Migration from African nations like Senegal across the Sahara and Mediterranean and into European nations like Italy increased massively since the beginning of the 20th century. Though many of the migrants eventually move on to other places, many remain in Italy. Little research has been conducted on where they end up within the country or why they end up in certain places over others, though the Italian government does keep track of its immigrant population by country of origin and municipality. By visualizing the settlement of these foreigners, especially in relation to the general foreign population and the total population, it may be possible to isolate some certain areas in Italy that are uniquely attractive to Senegalese immigrants.

Methods

Using data sourced from ISTAT, Italy’s official census and statistical bureau, figures for the population of Senegalese residents, total foreign residents, and total population were mapped according to the spatial unit of municipality, known as a comune in Italian. The absolute numbers of Senegalese and total foreign residents were displayed by comune, as were the percentages of Senegalese out of the foreign population and out of the total population, in order to see if there were places where Senegalese residents were higher concentrated than foreign residents in general. Finally, the numbers of Senegalese, foreigners, and total population were run through a local Moran’s I spatial autocorrelation in order to see where Senegalese were more highly concentrated in comparison to the general foreign and total populations.

Spatial Autocorrelation: Local Moran’s I

Analyzing and comparing the maps reveal some interesting results about the distribution of Senegalese and other foreigners in Italy. First, foreigners are generally more concentrated in larger cities while Senegalese residents are more distributed, particularly in the North. Senegalese residents make up high numbers and percentages in the population in some surprising areas, especially in smaller cities in Tuscany, Romagna, Sardinia, and Lombardy. The Moran’s I autocorrelations show that the areas with high clustering of the total population are not always the same as those of the foreign population, which is a very interesting find. But most importantly for the purposes of this project, it is clear that Senegalese residents are most highly clustered in the regions of Lombardy, Emilia-Romagna, and Tuscany, the regions which correspond with the highest average incomes in Italy, even more so than the foreign population on the whole.

Introduction

Limitations and Conclusions

The most important limitation faced during this project was that of limited data. Although ISTAT monitors its migrant population by comune and country of origin, it does not make public other useful data at that spatial unit, such as average household income, or employment rates, which would be useful in answering the “why” questions rather than just the “where”. Furthermore, in several instances data errors were clearly present, with some municipalities marked as having fewer total foreigners than Senegalese residents in the same year, which resulted in blank spaces on the map (including an entire province in the Northeast of the country).

Despite these limitations, however, some interesting conclusions can be taken from the analysis conducted in this project. For one thing, Senegalese residency patterns do not follow general foreign residency patterns, suggesting that there may be some other factor governing where they settle in Italy. Furthermore, they often settle in high percentages in smaller cities or suburbs of larger cities, which may influence their integration into their host communities. Further research and data collection ought to be undertaken on this issue, not just for Senegalese communities but for all nationalities settling in Europe, and for other receiving nations in the EU.

Coordinate System: WGS 1984 UTM Zone 32N Transverse Mercator
Data Source: ISTAT 2017
Other Mapping Resources: ESRI DataMaps 10 and GIS for Shapefiles and Labels
Scholarly Resources: