implies, depending on the level of income shock, India could add anywhere between 138 million to 744 million poor people, respectively

Source: Upcoming paper Saini and Khatri (2020)

Impact on states (25 percent income shock scenario)

Pie chart:
- Uttar Pradesh, 19.6%
- Bihar, 11.8%
- Maharashtra, 8.2%
- West Bengal, 7.5%
- Madhya Pradesh, 6.8%
- Rajasthan, 5.2%
- Gujarat, 5.2%
- Andhra Pradesh, 4.9%
- Karnataka, 4.8%
- Tamil Nadu, 4.2%
- Orissa, 3.8%
- Others, 18.1%

Poverty Ratio (%): 2011-12 and estimated

Percent population (y-axis, 0–80). States on x-axis: Manipur, Chhattisgarh, Bihar, Jharkhand, Assam, Orissa, MP, UP, Arunachal Pradesh, Nagaland, India, WB, Karnataka, Tripura, Mizoram, Gujarat, Sikkim, Meghalaya, Maharashtra, Uttarakhand, Rajasthan, Chandigarh, TN, J&K, HP, Andhra Pradesh*, Haryana, Punjab, Kerala, Delhi, Goa.

India: 21.9 → 46.3. Threshold of 50%.

Legend: ■ 2011-12 ■ After 25% decrease in MPCE

- Of the expected 354million poor people to be added, 50percent are estimated to be in **5 states**: Uttar Pradesh (19.6%), Bihar (11.8), Maharashtra (8.2), West Bengal (7.5) and Madhya Pradesh (6.8%)
- In 27 of the 35 studied states, poverty rates are estimated to double

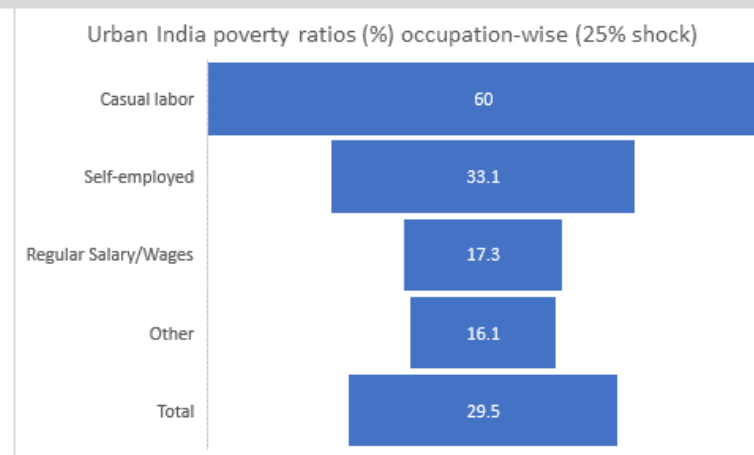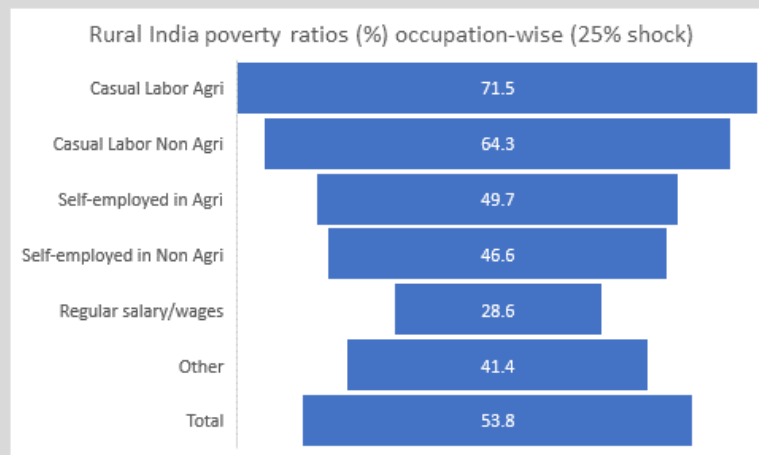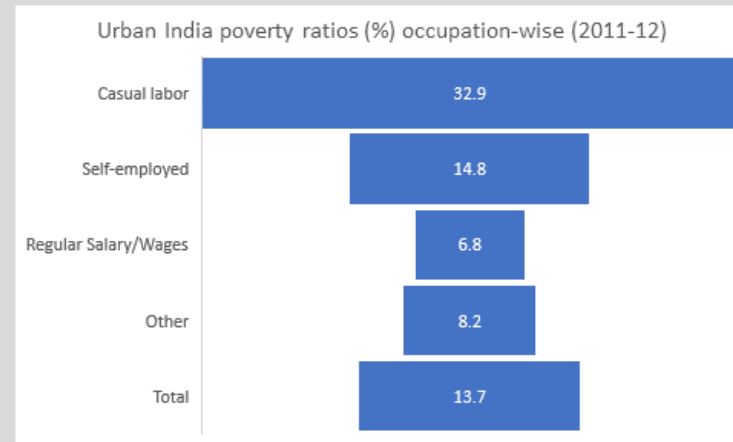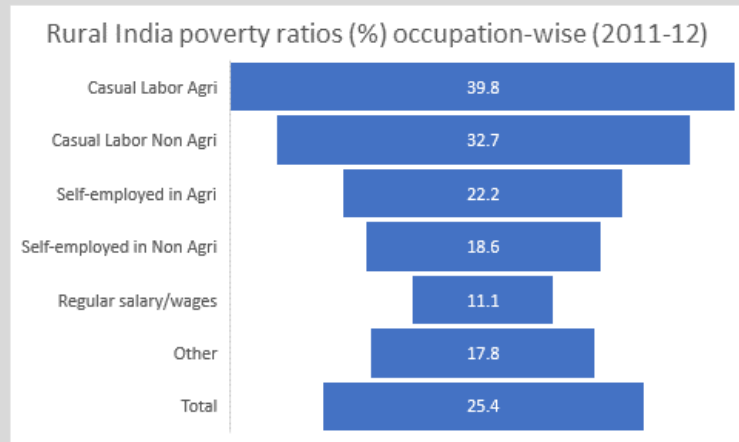*Source: Upcoming paper Saini and Khatri (2020)*

Impact on occupation(25 percent income shock scenario)

Rural India poverty ratios (%) occupation-wise (2011-12)

Casual Labor Agri	39.8
Casual Labor Non Agri	32.7
Self-employed in Agri	22.2
Self-employed in Non Agri	18.6
Regular salary/wages	11.1
Other	17.8
Total	25.4

Urban India poverty ratios (%) occupation-wise (2011-12)

Casual labor	32.9
Self-employed	14.8
Regular Salary/Wages	6.8
Other	8.2
Total	13.7

Rural India poverty ratios (%) occupation-wise (25% shock)

Casual Labor Agri	71.5
Casual Labor Non Agri	64.3
Self-employed in Agri	49.7
Self-employed in Non Agri	46.6
Regular salary/wages	28.6
Other	41.4
Total	53.8

Urban India poverty ratios (%) occupation-wise (25% shock)

Casual labor	60
Self-employed	33.1
Regular Salary/Wages	17.3
Other	16.1
Total	29.5

- Casual labour and self-employed are worst impacted

- 7 out of 10 are estimated to become poor among casual agricultural labourers

- Casual labour in agriculture in Bihar, West Bengal, Maharashtra and Uttar Pradesh are estimated to be worst impacted

Source: Upcoming paper Saini and Khatri (2020)

Relaxing assumptions

- Income shock not to be uniform across fractiles- Enough evidence emerging that people in the lowest fractiles (ones already poor or at threshold), most of whom work in the informal sector are worst hit;

- 25 percent income shock is overtly optimistic- There is growing and widespread evidence of job losses among low-income fractiles indicating a likely income shock much greater than 25 percent for people in these fractiles

- Economic and job crisis is likely to continue for longer- our assumption about incomes eventually recovering to pre-Covid-19 levels after few months is also likely to be overly optimistic. Income levels in- coming months will be determined by how the economy recovers and the lost employment is regenerated

DBT to bring back pre-income shock levels

All India (Combined) (INR) 2011-12	0-5%	5-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-95%	95-100%	Poverty Line
Actual Average MPCE	528	669	797	940	1078	1227	1400	1613	1908	2394	3202	5672	
Deficiency in MPCE of poor	-345	-204	-76										
Av MPCE after 25% income shock	396	502	598	705	809	920	1050	1210	1431	1796	2402	4254	873
Deficiency in MPCE of poor	-477	-371	-275	-168	-65								
Deficiency in MPCE of poor to reach pre-shock levels	-132	-167	-199	-168	-65								

- A transfer of about Rs. 199 or Rs. 200 per person per month will bring most population back to the pre-shock levels
- An amount of Rs. 199 in 2011-12 prices translate to about Rs. 312 in 2019-20 prices
- Will cost the country about Rs. 19,500 crores per month or about Rs. 2.3 lakh crores for the year i.e. about 1.14 percent of country's GDP

Source: Upcoming paper Saini and Khatri (2020)

DBT experience - Puducherry

- Rolled out in September, 2015 in lieu of physical entitlement under PDS

- Earlier failed experiment in Feb, 2015 in lieu of physical entitlement under state scheme;

- Size of benefit (2018-19)= INR 150/person (Priority) and INR 1050.7/Households (AAY)

- Payment made only for Rice

- Features:

  - Aadhaar seeding in the UT not compulsory

  - Bank accounts not in the name of female members: >70% of bank accounts in UT under DBT food are under the name of male members (2018)

  - Puducherry simultaneously physically transfers 20kg of single boiled rice under state scheme

Information updated, original source: Saini et al (2017)

DBT experience - Chandigarh

- Introduced in September, 2015 in lieu of central entitlement

- Size of benefit (2018-19)= INR 122.3/person (Priority) and INR 856.1/Households (AAY)

- Payment made for Rice and wheat

- Features:
  - Aadhaar seeding compulsory
  - Most beneficiary accounts opened under PMJDY and 97% of these were in the name of female head (2018);
  - All Fair Price Shops closed

Information updated, original source: Saini et al (2017)

Selected challenges in DBT faced in Chandigarh and Puducherry

- **Inadequacy of transferred amount-** Amount was felt to be insufficient to maintain pre-DBT levels, partly also because
    - Awareness of the beneficiaries: Most beneficiaries failed to understand that the amount transferred to them was net of CIP
    - Anticipated hike in prices by the local kirana stores

- **Insufficient last-mile delivery mechanism**
    - No SMS alerts sent to beneficiaries
    - Reliance on bank branches for withdrawal causing overcrowding and delays in receiving benefits
    - ATMs unable to dispense exact amount, thus effective entitlement reduced
    - Multiplicity of bank accounts

- **Rent seeking at points of withdrawal**

- **Awareness campaigns organized only after roll out of scheme.**

*Source: Saini* et al *(2017)*

Problems with DBT

- Not all states are equally ready for DBT

- Differences due to:
  - Economic vulnerability
  - State of deprivation- social and nutritional vulnerabilities
  - State of financial inclusion and infrastructure
  - Demographic challenges

Selection criteria for DBT- 16 factors

Demography	PDS Performance	Financial Performance	Other
Poverty Ratio	PDS extension	Bank Branches, ATMs, and BCs	Mobile penetration
Share in India's Poor	Leakages	Level of seeding of PMJDY accounts	Number of Post Offices
Literacy Rate	Reliance on PDS for consumption		
Female Literacy	Status of computerization		
Malnutrition	Completion of 9 point action plan		
Rural/Urban Population	Level of seeding of Ration card to aadhaar		

Information updated, original Source: Saini et al (2017)

Banking Density per 100,000 people: 56 banking points for 1lk people
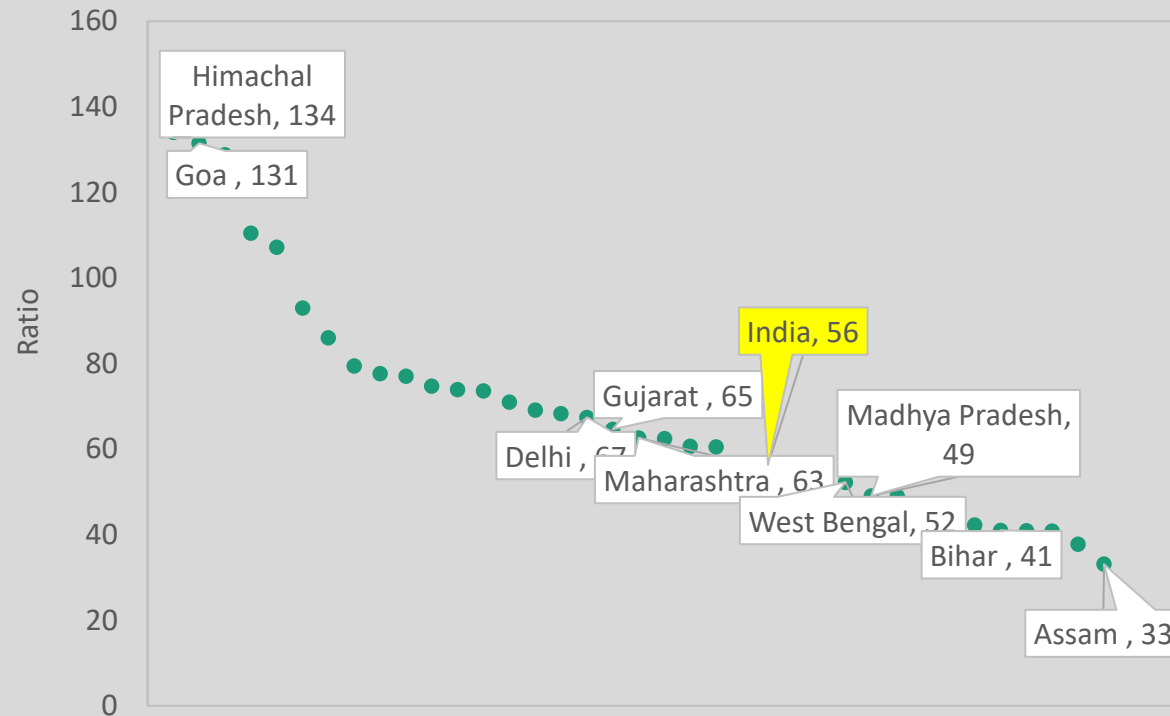
- The banking density of India is about 56 branches per hundred thousand people

- Himachal Pradesh is at the top with a banking density of 134 per hundred thousand people

- Assam is at the end of the spectrum with a banking density ratio of 33

Note: The densities in the above figure have been estimated using projected population totals for 2018 (computed using decadal growth rate of population between 2001 and 2011). The data on the number of commercial banks, ATMs, Post Offices, are for the year 2018. The data of Banking Correspondents is as per the latest data available on the SLBC website of the particular state

Information updated, original source: Saini et al (2017)

Results of state readiness index for DBT under PDS/NFSA

Phase	States and UTs
Phase 1: DBT Implementation by 2021	<u>Six</u>: Punjab, Delhi, Chandigarh, Daman & Diu, Goa, Puducherry, Kerala
Phase 2: DBT Implementation by 2022	<u>Five</u>: Haryana, Tamil Nadu, Andhra Pradesh, Telangana and Karnataka
Phase 3: DBT Implementation by 2024	<u>Eleven</u>: Madhya Pradesh, Chhattisgarh, Rajasthan, Jharkhand, Bihar, Odisha, Uttar Pradesh, West Bengal, Maharashtra, Gujarat, and Dadra and Nagar Haveli
Phase 4: DBT Implementation by 2026	<u>Thirteen</u>: Arunachal Pradesh, Assam, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Uttarakhand, A&N Islands and Lakshwadeep

It may be noted that certain cities like Lucknow in UP, Chennai in Tamil Nadu, Bangalore in Karnataka, Mumbai in Maharashtra, among others, are more prosperous than their average states or even the states in Phase 1. Thus, even though the complete state is recommended for a later date of DBT food implementation, these cities can be taken up for its immediate implementation.

Information updated, original source: Saini et al (2017)

DBT and way forward

- Not all states are equally ready. Not all districts within each state are equally ready;

- Last mile connectivity will be an issue- distributing direct cash vs account transfer?

- Financial literacy and access will be an issue

- Identification of beneficiaries will be a big issue:
  - There is no comprehensive database of say the casual workers in rural and urban areas. MGNREGA cards (active 12.4 cr) can be used for rural but what about urban areas. Can the database of ration cards be used? EWS data from schools? SECC?
  - To begin with, there will be large exclusion errors for the beneficiaries, at least for the informal sector where there is no comprehensive record