

Migratory Flows & the Partition of British India

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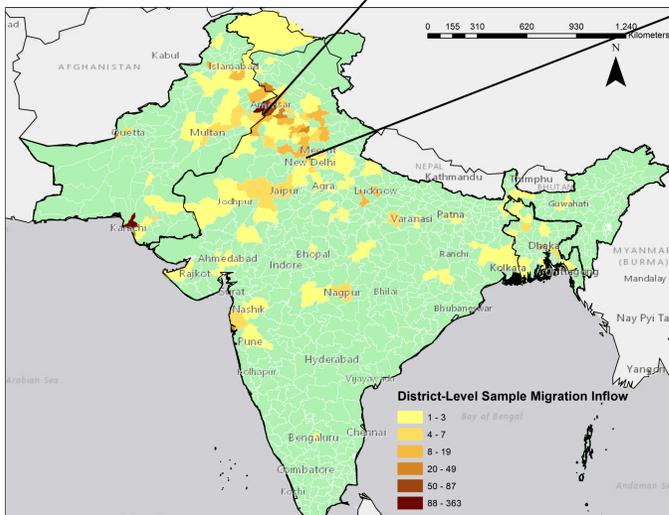
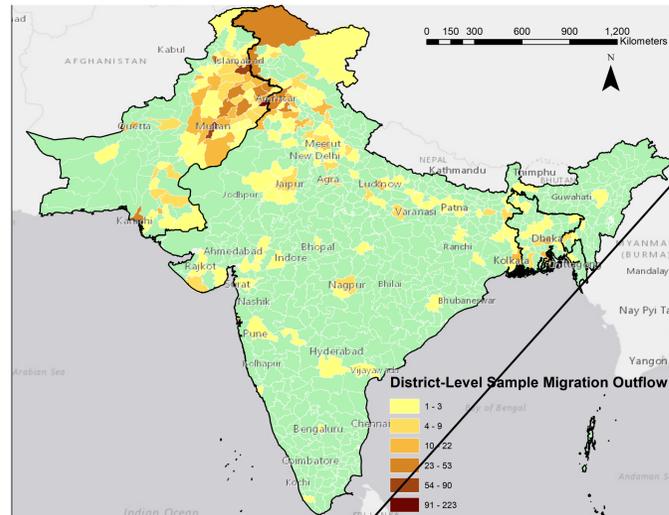
Introduction

Experiences of forced migration influence political and social contexts all over the world today. The Partition of India in 1947 precipitated one of the largest mass migrations in human history as millions of people crossed lines of division between the newly created states of Pakistan, East Pakistan (now Bangladesh), and India. One 2008 study of migratory inflows estimates an outflow of approximately 17.9 million people during this period of displacement in the subcontinent. Beyond this research, there is limited data available providing spatial or demographic analyses of migration after 1947. This is potentially because amidst the chaos following 1947, particularly in Punjab and Bengal, there is limited archival data detailing routes and means of migrations. In order to answer some of the questions raised by archival silences, the Lakshmi Mittal and Family South Asia Institute collected approximately 2023 oral histories from Pakistan, Bangladesh, and India describing experiences of navigating the period of migration after Partition.

The goal of this project was to illuminate information about migratory flows as described in the data sample collected by the LMFSAI. While this could potentially uncover interesting information about the routes and means of migration during Partition, this also offers an opportunity to interrogate whether the picture presented specifically by this data set accurately captures demographic data. This study focused particularly on migratory inflows and outflows on the district level and included an analysis of refugee camp distribution and rehabilitation resource accessibility for refugees identified as Poor to Lower Middle Class. Visualizing migratory inflows and outflows offers significant utility towards understanding the allocation of relief and rehabilitation facilities. Of particular interest to this study would be how socioeconomic status alters migration means, routes, and experiences. Demographic analysis of the data sample will also provide insight towards how the experiences of religious and ethnic minorities, as well as lower caste-class groups are reflected in the present literature.

Migratory Inflows and Outflows

as reflected in the data sample

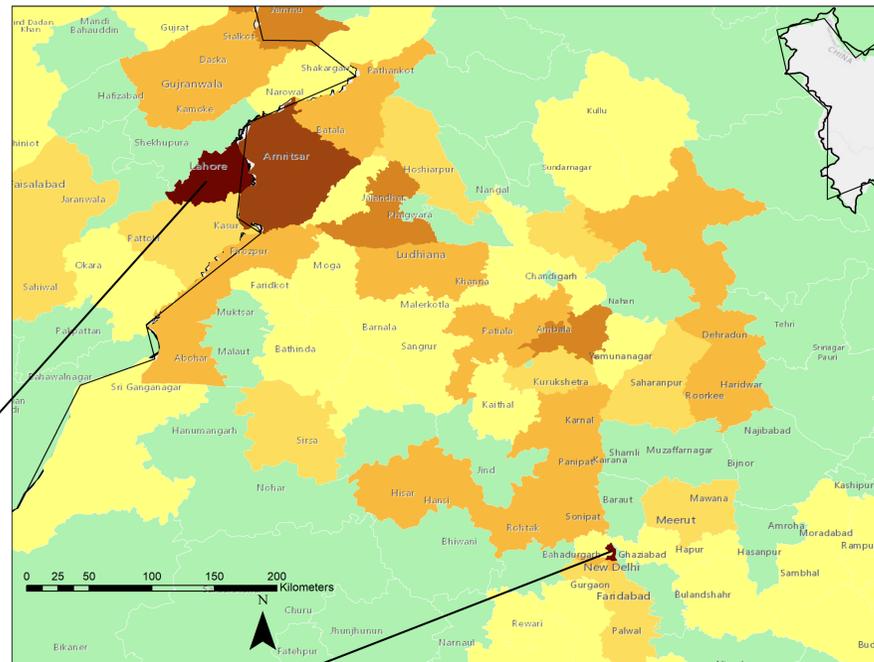


Methods

The biggest challenge in this project was actually working with the dataset and making the contents legible to ArcMap. In order to find points of departure and arrival, I input latitude and longitude for each site in a datafile for each interviewee. These points were then geocoded into ArcMap, then spatially joined at the district level in India, Pakistan, and Bangladesh (East Pakistan in 1947). Refugee camp site data was similarly geocoded into a point vector layer. In order to create the migration inflow specifically for Delhi, the XY to Line tool was used. The Kernel Density tool was then used to visualize the concentration of refugee camps as it related to refugees who would likely be in need of rehabilitation facilities or resources. To identify which refugees would be in need, an attribute join was conducted to align refugees' socioeconomic status after Partition to their points of departure and destination. Socioeconomic data as described in the sample was given a numeric value to assess vulnerability using the Field Calculator. Global & Local Moran's I analyses were also conducted in ArcMap in order to assess whether there was a spatial correlation between refugee migration destination and socioeconomic status after Partition.

Regional Distribution

Lahore and Delhi



Discussion & Conclusion

While there are many studies researching the political, social, and cultural implications of mass migration in the period following Partition, there are few spatial and demographic analyses. Filling this gap is particularly difficult given the archival loss that accompanied the chaos of approximately 17.9 million people leaving their homes. The primary goal of this study was to analyze a specific dataset collected from interviews with Partition survivors, tracing migration means, routes, and demographic information. Spatial analysis of migration outflows and inflows identified regional concentrations in the regions of Punjab (especially the districts of Lahore and Amritsar) and in the district of Delhi. The migration inflow also demonstrates a tendency towards urban centers like Lahore and Delhi. However, without district-level population data from 1947 to 1951, such assertions are difficult to evidence.

Two maps were created after identifying the regional concentration between Lahore and Delhi. The first traced the sample's migratory inflow directly to Delhi, further demonstrating a concentration of migration in Punjab. The second map built from an understanding that migrants of lower socioeconomic status after migration likely required more rehabilitation resources and facilities from refugee camps. Thus, the distribution of refugees of lower socioeconomic status was mapped alongside the concentration of refugee camp sites in order to visualize potential spatial correlation. The results of a Global Moran's I analysis, however, demonstrated that there is little correlation between socioeconomic status and migration destination. A High-Low Clustering analysis furthered this notion by demonstrating limited clustering between neighbors of high socioeconomic status and low socioeconomic status after Partition. Again, however, these spatial analyses were not normalized with district-level population data, which could have definitely affected the results.

This study also sought to analyze the demographics of the sample in question. Specifically, the variables of socioeconomic status, gender, whether or not interviewees migrated, and educational attainment were measured. Notably, the sample includes substantially more migrants of Middle Class to Wealthy status than Poor to Lower Middle Class Status. Ultimately, this skew affects the utility of this data sample in conceptualizing the broader implications of mass displacement after Partition. Future directions potentially include accessing census data in order to execute more accurate spatial analyses by normalizing the data.

Limitations

It is critical to situate that this study strictly analyzes data collected by the LMFSAI, and the demographic evidence actually suggests that the sample does not accurately reflect the composition of the population affected by the Partition of British India (e.g. only 1.9% of the sample was identified as "Poor" before Partition). Migratory inflows and outflows were calculated at the district levels in India, Pakistan, and Bangladesh, but these districts were based on present-day regional borders. These vector polygons do not entirely adhere to the lines of divisions between countries and districts in 1947. Similarly, census population data between 1945 and 1951 (the main period of migration) at the district-level was not readily available for all three countries. Thus, spatial analyses could not be normalized over the district population. Additionally, all spatial analyses were conducted from geocoded data, which may have been incorrectly located by ArcMap.

Sample & Spatial Analysis

Sample Demographics

Educational Attainment among Sample Migrants



	Poor	Lower Middle Class	Middle Class	Upper Middle Class	Wealthy
Before Partition	37	299	935	500	135
After Partition	188	521	746	255	65

Spatial Autocorrelation

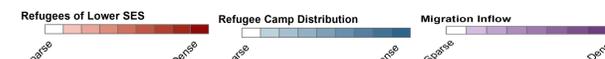
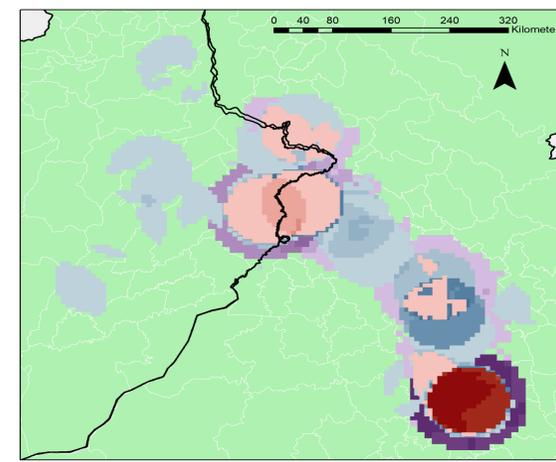
Global Moran's I: Moran's Index: 0.034604
 High-Low Clustering: z-score: 0.79388

References & Data Sources

Projection: WGS 1984 UTM Zone 43N

Data Sources: Looking Back, Informing the Future: The 1947 Partition of British India, *Implications of Mass Dislocations Across Geographies*. Working dataset from the Lakshmi Mittal and Family South Asia Institute, Harvard University. Tufts M Drive.

Refugee Camp Distribution in Punjab



Sample Inflow to Delhi

