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#### Impacts of a National Lockdown on Smallholder Farmers' Income and Food Security: Empirical Evidence from Two States in India

Samiya Majid Virginia Commonwealth University

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Impacts of a national lockdown on smallholder farmers' income and food security: Empirical evidence from two states in India

Authors: Francisco Ceballos, Samyuktha Kannan, & Berber Kramer

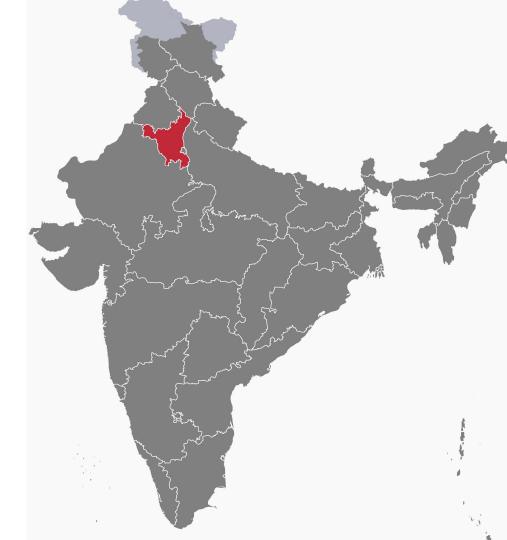
Presented by: Samiya Majid

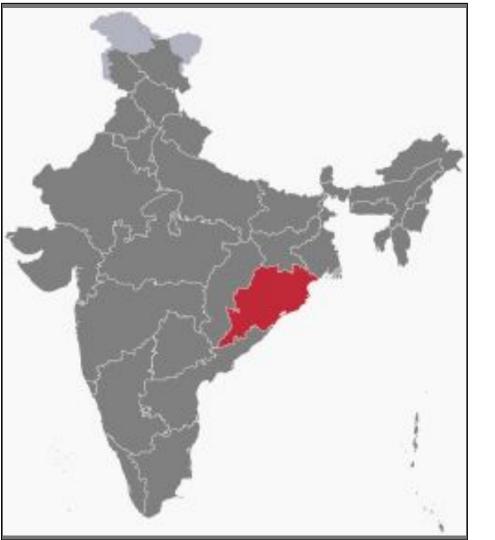
# **1**. Introduction

- → COVID's disproportionate effect on economies worldwide
- → >2/3s of the world's poor depend on agriculture
- → Effect of the COVID lockdown on farmers' livelihood: income, food security, etc.

### Haryana

- → Dominant winter crop is wheat and is harvested in the first three weeks of April
- → Reliance on machinery to get crop

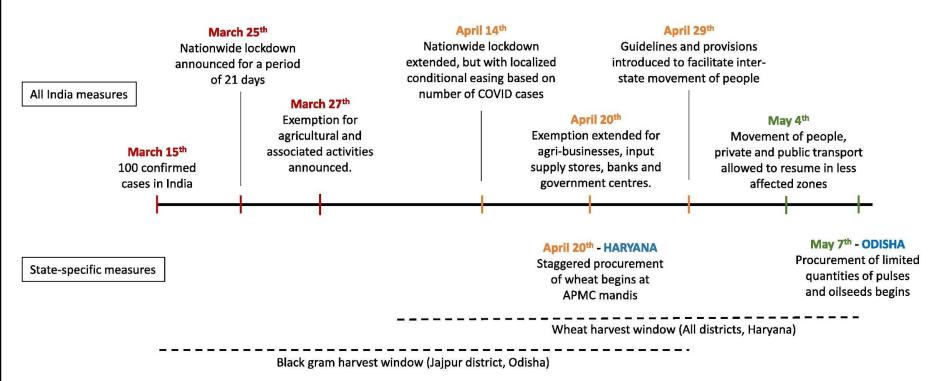




# Odisha

- → Winter crops include paddy, pulses, and oilseeds
- → Reliance on manual labor

# India's Response to COVID-19



# **Challenges for farmers**

- *Mandis* or market yards, where farmers sold majority of their crop remained closed
- Interstate movement of goods was delayed
- Local authorities interpreted the new policies in different ways

# Differing Local Policy

### Haryana

- → Divided up groups of farmers that could enter mandis so it was staggered
- → Efforts were made to reach all farmers
- → 61% of registered farmers were able to sell their produce through this method

### Odisha

- → Procurement of crops was announced much later than Haryana and much later than the harvest window
- → Limited to farmers who could register with agricultural organizations

# **The Study**

- → Primarily phone based, right after announcement of the lockdown and harvest season in both Haryana and Odisha
- → Covered 1515 farmers in the two Indian states
- → Phone surveys were complemented with interviews and review of policy

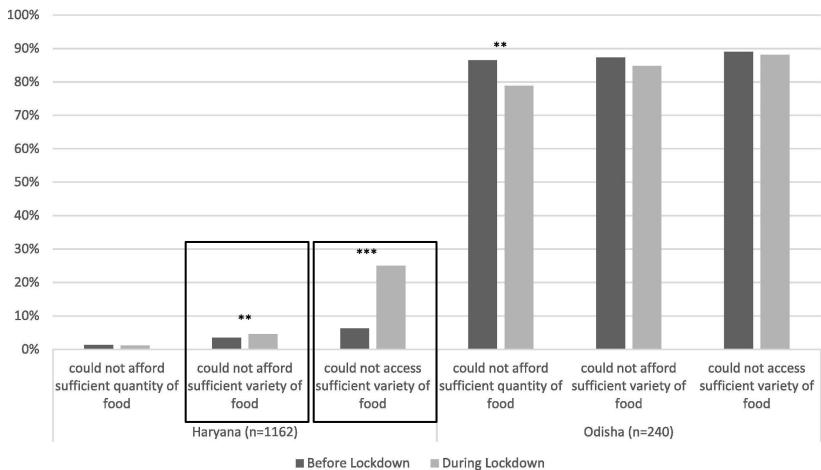
# The Survey

- Conducted in farmers primary language
- → 97% consent rate in Haryana and 100% consent rate in Odisha
- 1275 respondents from Haryana and
  240 respondents from Odisha
- Questioned about access to food during the lockdown and the month before the lockdown.

#### Results

Variable	Haryana (wheat)	Odisha (black gram)	
	(1)	(2)	
As a result of lockdown measures, farmer had to			
Harvest earlier than normal	11%	57%	**
Harvest later than normal	32%	35%	
Spend more on harvest	41%	80%	
Spend more on labor for harvest	25%	73%	**
Spend more on machinery for harvest	23%	38%	
Spend more on transport to the market	25%	52%	*
Store harvest to sell or consume in future	61%	74%	
If stored: Farmer lost or discarded harvest in storage	15%	n/a	
Sell the harvest for a lower price than what farmer would normally	0%	36%	***
get			
Borrow money to cope with agricultural losses due to this crisis	2%	14%	*
Farmer received notice of compensation from government	0%	4%	***
Total number of respondents	1275	240	

# Food Insecurity in Haryana vs Odisha





The study highlighted several considerations for aiding in economic recovery for farmers

# **Conclusions**

<u>Labor Supply:</u> labor supply was affected more in Odisha, where farmers didn't have access to mechanized alternatives. In regions with local labor shortages, wages could go up, affecting farmer incomes. In regions with labor excess, wages could go down, affecting labor incomes

<u>Market Access:</u> established public procurement system in Haryana protected wheat farmers during the lockdown

<u>Technology:</u> database of farmers in Haryana offered many positive possibilities during this pandemic

<u>Food Security:</u> policies would need to target areas with lower food production diversity and higher diversity differently

# Discussion

- → What are possible limitations of this study?
- → When navigating between strict COVID policy and ensuring food security in poorer areas, where should we draw the line?
- → How can the results of this study be implemented

CITATION

Ceballos, Francisco; Kannan, Samyuktha; and Kramer, Berber. 2020. Impacts of a national lockdown on smallholder farmers' income and food security: Empirical evidence from two states in India. World Development 136(December 2020): 105069. https://doi.org/10.1016/j.worlddev.2020.105069