A Spatial Analysis of the Indian Farmers’ Protest

Fateh March ~ Victory March

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Behind the Farmers' Protest

In September 2020, the Indian government passed 3 new agricultural laws (Navsharan, 2021):

1. Farmers’ **Produce Trade** and Commerce (Promotion and Facilitation)
2. Farmers Agreement on **Price Assurance** (Empowerment and Protection)
   a. Farm **Services** Act (the Contract Farming Act)
3. The Essential Commodities Act (Amendment: on **Food Hoarding**)
Motivation

- **The largest** protest in the world (Navsharan, 2021)
  - Over *250* million active protestors (Dhillon, 2021)
- Over *200* labor unions and political groups were involved (Navsharan, 2021)
- **Limited research**
Existing Work

1. Sentiment Analysis of Media
2. Union Involvement
3. Nature of the Protest
Gaps in Analysis?

- Actors Involved
- Nature of Protests
- Spatial Patterns
ACLED
The Armed Conflict Location & Event Data Project

- Over **6,000** unique protests reported between 2019-2021
- **17** variables: date, actors, source reporting it, and the nature of the protest
  - latitude/longitude
- **~200** actors involved

Did the level of violence in protests dependent on the agricultural population of that state?

**Analysis Methods**: Linear Regression, Moran's I Test for Spatial Pattern, Spatial Regression Models

**Results**: There is not evidence for spatial autocorrelation b/w protests(% violent) & agricultural population (%).

**Limitation**: High level of aggregation can understate effects!
Distribution of Actors Across India

Actor Name

- **AIKSCC**: All India Farmers' Struggle Coordination Committee
- **SKM**: United Farmers Front
- **VCK**: Viduthalai Chiruthaigal Katchi
- **BKU**: Bharatiya Kisan Union
- **INC**: Indian National Congress
Future Directions

1. Looking at point-level models instead of areal-level models
   a. Preserve the exact locations of events
2. Working on categorizing actors
   a. Spatial analysis of unions and political groups
3. Incorporate population into models