## Delhi NCR Coronavirus Telephone Survey- Round 2 April 23-26, 2020

Preliminary Findings NCAER National Data Innovation Centre

May 2, 2020

This is a preliminary report being released quickly after completing the DCVTS Round 2 due to the urgency of producing evidence to help map sensible strategies for fighting the Coronavirus Pandemic. Comments and suggestions are welcome and should be sent to <u>sdesai@ncaer.org</u> and <u>spramanik@ncaer.org</u>. All rights reserved. The material in this publication is copyrighted. NCAER encourages the dissemination of its work and will normally grant permission to reproduce portions of the work promptly. This work is the product of the research staff of NCAER. The findings, interpretations and conclusions expressed herein do not necessarily the views of the Governing Body or Management of NCAER.

#### **Recommended citation:**

NCAER National Data Innovation Centre (2020). Delhi NCR Coronavirus Telephone Survey- Round 2 (April 23-26): Preliminary report. Available online http://testnew.ncaer.org/image/userfiles/file/NDIC-TEL/Round-2/NCAER%20May%201%202020%20DCVTS-2%20Presentation.pdf. Published by National Council of Applied Economic Research, New Delhi.

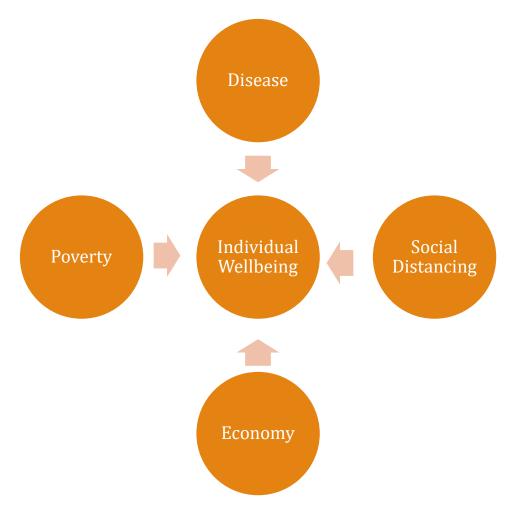


## COVID-19 – Unprecedented Global Challenge

- Over 3.3 million cases worldwide
- Over 2,34,000 deaths worldwide
- India identified cases more than 35,000
- Deaths more than 1100



# There is no ideal choice to balance between life and livelihood: how to make the best among difficult choices



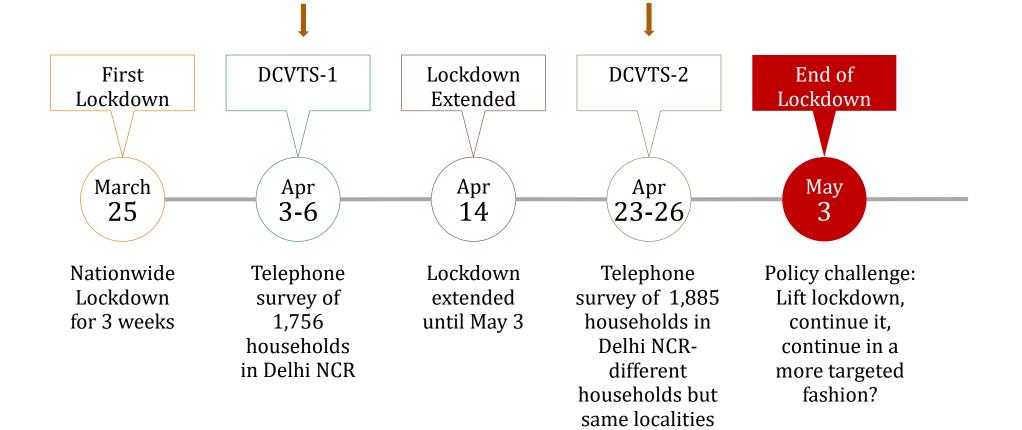


## Delhi NCR Coronavirus Telephone Survey (DCVTS) – Data for Informed Policy Dialogue

### Pulse of the People



### Coronavirus & DCVTS Timeline





## Delhi NCR Coronavirus Telephone Surveys

DCVTS-1 (April 3-6, 2020)

- Sample 1,756
- Telephone survey
- Length about 10 mins
- Reinterviewed households we have been interviewing as a part of Delhi Metropolitan Area Study (DMAS) for the past year
- Prior contact, validated phone numbers – resulted in 77% response rate

DCVTS-2 (April 23-26, 2020)

- Sample 1,885
- Telephone survey
- Length about 15 mins
- Interview neighbours of DMAS respondents
- No prior contact and phone numbers were about 15-16 months old
- Overall response rate: 64%
  - Noncontact rate 22% (wrong number, out of service, no incoming facility etc.)
  - Among the contacted respondents, response rate is 82%



#### DCVTS-2 sample looks fairly similar to the DMAS sample

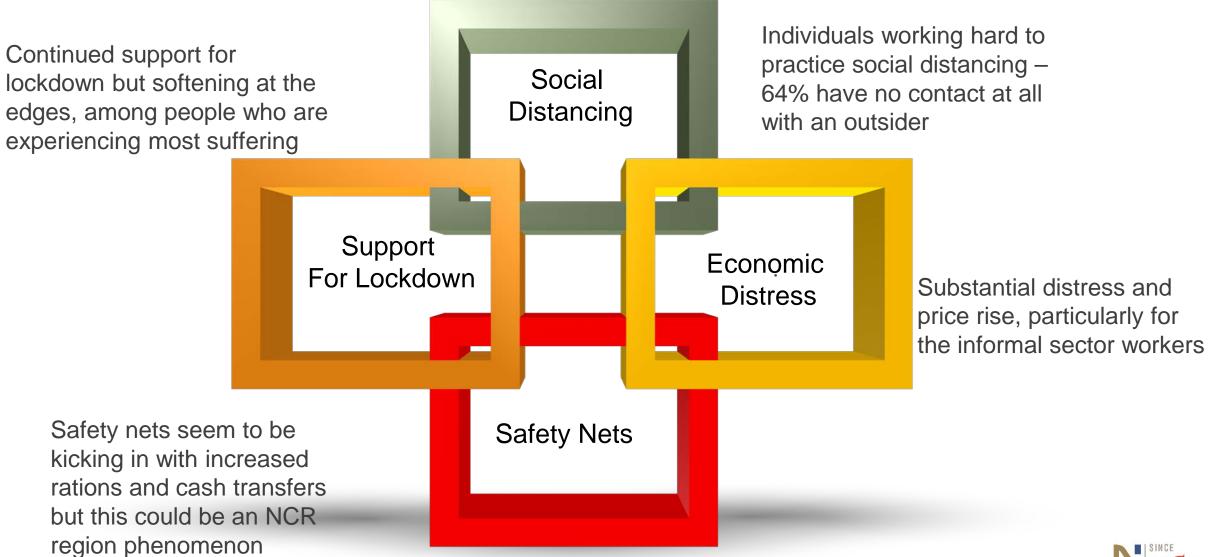
#### **Procedure:**

- NCAER has undertaken Delhi Metropolitan Area Study (DMAS) covering the whole NCR region with both urban and rural samples
- In order to select DMAS sample, a listing of the households living in each selected cluster (NSS urban block or census village) was carried out where basic household information was collected along with the phone numbers
- DCVTS-2 randomly selected 11 households from each selected DMAS cluster using the listing data as the sampling frame (after excluding DMAS sample)
- These households are very similar to the full DMAS sample as this table shows

	DCVTS-2	<b>DMAS Baseline</b>
% Urban	49.5	50.0
% Households with		
TV	79.8	78.0
Fridge	60.0	66.1
Motorcycle/Scooter	58.3	55.8
Gas	91.6	89.7
Toilet	91.6	87.0
Clock/Watch	89.5	88.6
Household Size	5.2	5.2
Draw any income from		
Farming	21.9	29.2
Business	20.4	28.9
Casual Wage Work or Salaried Work	68.2	68.6
% HHs with ration card	NA	74.1
Sample Size	1,885	5,253



## Key Results from DCVTS-2





### Social distancing seems to be more effective



Larger proportion of respondents in DCVTS-2 reported meeting no one outside the house compared to DCVTS-1

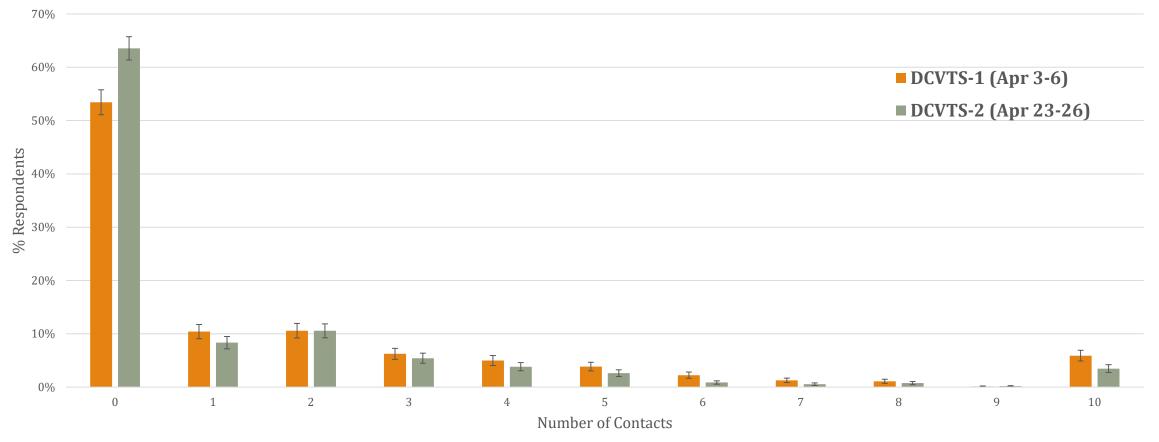
Moreover, even after lockdown ends, a substantial minority will continue practicing social distancing



## Social distancing strengthened: More people avoid contact with anyone at all

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Number of Contacts Outside the Home in Preceding 24 Hours





#### But a very small proportion has more than 10 contacts. What leads to this?

- Most people had higher social contacts due to their work
- Example among DCVTS-2 respondents
  - police, shop owner, persons associated with hospitals and clinics
- Higher number of contacts also occurred at some public places such as
  - kirana shop, market, mandi, PDS shop
- Very few respondents noted any other reason. This may be due to perceived social pressure.

*Q: Please think about the people you were in contact with yesterday from when you woke up in the morning till when you slept. A contact is defined as:* 

- a two-way conversation in the physical presence of another person or
- a physical presence of another person within 6 feet or
- direct contact (for example hand holding, sharing a motorcycle or bicycle ride, or holding a baby).

Besides the members residing in your house, how many people did you come contact with yesterday outside your house?

*Interviewer instruction:* 

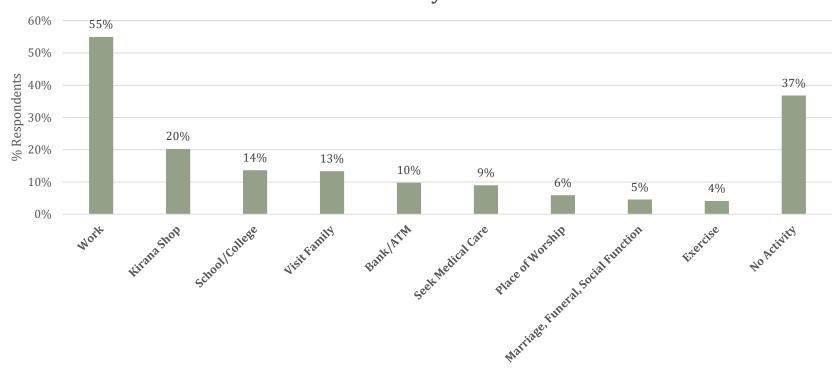
- Probe: Please think through your day from morning to night. Did you miss out any people you contacted yesterday outside your house?
- If no visitors came in contact, record [0].



# Activities respondent will resume immediately after the end of the lockdown

Most people want to return to work.

Interestingly, 37% of the respondents do not plan to resume any activity immediately if the lockdown is lifted on May 3.



#### Activities that will be resumed immediately if the lockdown is lifted in May 3

*Q: If the lockdown is lifted after 3rd May, what are the activities that you and members of your household would like to resume immediately?* 



## Tremendous impact of lockdown on livelihoods



Incomes have fallen sharply while prices have risen

Individuals living in red zone districts are most affected as are casual workers and households with businesses



#### Tremendous impact of lockdown on incomes

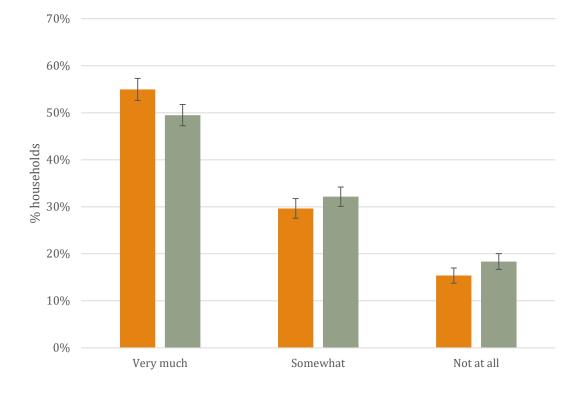
Individuals experiencing large income reduction most likely to ....

- Live in red districts vs. orange districts (54% vs. 43%)
- Be casual workers vs. salaried workers (72% vs. 41%)
- Urban vs. Rural (53% vs. 46%)

*Q: Did Coronavirus outbreak reduce the income or wages of your household in the last two weeks? Options: 1. Very much, 2. Somewhat, 3. Not at all* 



#### DCVTS-1 (Apr 3-6) DCVTS-2 (Apr 23-26)

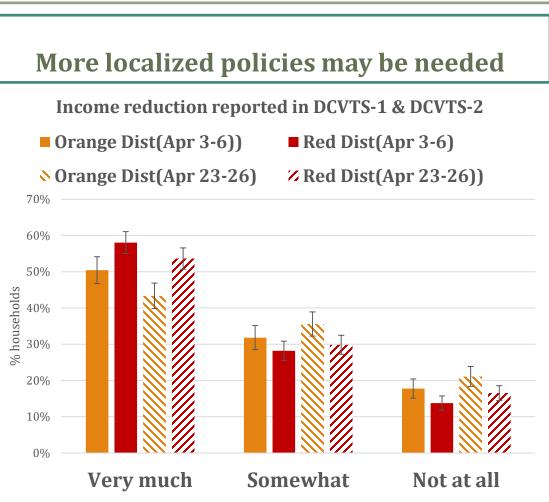




## Future focus will need to be on districts identified as red districts, with stricter movement control

Gap between red & orange districts has grown between two rounds

- Red districts have experienced far more stringent lockdown
- Movement in orange districts has slowly relaxed
- In DCVTS-1 people in red districts were about 8 percentage point more likely to report their income reduced "very much"; in DCVTS-2 the gap is 11 percentage points resulting in significant difference between experiences in red and orange zones.





## While supply shortages have improved, price increase is worrisome

Declining supply shortage between two rounds

- In DCVTS-1, 29% of the households reported shortages of essential commodities such as grains, vegetables, medicine or cooking fuel
- In DCVTS-2 this proportion had fallen to 9%

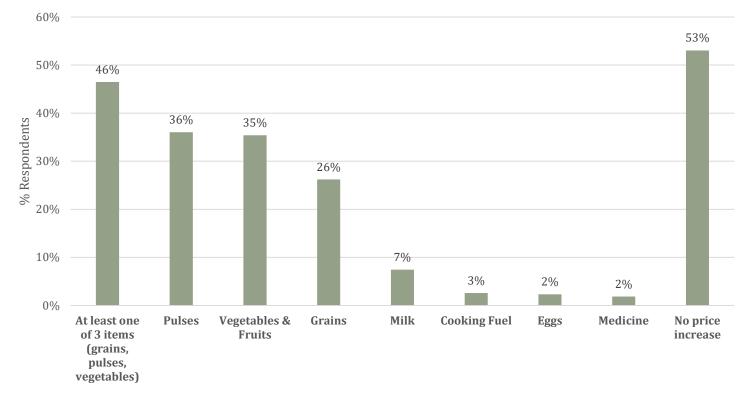
*Q:* In the last two weeks, did you or members of your household experience any increase in prices for the following items?

Interviewer instructions:

- Read out the responses one by one
- *Record all that applies*

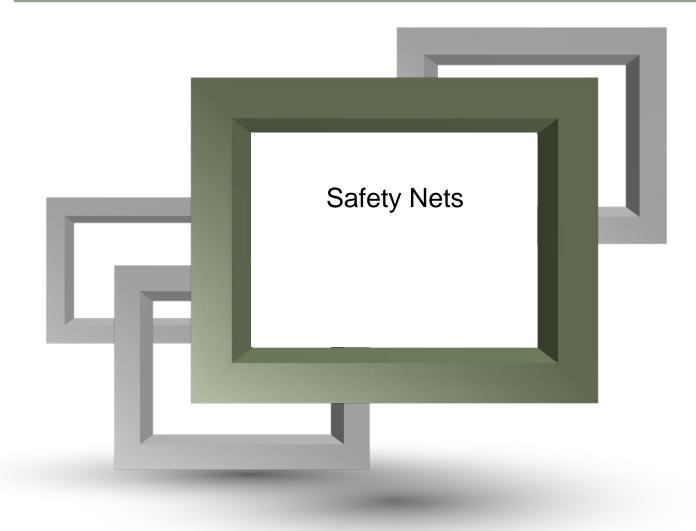
But people in Delhi NCR experienced substantial price increase during DCVTS-2 (Apr 23-26)

#### Commodities for which prices increased post lockdown





## Safety nets are beginning to kick in



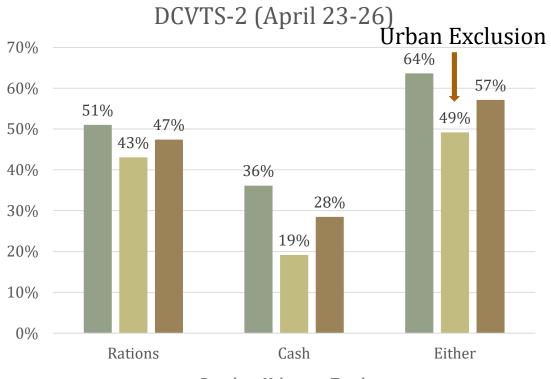
Substantial proportion of DCVTS-2 respondents reported receiving extra PDS rations or extra cash transfers

57% received at least one of the two benefits



## Safety nets are beginning to kick in

#### Received additional PDS ration or additional cash transfer



Rural Urban Total

#### **Social safety nets**

- A substantial proportion of households received additional rations or cash transfer in the last one month
  - These proportions are higher than observed in other parts of the country
- Percentage of households received both the benefits is only 19%
  - Stark rural (25%) and urban (12%) difference

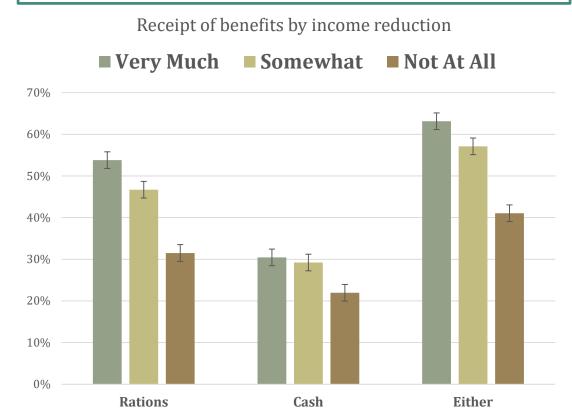
Q: In the last one month, have you received additional ration (grains and pulses) from the Government because of Coronavirus outbreak?

Q: In the last one month, did you or anyone else in your household receive additional cash in the bank account from the Government because of Coronavirus outbreak?



## Households that have experienced income loss seem to be receiving benefits

Receipt of additional PDS ration or cash transfer by level of income loss

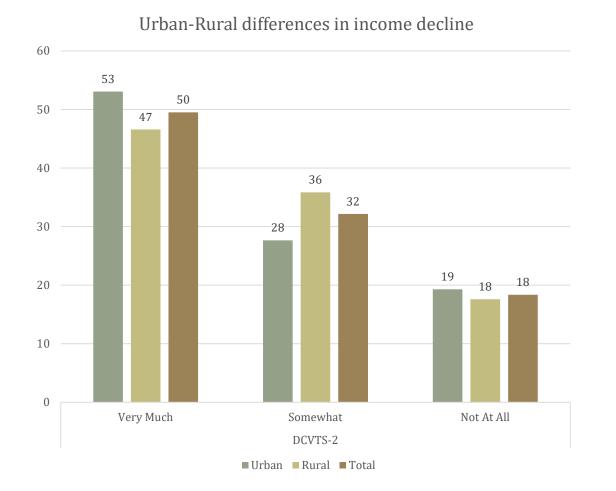


Households with income loss most likely to be recipients

- Households with income loss are most likely to be the ones receiving rations or cash benefits
  - This is basically an occupation story, to which we return later on
- However, cash benefits are relatively modest
- Median amount received is Rs. 753
  - Rural: Rs. 1000; Urban: Rs. 500
- Mean Rs. 1,310
  - Rural: Rs. 1,318 ; Urban: Rs. 1,293
- Urban exclusion is also worrisome



## Urban-rural differences in receipt of safety net does not commensurate with the economic impact



- Urban and rural differences in income decline and likelihood of disease spread do not match urban-rural differences in receipt of safety nets
- Receipt of extra rations
  - 51% rural, 43% urban
- Receipt of additional cash transfers
  - 36% rural, 19% urban
- Amount of additional cash received
  - Median rural Rs. 1000, urban Rs. 500
- Rural advantage may be due to past emphasis on direct benefit transfer (DBT) that were highly rural targeted (e.g., MGNREGA) or may be due to larger household size



### Support for lockdown remains strong



But it is softening at the edges

Part of this softening may be due to the perception of low or no risk of infection



### Support for lockdown continues to be strong

- Both surveys were conducted about 10 days before the end of the lockdown
- When asked about support for continuation of the lockdown for an additional two weeks, a vast majority of respondents are willing to support it if required

*Q: In order to limit the spread of the Coronavirus, if the lockdown phase is extended for another two weeks after 14<sup>th</sup> April/May 3, would you support that or oppose that?* 

- Response options:
- Strongly support
- Support
- Neutral
- Oppose
- Strongly oppose
- Cannot say now, depends on the situation



### There is continued support for the lockdown

#### 70% 63% 60% 60% 50% 40% 28% 30% 24% 20% 10% 6% 5% 3% 3% 2% 1% 1% 0% **Strongly Strongly oppose** Depends Support Neutral Oppose support

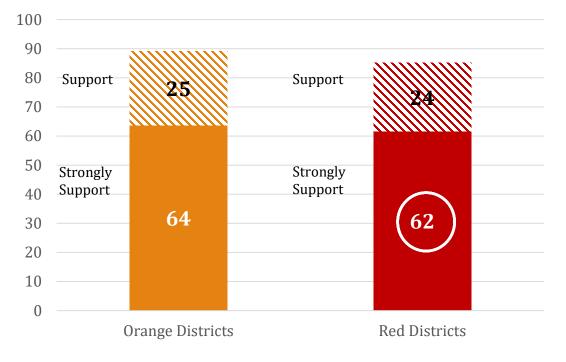
Support for continuing lockdown for additional 2 weeks in DCVTS-1 & DCVTS-2



Aggregate statistics mask declining strength of support in most affected areas (Red districts)

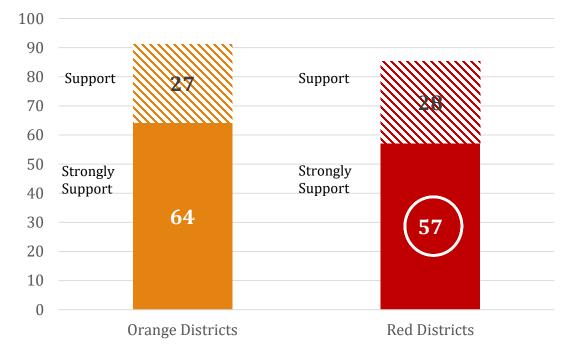
DCVTS-1

#### % expressing support for lockdown continuation



#### DCVTS-2

#### % expressing support for lockdown continuation

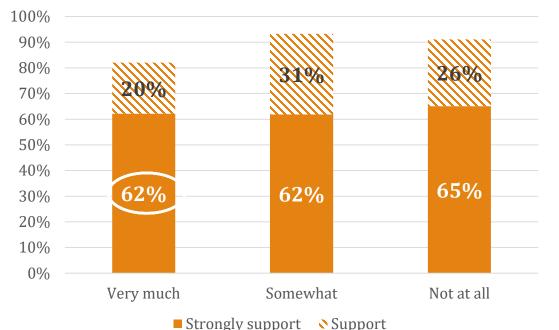




Not surprisingly individuals experiencing large income reductions are beginning to be less supportive of lockdown

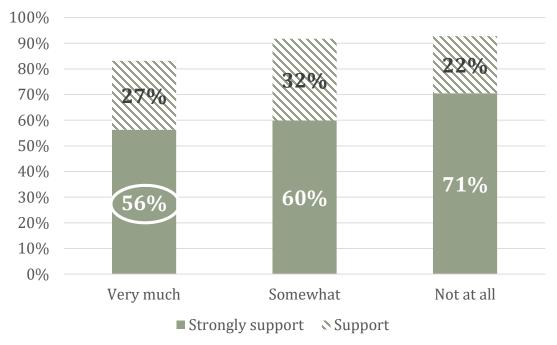
DCVTS-1 (3-6 April)

Level of support for continuing lockdown by extent of income decline



DCVTS-2 (23-26 April)

Level of support for continuing lockdown by extent of income decline

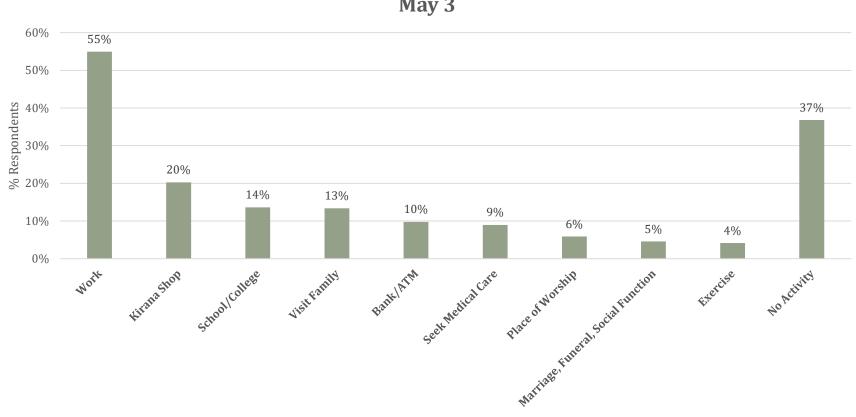




## Activities respondent will resume immediately if the lockdown is lifted after 3<sup>rd</sup> May

Among those who strongly supported extending lockdown: 43% will not resume usual activities immediately if the lockdown is lifted.

Those who did not strongly support the lockdown extension: the percentage is much lower (28%).









#### THE OCCUPATIONAL STORY



## Distribution of households with different sources of income in DCVTS-2

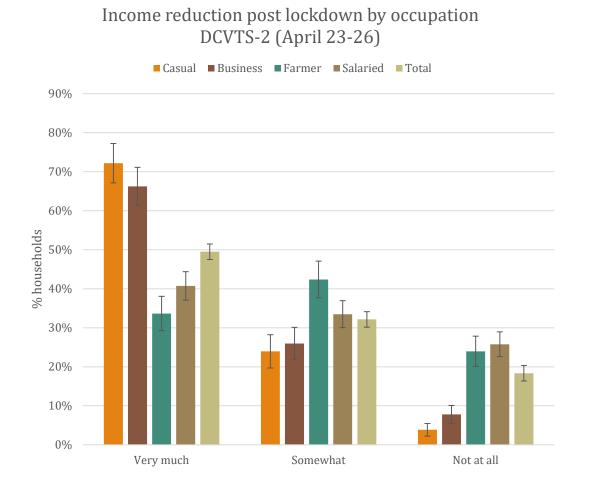
- Data on source of income were collected in two ways in the DCVTS-2 questionnaire
- Section 5a. Sources of income
  - Is your household engaged in cultivation?
  - Does your household have a business, however small or large?
  - Does anyone in your household have a regular salaried job?
  - Does anyone in your household work as a daily wage labour?
- Section 7. Socio-demographic and economic characteristics
  - What is the main source of income for your household?
- Distribution of households by main source of income

	<b>Casual labour</b>	Business	Cultivation	Salaried work	Other*	Total
Number of						
households	338	385	413	675	74	1,885
Pct	18%	20%	22%	36%	4%	100%

\*Rent, remittances, pension, other



#### Economic impacts of lockdown vary by occupation

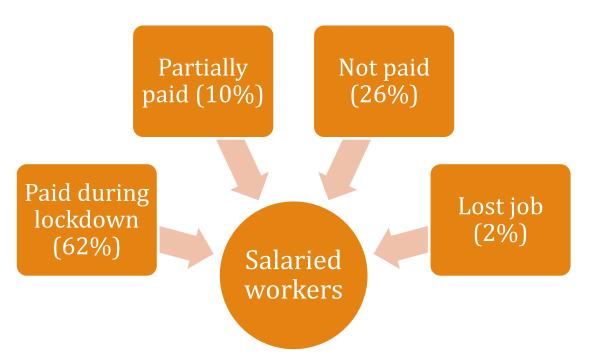


- Income declines depends on the kind of work individuals do
- Households whose primary source of income is casual labour, either in agriculture or in nonagricultural work, are the most likely to experience lack of work and income declines
- Owners of businesses are not far behind
- Similar trend was observed in DCVTS-1 as well



### Salaried workers are fairly heterogeneous

- Income loss may not be apparent for salaried workers in the middle of the month when DCVTS-2 was conducted
- So for salaried workers, we asked whether they received their March salary during the lockdown or not
- 62% of salaried workers reported receiving their full salary
  - Remaining 38% either did not receive any salary, received a partial salary, or lost their job during the lockdown
- Even among salaried workers, more than a third suffered some income loss





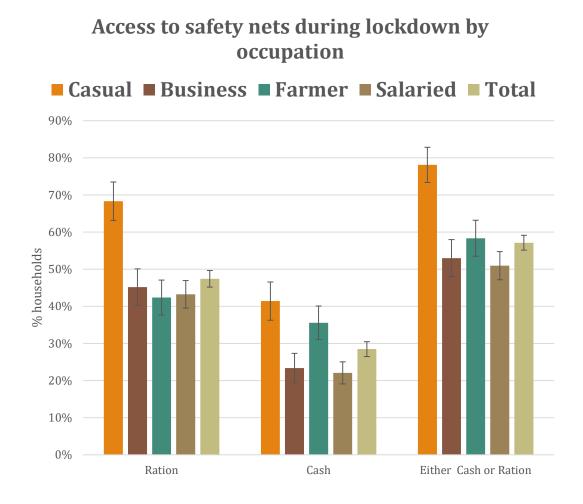
#### Farmers have been somewhat protected so far

- 30% of the cultivators face some difficulty in harvesting due to labour shortage during lockdown
- Transporting and selling crops has posed some challenges
- About 12% of the farm households reported some difficulty in getting the produce to the mandi
  - 11% had no problem
  - 77% had not yet tried

- There are exceptions in lockdown rules for farmers in allowing for greater mobility
- However, it is possible that the effect on farmers could be greater going forward, given that the lockdown and social distancing may make it difficult for farmers to sell and deliver their produce



## Access to safety nets is also shaped by occupations and place of residence



- Access to safety nets in an emergency depends on being part some safety net program in the past
- Casual labourers in rural area are often part of the schemes through which many safety net benefits are delivered
  - These are used during lockdown
- In Uttar Pradesh, MGNREGA card holders got access to PDS rations
- Direct cash transfer was made to Jan Dhan accounts
- Jan Dhan accounts used for MGNREGA payment in rural areas



### Casual workers are particularly at risk

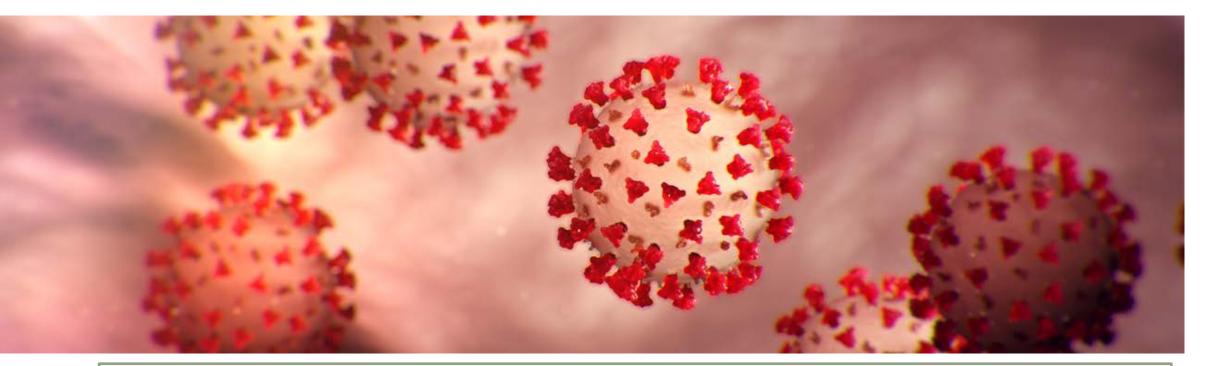
#### **Income reduction**

- 72% of casual workers reported that their income was affected very much in the last two weeks before the survey (DCVTS-2)
- Higher percentage of the casual workers will immediately return to work, if lockdown is lifted after 3<sup>rd</sup> May (63% vs. 55% of all)
- Relatively smaller percentage strongly supported the lockdown (48% vs. 60% of all)

#### **Receipt of safety nets**

- Households with casual wage work are most in need of relief
- Targeting such relief appears to be working
  - 68% received additional ration as compared to 47% of all households
  - 41% received additional cash (29% of all)
  - 32% (19% of all) received both form of benefits
- However, 30% of casual workers did not receive additional rations in spite of their need for it
- Continuing and enhancing these safety net measures will be necessary if the lockdown is to continue in some form or the other





#### PERCEPTION OF RISK



India's perceived success in flattening the curve may have dangerous side effects

Time to go from 1,000 to 28,000 cases

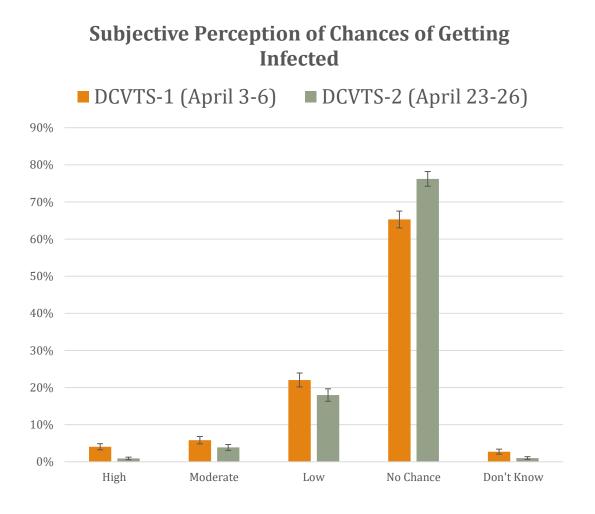
- Brazil 14 days
- Russia 19 days
- India 29 days
- In order to contain panic, there is a tendency to underestimate the virulence of the disease

Potential underestimation of risk

 As a result the proportion of individuals who perceive themselves at risk has gone down substantially



### Perception that respondents and their household members getting infected has gone down substantially



- As high as 76% of respondents see no chance that they or their families might get infected, up from 65% in early April
- There may be many causes of this drop, including more social distancing and the complacency brought about by not being infected so far
- There might be dangers associated with underestimating the risk

*Q: According to you, what is the chance that you and your household members will get infected with the Coronavirus?* 



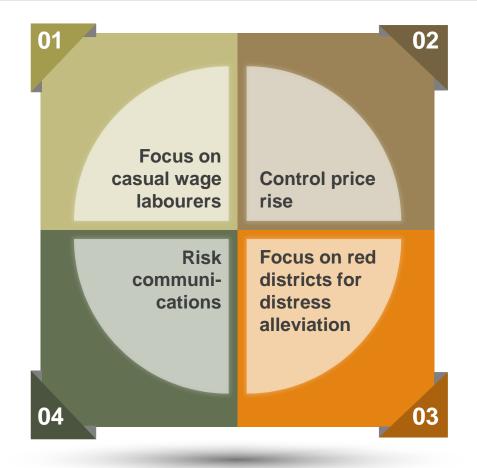
## Policy options going forward – regardless of whether full or targeted lockdown is continued

#### Livelihoods & Safety nets

Ensure access to safety nets & safe work opportunities via MGNREGA. Urban casual workers are at particular risk but excluded from MGNREGA. Encourage piecework based production from home (Masks? Protective equipment?)

#### **Clearly Communicate Risk**

Underestimating virus virulence is dangerous since it encourages individuals to ignore risks



### Improve supplies & enhance PDS

Time to use grains available with FCI and improve transportation to control price rise. PDS has a rural bias but disease and lockdown greater problem in urban areas.

#### **Localised Strategy**

Most policies are state level policies but movement control is local. Devise district and neighbourhood level policies for alleviating distress.



### About NCAER and NCAER NDIC

#### NCAER

Established in 1956, NCAER is India's oldest and largest independent, non-profit, economic policy research institute. NCAER's work cuts across many sectors, including growth, macro, trade, infrastructure, logistics, labour, urban, agriculture and rural development, human development, poverty, and consumers. The focus of NCAER's work is on generating and analysing empirical evidence to support and inform policy choices. It is also one of a handful of think tanks globally that combine rigorous analysis and policy outreach with deep data collection capabilities, especially for household surveys.

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#### **NCAER National Data Innovation Centre**

The NCAER National Data Innovation Centre was set up in December 2017 to promote innovation and excellence in data collection and build research capacity to strengthen the data ecosystem in India. The NDIC is envisaged as a hub for providing expertise to policymakers, government statistical agencies and private data collection agencies. NDIC is pursuing three primary goals: [1] To pilot innovative data collection methods and mainstream successful pilots into larger data collection efforts; [2] To impart formal and informal training to a new generation of data scientists; and [3] To serve as a resource for data stakeholders, including Government data agencies and ministries.

NDIC is experimenting with survey instruments and modes of data collection to address shortcomings in existing approaches. The DCVTS is an example of our rapidly building a quick response telephone survey on top of our existing Delhi Metropolitan Area Study, which is a panel study.



## Acknowledgements

- NCAER National Data Innovation Centre Team
  - Concept, study design, analysis and report: Sonalde Desai and Santanu Pramanik
  - **Questionnaire design:** Santanu Pramanik, Sonalde Desai, Ruchi Jain, Manjistha Banerji, Reem Ashraf, Pallavi Choudhuri, Debasis Barik, Neerad Deshmukh, Om Prakash Sharma, Abhinav Motheram
  - **Training and field management:** Dinesh Tiwari, Gurpreet Singh, Bijay Chouhan, Arpita Kayal, Sreejith Karunakaran
  - **Quality control and remote monitoring:** Santanu Pramanik, Dinesh Tiwari, Gurpreet Singh, Arpita Kayal, Jaya Koti, Deepa S., Sumiran Chandra, Sreejith Karunakaran, Neeraj Kumar
  - Preload preparation and data cleaning: Bijay Chouhan, Jaya Koti, Om Prakash Sharma, Dinesh Tiwari
  - **CATI programing:** Abhinav Motheram and Bijay Chouhan
  - NDIC field team
- NCAER Management: Shekhar Shah, Shashanka Bhide, Anil Sharma, G. C. Manna
- Advisors: Sekhar Bonu, Manju Rani, Suneeta Krishnan, Sanjeev Sridharan, Lalit Dandona, Supriya Kumar, Bornali Bhandari

