# Impact of Partition-induced Displacement on the Literacy Rates

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## Introduction

- Partition of India- One of the **largest** and most **rapid involuntary** migrations in history
- About 16.7 million people were forced to move out within a period of four years after the Partition.
- This paper will focus on the movement along the Western frontier that has been characterised as an exchange of population instead of a uni-directional flow of people.

## Map 1: Map of Punjab in 1947



Princely States

The Radcliffe Line
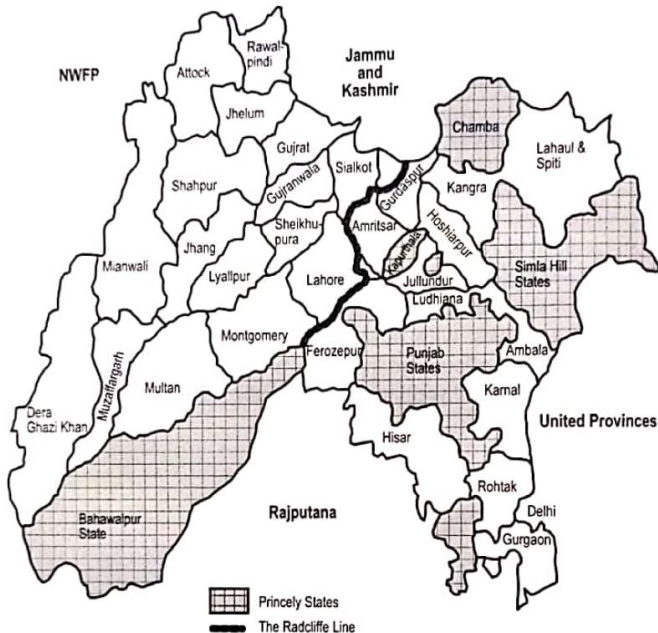
Courtesy Dr Pippa Virdee

## This paper

- Aim- Examine the short-term (1961-71) and long-term (1991-2011) effects of the influx of literate refugees on literacy rates in the receiving regions.
- Bharadwaj et al. (2009) highlighted that refugees, especially those from West Punjab, tended to have higher literacy levels compared to the native population in East Punjab
- Were refugees more literate than natives? ▸ Graph

# Literature Review

- Bharadwaj et al.(2008) analyzed the size and nature of migratory flows due to Partition. 3 effects namely **Distance effect, Replacement effect and Large cities effect** determined the Partition flows.

- Bharadwaj et al.(2009) showed that a one standard deviation increase in inflows during Partition raised **literacy rate** by approximately one percentage point in India.

- Bharadwaj & Mirza (2019) found a moderate but significant positive effect of Partition on **agricultural development**. Another study found a positive impact of partition migrants on **India's jute industry** (Bharadwaj, P., & Fenske, J 2012)

- Bhattacharya & Mukhopadhyay (2023) examined the impact of Partition flows on **social capital** and found that social capital is lower in districts that received more Partition migrants.

# Motivation and contribution

- United Nations estimates that more than 120 million people worldwide had been forcibly displaced due to wars, conflicts, and natural disasters (UNHCR, 2024)
- Role of skilled migrants in shaping the development trajectory of host regions.
- Persistence of historical shock
- Novel dataset- Constructed a village-level panel dataset from 1951-2011 (except 1981)

## Data

- Census, 1951 defined displaced persons as *"Any person who has entered India having left or been compelled to leave his home in Western Pakistan on or after the 1st March, 1947 or his home in Eastern Pakistan on or after the 15th October, 1946, on account of civil disturbances or the fear of such disturbances or on account of the setting up of the two Dominions of India and Pakistan."*

- Data source: District Census Handbooks (1951 onwards) ▸ Sample

- The study is at the village-level (rural tracts), hence data was digitised and then villages were mapped across years.

| Name 1951 | Area 1951 | Name 1961 | Area 1961 |
|-----------|-----------|-----------|-----------|
| Alwan Vasih 28 | 1.698 | Awan Basau 28 | 1.7 |
| Bhrio Wal Kukeza 165 | 1.503 | Bhilowal 165 | 1.5 |
| Patti 170 | 8.975 | Patti 171 | 8.98 |

# Descriptive Statistics

| Variables | Obs. | Mean | Std. Dev. |
|---|---|---|---|
| Literacy Rate | | | |
| 1951 | 9593 | 10.223 | 8.504 |
| 1961 | 9593 | 19.029 | 9.294 |
| 1971 | 8634 | 27.122 | 10.78 |
| 1991 | 9563 | 45.27 | 11.707 |
| 2001 | 9407 | 57.442 | 10.394 |
| 2011 | 9419 | 65.671 | 8.507 |
| Total population (1951) | 9593 | 790.576 | 772.448 |
| Total displaced | 9593 | 102.76 | 216.496 |
| Male displaced | 9593 | 55.064 | 114.225 |
| Female displaced | 9593 | 47.696 | 102.738 |
| Proportion of displaced | 9593 | 0.177 | 0.252 |
| Proportion of male displaced | 9593 | 0.178 | 0.253 |
| Proportion of female displaced | 9593 | 0.176 | 0.254 |

# Mean Literacy Rates (1951-2011)
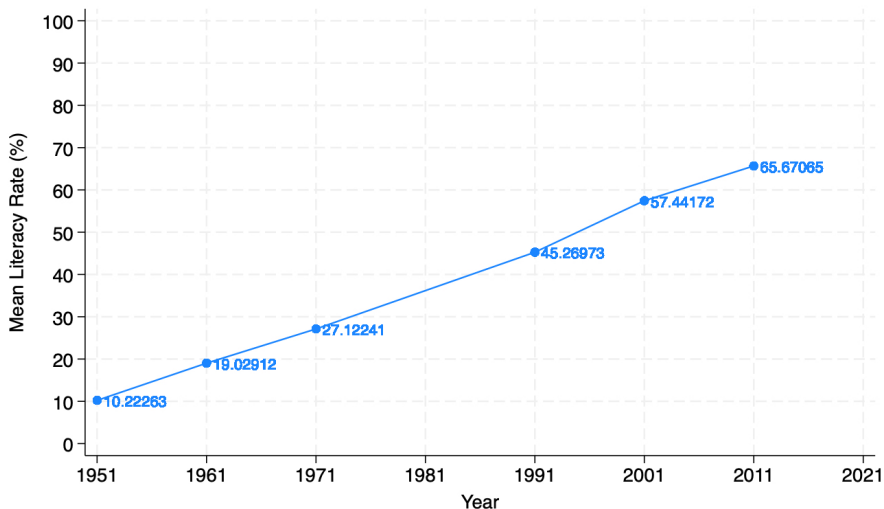
# Distribution of displaced persons

## Proportion of displaced to rural/urban areas
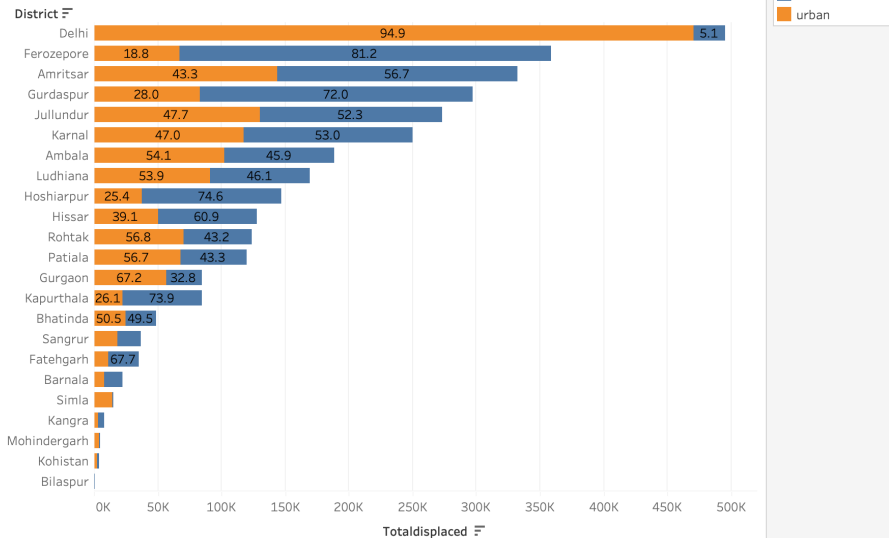
Distribution of displaced persons
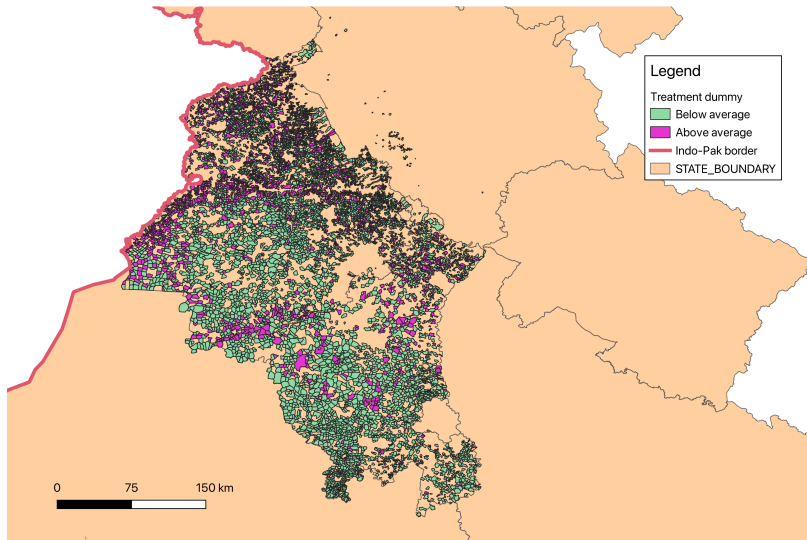
# Threats to identification

- **Selection at destination** : In rural areas of Punjab, the migration patterns were primarily dictated by the government's land allocation policies, which depended on the availability of evacuee land. For eg: Refugees from Lahore district were allocated to Amritsar & Ferozepore district, Gujrat & Jhelum to Ambala (Resettlement Manual) ▸ Allocation Rule  ▸ Graph

- **Endogeneity**: It is possible that some unobserved variable such as proportion of Muslims in a village before Partition influenced the number of displaced persons as well as literacy rates.
  Used **Instrumental Variable** framework to deal with potential endogeneity.

# Empirical Strategy-Instrumental Variable Estimation

- Instrument: Shortest distance from the centre of village i to the Indo-Pak border (Bharadwaj et al., 2008; Bharadwaj, P., & Fenske, J, 2012) ▸ First stage

- Baseline specification:

$$Lit_{ist} = \alpha + \beta D_{is,1951} + \gamma D_{is,1951} * Year_t + \delta_t + \phi_s + \lambda_{st} + \varepsilon_{ist} \quad (1)$$

- t = {1951,1961,1971,1991,2001,2011}

- $D_{is,1951}$ is defined as the number of displaced individuals in village $i$ sub-district $s$ divided by the total population in village $i$ in 1951.

- Standard errors are clustered at village level.

# Results

| VARIABLES | Literacy Rates (1951-2011) | |
| --- | --- | --- |
| | OLS | IV |
| | (1) | (2) |
| Displaced#1951 | 3.327*** | 17.421*** |
| | (0.439) | (2.720) |
| Displaced#1961 | 1.182*** | 24.779*** |
| | (0.415) | (2.959) |
| Displaced#1971 | 0.521 | 24.974*** |
| | (0.479) | (3.583) |
| Displaced#1991 | -0.224 | 3.038 |
| | (0.409) | (2.892) |
| Displaced#2001 | -1.775*** | -1.615 |
| | (0.380) | (2.545) |
| Displaced#2011 | -1.465*** | -2.962 |
| | (0.315) | (2.110) |
| | | |
| Observations | 54,848 | 53,844 |
| R-squared | 0.937 | 0.926 |
| Number of clusters | 9,593 | 9,368 |
| Year FE | YES | YES |
| Tehsil FE | | |
| District FE | YES | YES |
| Tehsil-Year FE | | |
| District-Year FE | YES | YES |
| SE clustered at village level | YES | YES |

Regression Estimates: OLS and IV
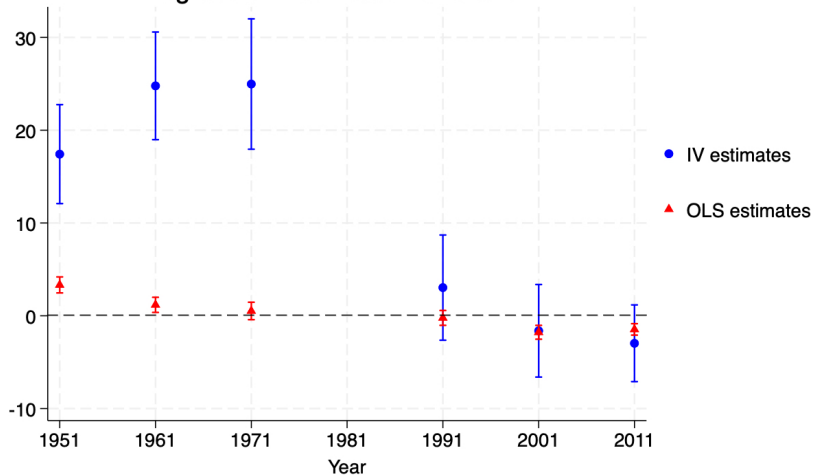
# Possible Mechanisms

- Lack of trust among natives and refugees
  - ➢ Individuals residing in districts that experienced more Partition displaced migration exhibit lower levels of social capital today. (Bhattacharya & Mukhopadhyay, 2023)
  - ➢ The relocatees disliked the label *saranarthi* (asking for refuge), a term commonly used by the natives, and called themselves *pursharthi* (one who believes in self help). (Saksena, 1961)
  - ➢ Rehabilitation of refugees has incurred local economic rivalry: Agree - 75.8% ; Disagree - 5.6%
- Remigration of displaced persons - They might have moved to other places following the disturbances in the 1980s. ▸ Graph

# Conclusion

- Areas experiencing a high influx of refugees may have benefited from refugee spillovers in the short run (1961). However, in the long run, these regions did not sustain the same positive outcomes.
- Way forward
  1. Include 1981 data enabling us to observe the transition of effects over time and identify potential inflection points.
  2. A field experiment to explore the channel of trust and social cohesion

Thank you!

# Comparison of literacy rates of natives and refugees

Literacy rates among refugees and natives (Rural areas)
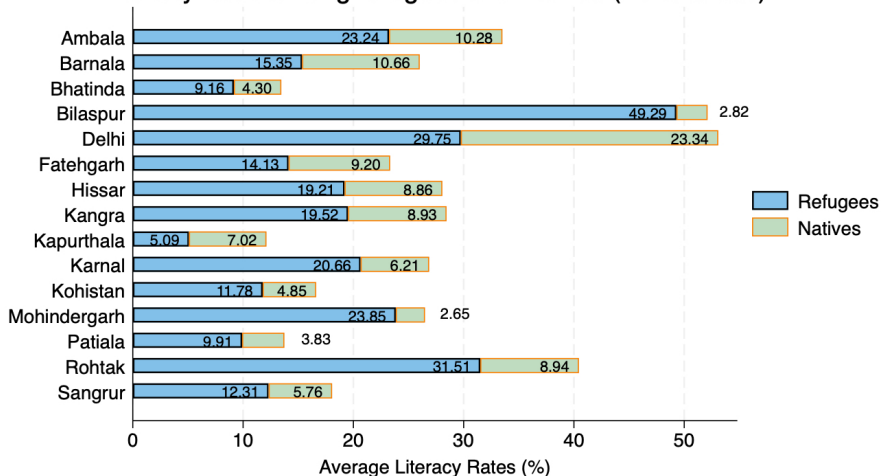
PRIMARY CENSUS ABSTRACT

Hissar Tahsil Rural Tract (Circle Hissar)

| S. No. | Name and number of Village or Town/Ward | Area of village or town in acres | Occupied Houses | | Total number of persons enumerated (including inmates of institutions & houseless persons) | | | Literates | | Agricultural Classes | | | |
| | | | No. of Houses | No. of Households | | | | | | I. Cultivators of land wholly or mainly owned and their dependants | | II. Cultivators of land wholly or mainly un-owned & their dependants | |
| | | | | | P | M | F | M | F | M | F | M | F |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 | Talwandi Badshahpur 1 | 5607 | 220 | 229 | 1137 | 619 | 518 | 35 | ... | 431 | 356 | 138 | 117 |
| 2 | Talwandi Rokka 2 | 4382 | 180 | 184 | 1021 | 484 | 537 | 135 | 43 | 260 | 279 | 117 | 118 |
| 3 | Saharwa 3 | 5563 | 230 | 253 | 1312 | 719 | 593 | 159 | 7 | 650 | 542 | 62 | 51 |
| 4 | Dobeta 4 | 2738 | 36 | 38 | 215 | 109 | 106 | 8 | ... | 102 | 94 | 4 | 9 |
| 5 | Bure 5 | 1739 | 151 | 151 | 885 | 472 | 413 | 151 | 4 | 14 | 9 | 436 | 386 |
| 6 | Badun-Brahmanan 6 | 1835 | 117 | 117 | 604 | 285 | 319 | 84 | 3 | 279 | 309 | ... | 1 |
| 7 | BadunRanghran 7 | 3053 | 73 | 75 | 453 | 231 | 222 | 28 | 5 | 122 | 103 | 95 | 106 |
| 8 | Bhaar 8 | 517 | 21 | 23 | 170 | 88 | 82 | 5 | ... | 88 | 82 | ... | ... |
| 9 | Harita 9 | 1317 | 137 | 138 | 761 | 407 | 354 | 49 | 44 | 386 | 329 | ... | ... |
| 10 | Daha 10 | 3101 | 135 | 138 | 752 | 406 | 346 | 26 | 2 | 323 | 277 | 32 | 38 |
| 11 | Chandnaud 11 | 1107 | 57 | 58 | 316 | 162 | 154 | 30 | ... | 101 | 89 | 47 | 47 |
| 12 | Pahal 12 | 1475 | 57 | 57 | 307 | 175 | 132 | 32 | ... | 65 | 50 | 101 | 80 |
| 13 | Rawat Khera 13 | 5287 | 181 | 189 | 960 | 505 | 455 | 69 | 6 | 167 | 135 | 307 | 297 |
| 14 | Chiraud 14 | 3018 | 133 | 134 | 715 | 383 | 332 | 98 | 5 | 332 | 292 | 13 | 13 |
| 15 | Kaluwas 15 | 3596 | 150 | 153 | 852 | 421 | 431 | 54 | ... | 381 | 393 | 22 | 18 |
| 16 | Takas 38 | 1413 | 77 | 81 | 406 | 197 | 209 | 2 | ... | 131 | 127 | 45 | 59 |
| 17 | Maklan 59 | 2410 | 152 | 155 | 793 | 400 | 393 | 9 | ... | 313 | 301 | 46 | 40 |
| 18 | Devi 60 | 1753 | 86 | 93 | 480 | 243 | 237 | 9 | ... | 199 | 191 | 14 | 14 |
| 19 | Guzar 61 | 659 | 47 | 47 | 231 | 118 | 113 | 7 | ... | 75 | 72 | 26 | 22 |
| 20 | Bhoj Raj 62 | 2312 | 88 | 94 | 532 | 290 | 242 | 15 | ... | 204 | 166 | 38 | 21 |

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| District/Tahsil of origin or description | Allocation for new allotments |
|---|---|
| Montgomery district : Non-colonists and West Punjab colonists. | Muktsar and Fazilka tahsils of Ferozepore district. |
| Multan district : | |
| Tahsil Multan .. .. .. | Hissar district. |
| Tahsils Khanewal and Kabirwala | Hissar tahsil. Tahsil Hansi, overflow to Tahsil Hissar. |
| Tahsil Mailsi and Vihari ' .. | Tahsil Fatehabad. |
| Tahsil Ladhran .. .. .. | Tahsil Bhiwani and Loharu area. |
| Tahsil Shujabad .. .. .. | Karnal district. |
| Jhang district : all tahsils .. .. | Tahsils Rohtak and Gohana of Rohtak district. |
| Muzaffargarh district : | |
| Tahsil Muzaffargarh .. .. | Tahsil Gurgaon of Gurgaon district. |
| Tahsil Alipur .. .. .. | Tahsil Sonepat of Rohtak district. |
| Tahsils Leiah and Kot Adu .. | Tahsil Jhajjar of Rohtak district. |
| Dera Ghazi Khan district.. .. | Tahsils Palwal, Ballabgarh and Ferozepore Jhirka of Gurgaon district. |
| Mianwali district .. .. | Tahsils Rewari and Nuh of Gurgaon district and Bawal district of Nabha State. |
| Rawalpindi, Jhelum and Gujrat | Ambala district. |
| Attock and Shahpur districts .. | Ludhiana district. |

# Distribution of displaced persons by district of origin
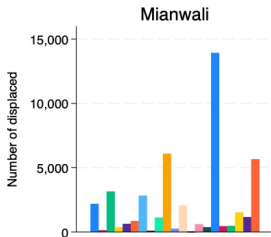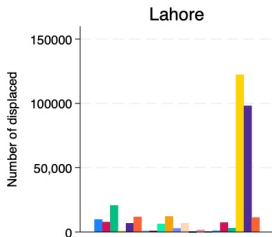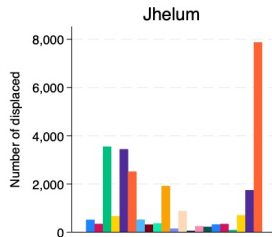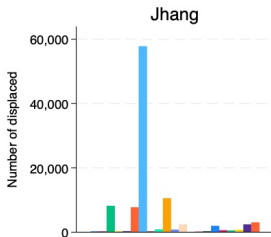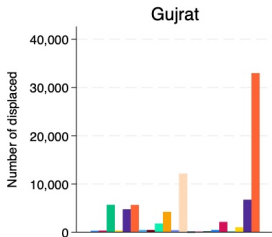
# First stage regression

| Dependent variable: Proportion of Displaced | |
|---|---|
| Distance to border | -8.24e-07*** |
| | (8.86e-09) |
| Year FE | YES |
| Tehsil-Year FE | YES |
| Observations | 56,208 |
| Number of groups | 9368 |

Table: First stage regression

# Population growth (1951-2011)