



# What exactly correlates with crime rate in India?

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# Motivation

- With the increase in technology and independence, crime rate is increasing monotonically.
- What social factors might be causing it?
- Can we gullibly try some first came thoughts about the factors?
- What about the crime rate against women in our country?
- Can we find some factor which correlates with the crime rate of that region?

# Data Source

- A digital India Initiative by Indian government, <https://data.gov.in>

# Software used

- Tableau

# Approach

- A very naïve approach has been followed by considering each of the 29 states and 7 Union Territories as uniform regions.
- Anyone's first thought would be "relation to poverty".
- I thought about looking into other aspects first and will finally go to poverty data eventually.
- First, looking into the crime rates and convicts jailed in each of the regions, we get some insight.
- Then, I classified the crimes against women in each region according to the type of attack.

# Crime vs What?

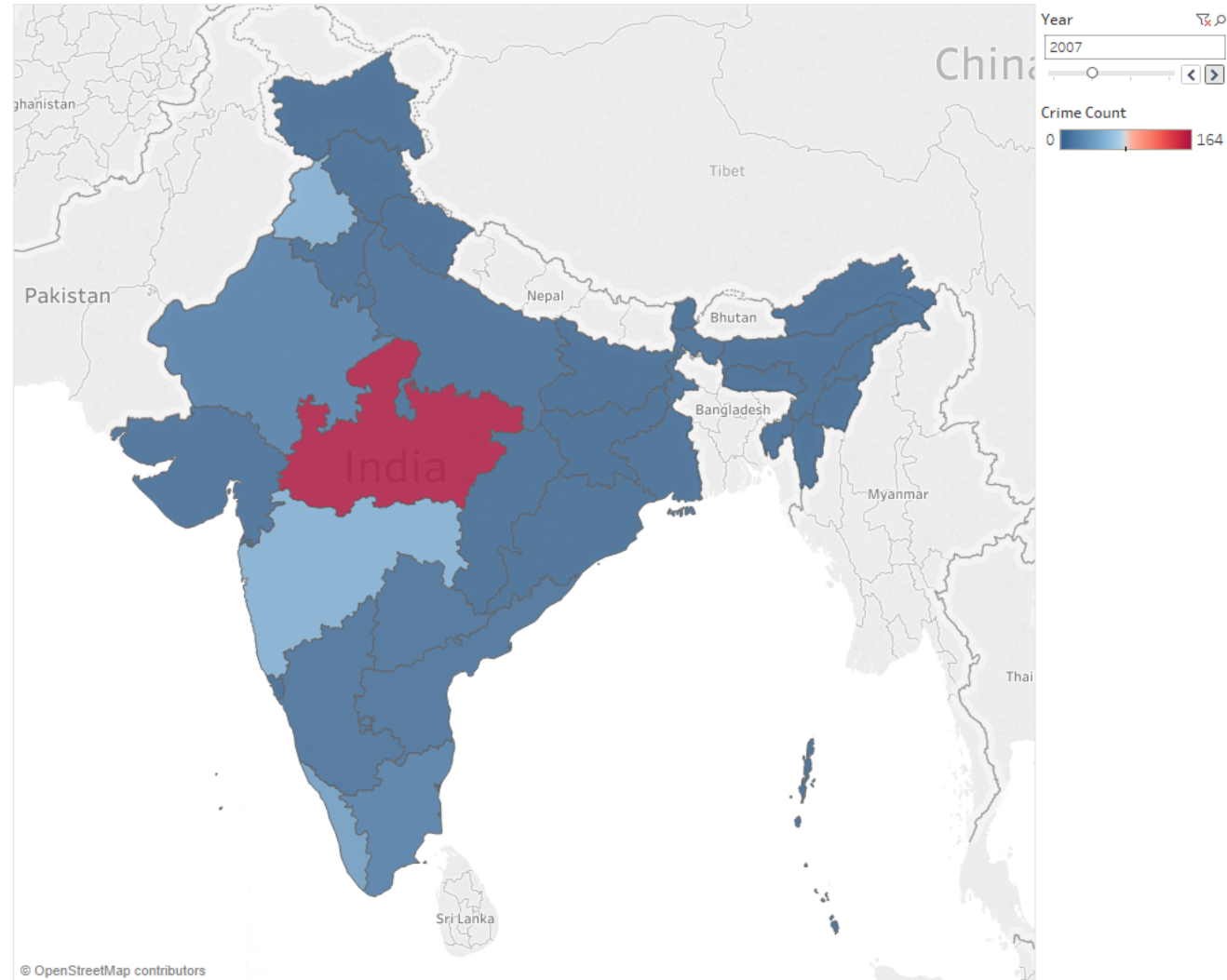
1. Total Crime Count/Number of convicts
2. Crime Against Women
3. Categories of Crime and Total Count
4. Population Density and Percentage of Population
5. Total Enrolment in Educational Institutions
6. Female Enrolments in India
7. Total Literacy Rate
8. Female Literacy Rate
9. Poverty

# 1. Crime Rate in India

Data from 2007, 2011 and 2012 has been collected.

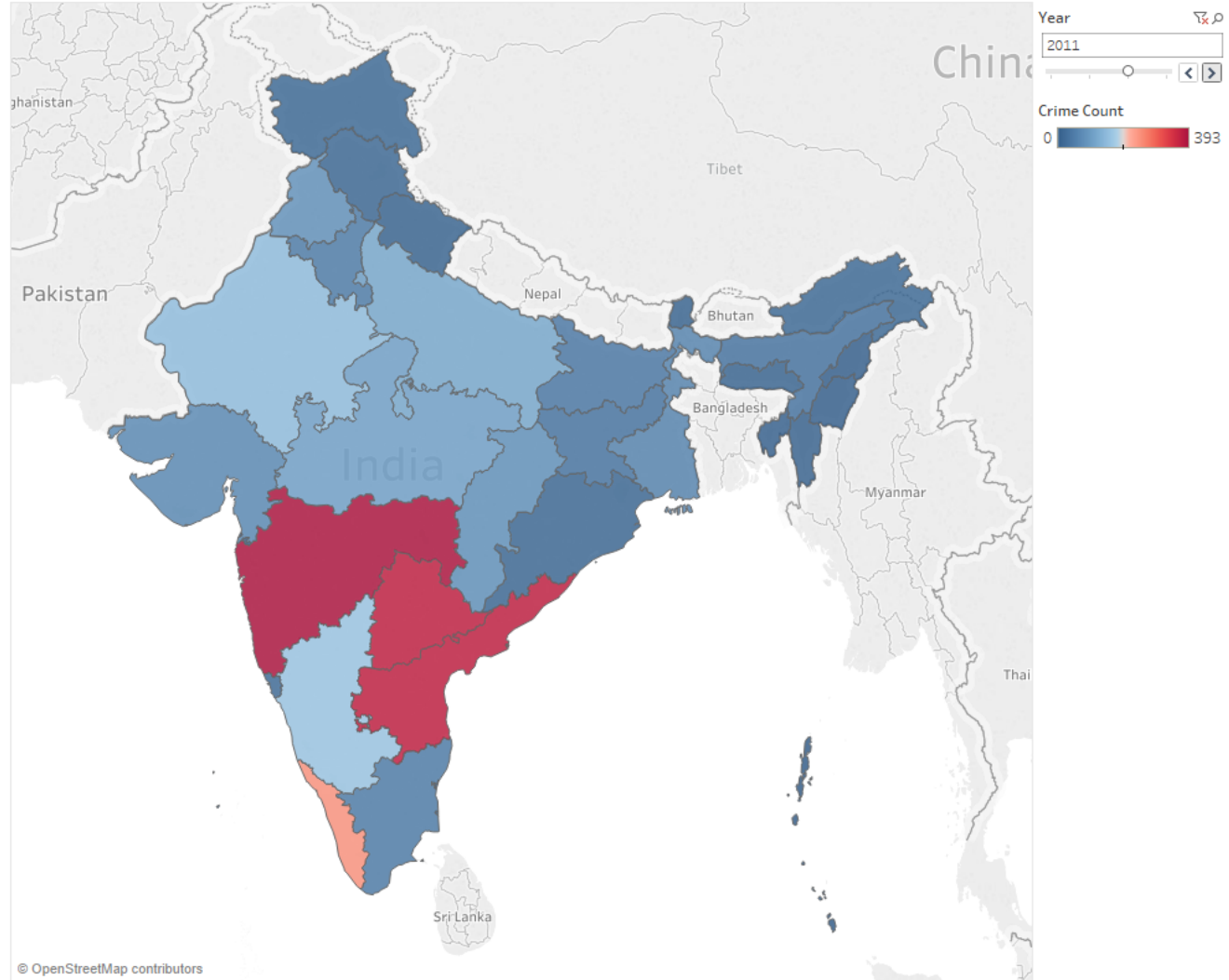
# Crime and Poverty?

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# Crime and Poverty?

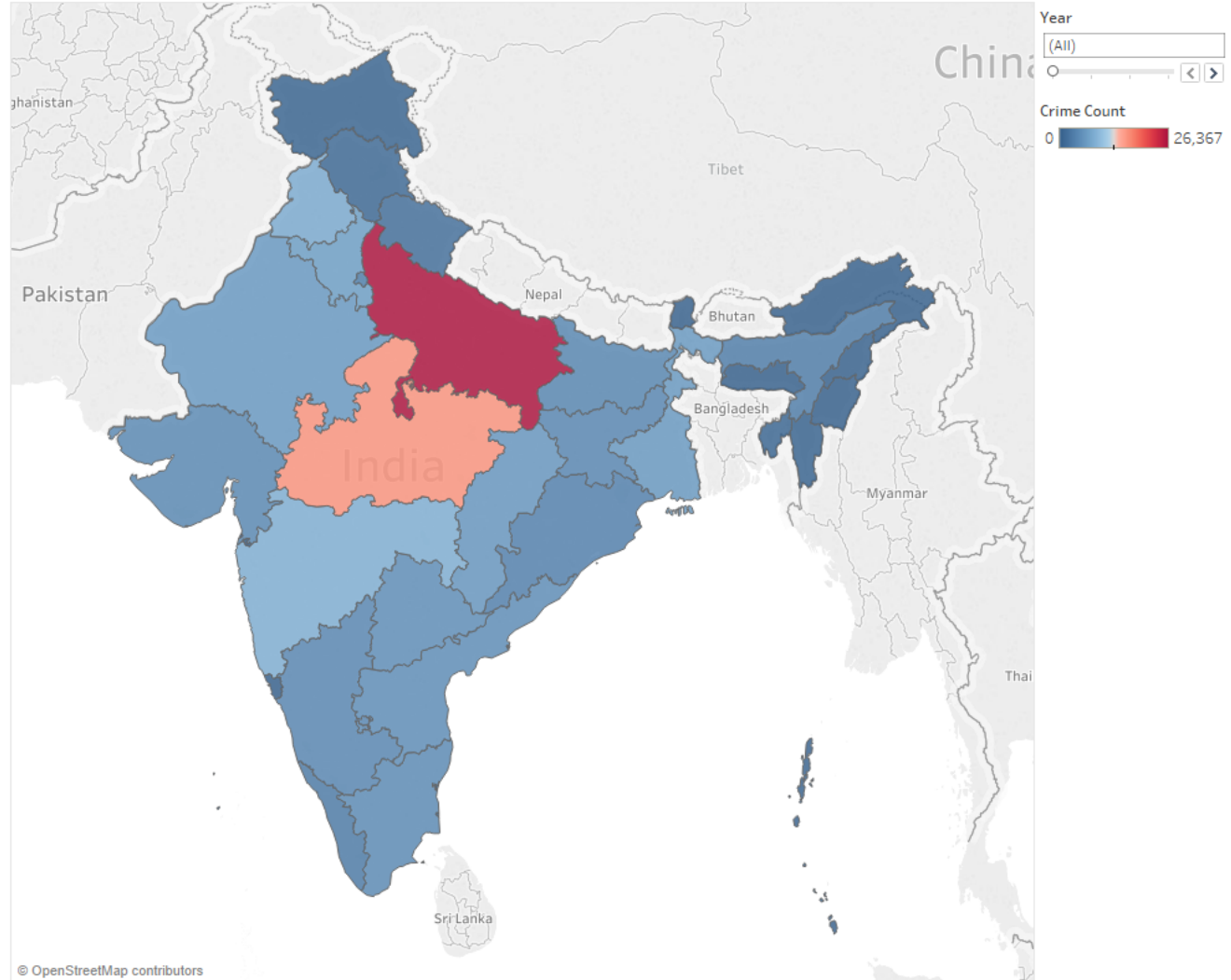
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# Crime and Poverty?

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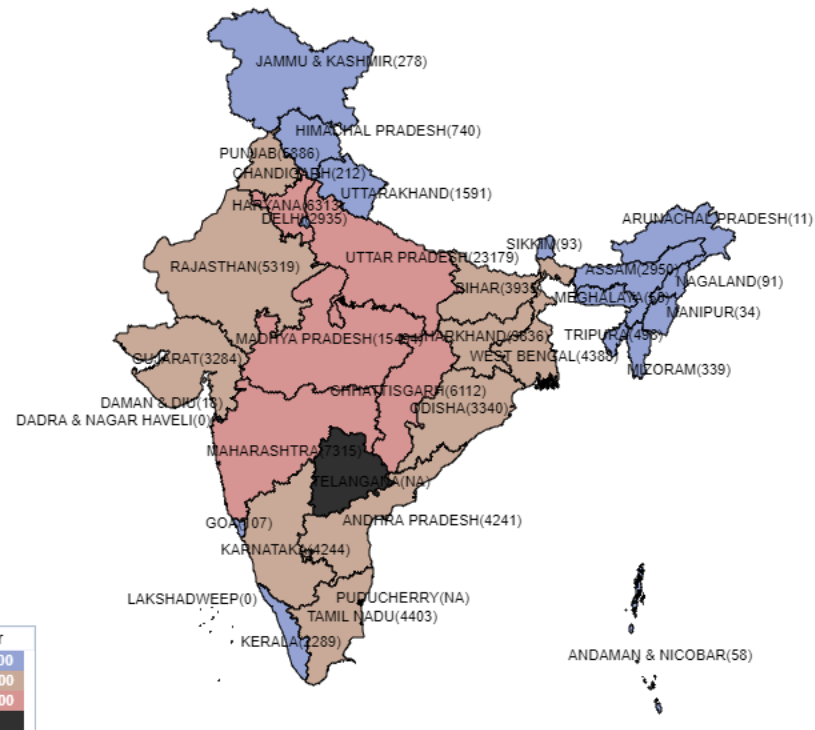
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# Crime and Poverty?



View in Visualization Tool »

Number of Convicts under total IPC Crime in 2013



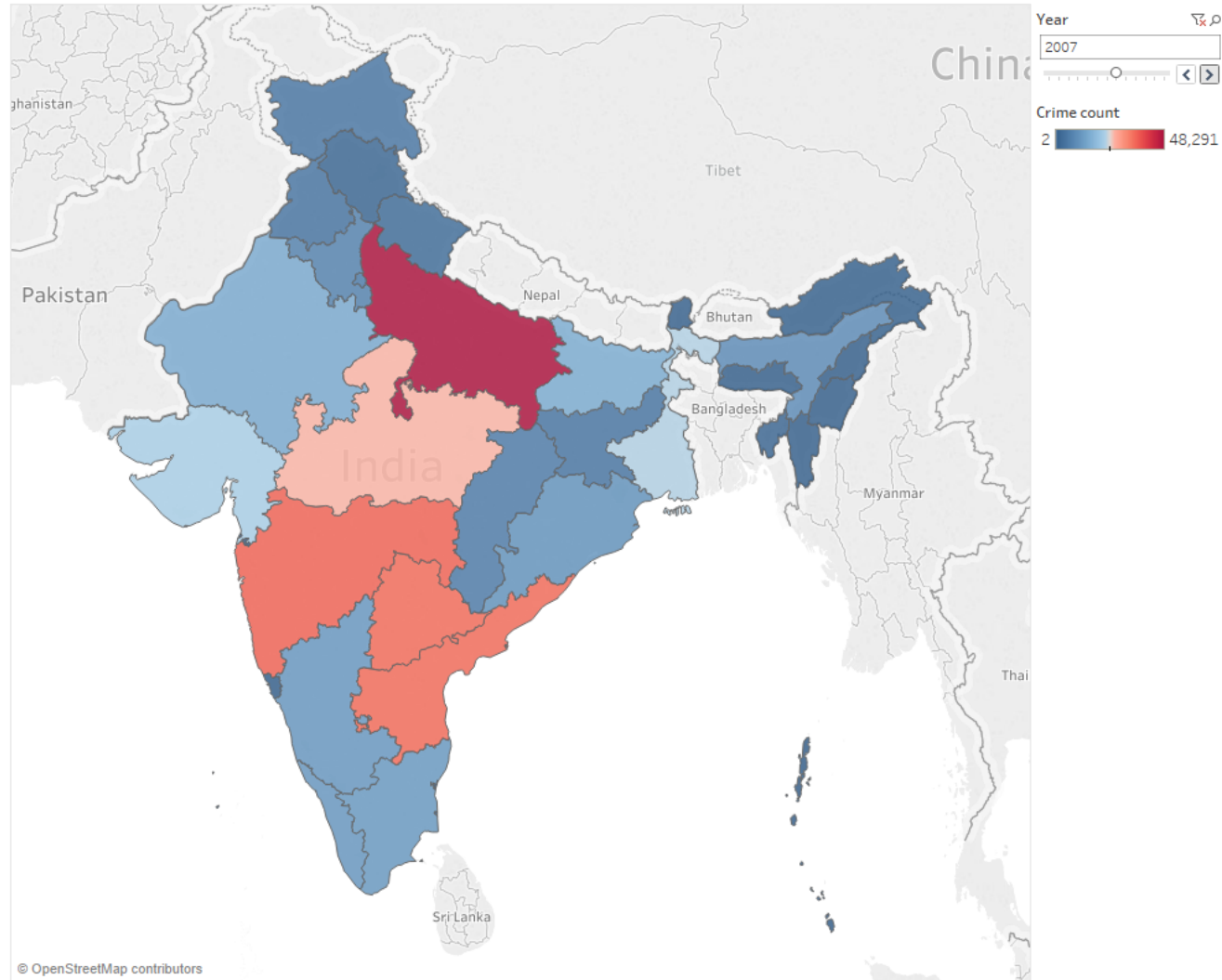
Data Source: data.gov | Powered by visualize. data.gov

- NFHS
- Oil
- Passenger
- Petrochemical
- Petroleum
- PHC
- port
- Power
- Primary
- Product
- Production**
- railway
- Revenue

## 2. Crime Rate against Women

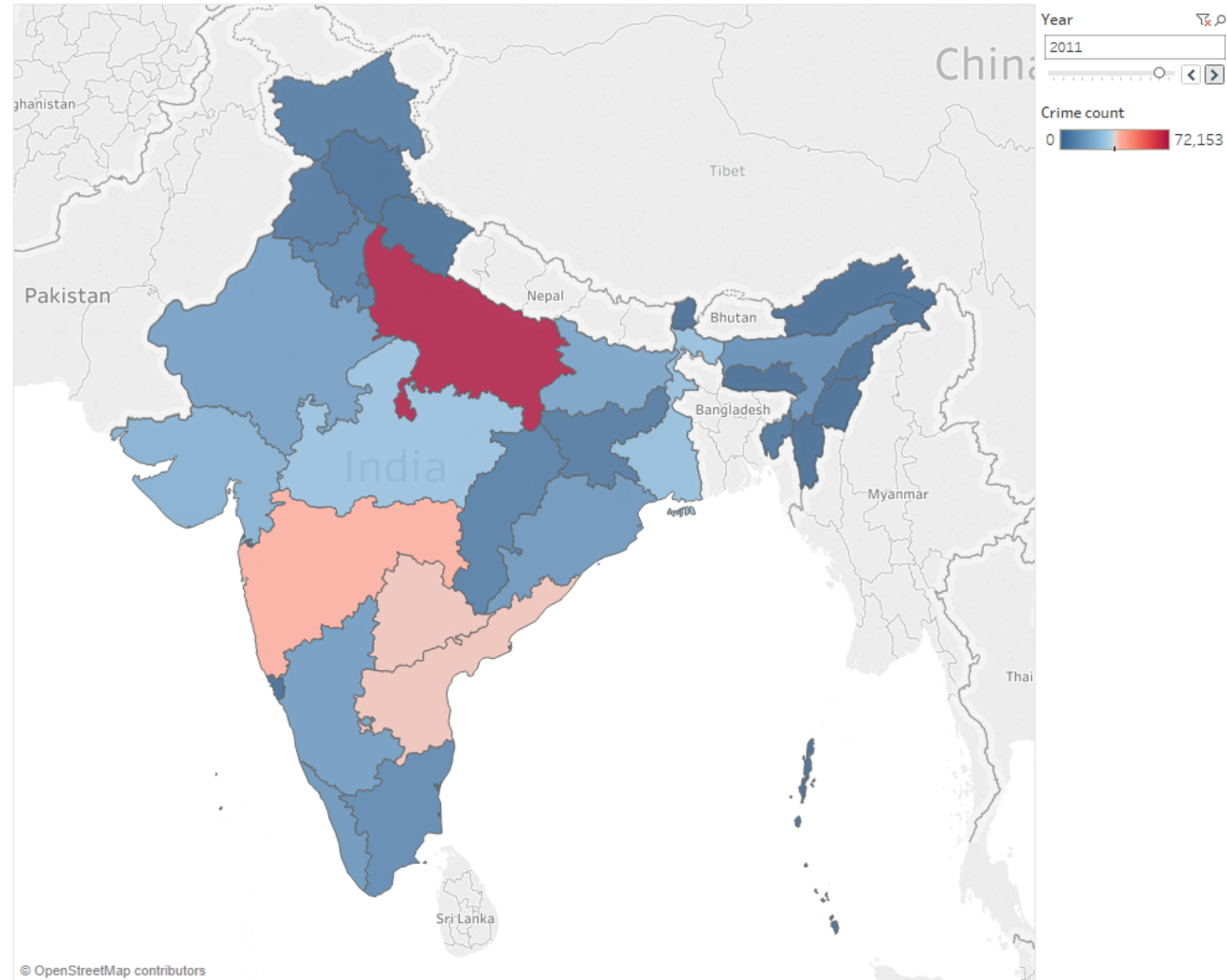
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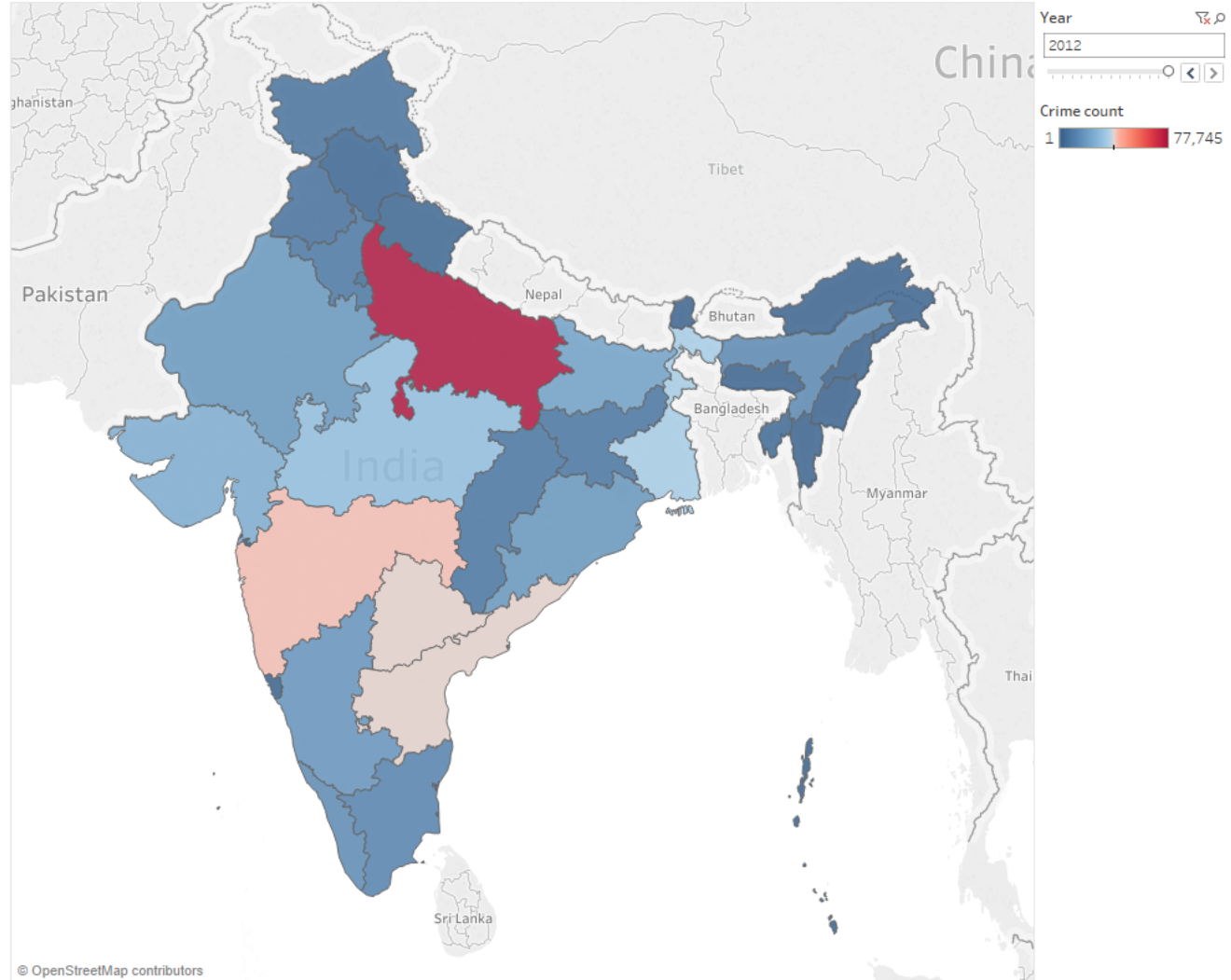
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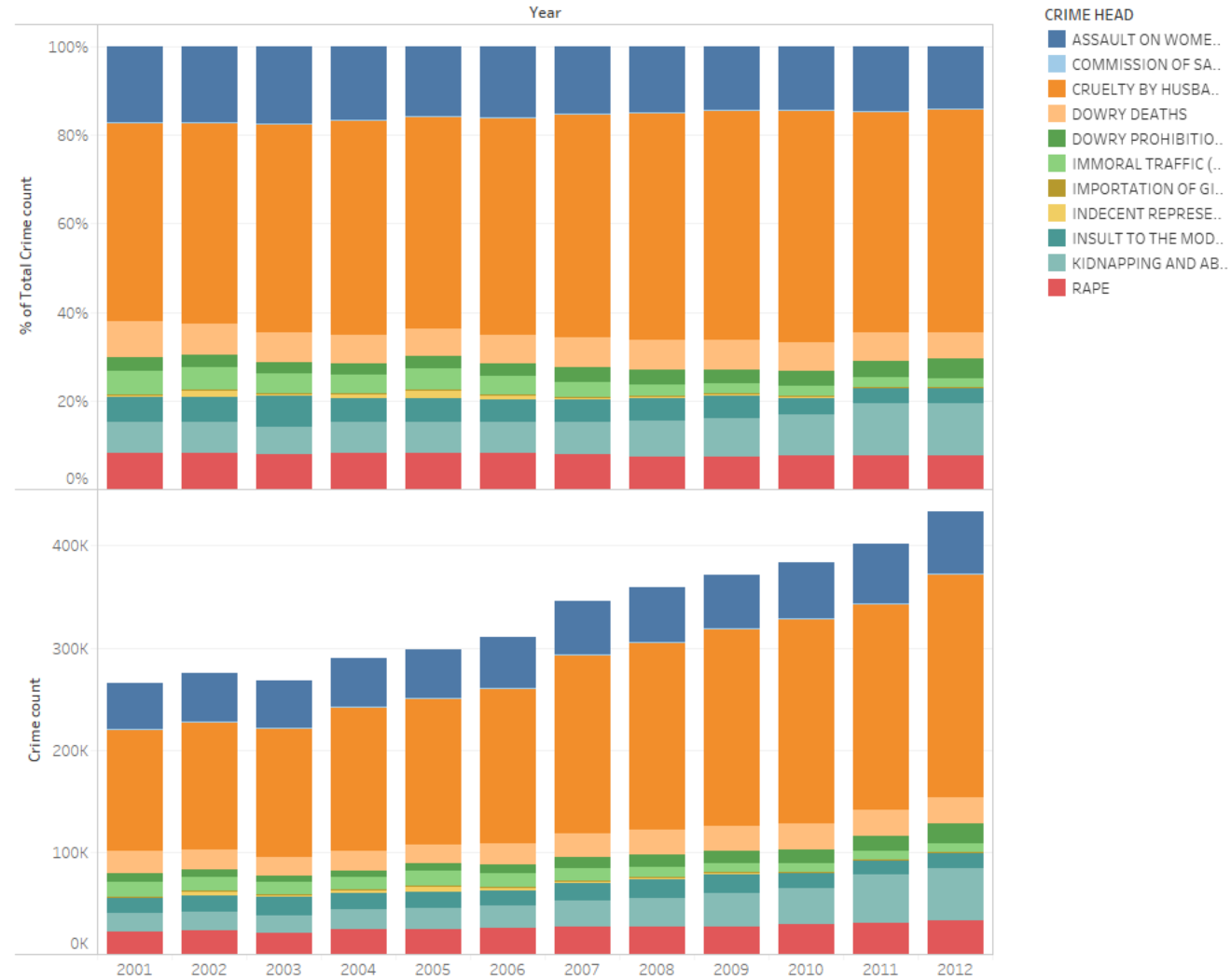
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# Crime and Poverty?

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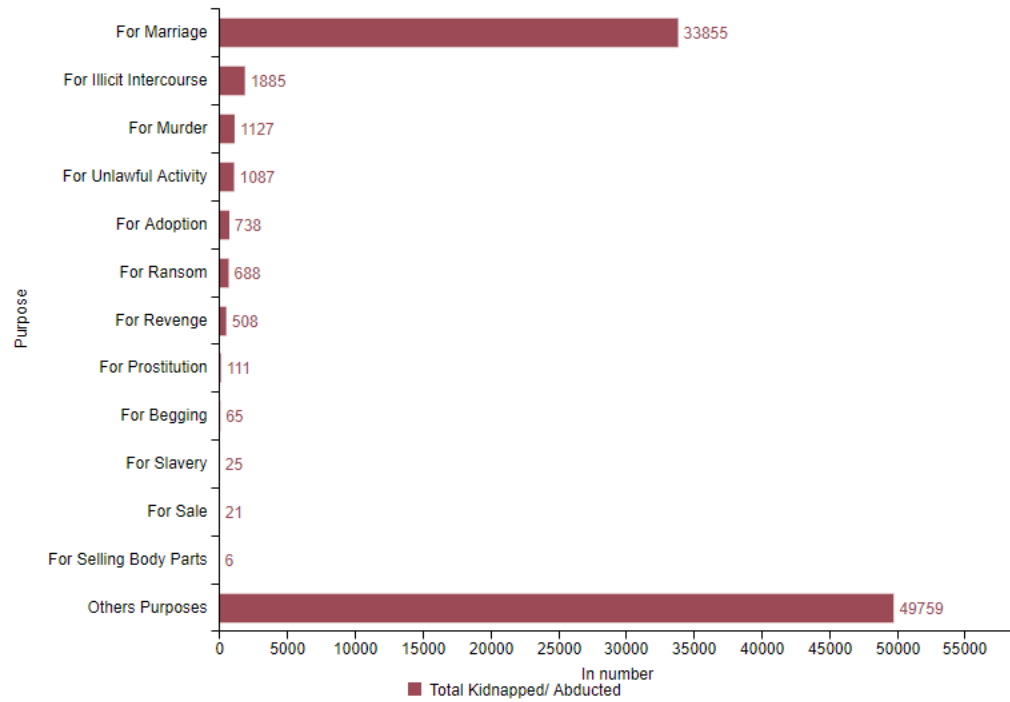
# Crime and Poverty?



Resource Title: Purpose of Kidnapping and Abduction (Sec.363 to 369 IPC) of Child & Adult Victims during 2016

[View in Visualization Tool >](#)

Purpose-wise Kidnapping and Abduction of Child & Adult Victims in India during 2016



Data Source: data.gov.in Powered by visualize.data.gov.in

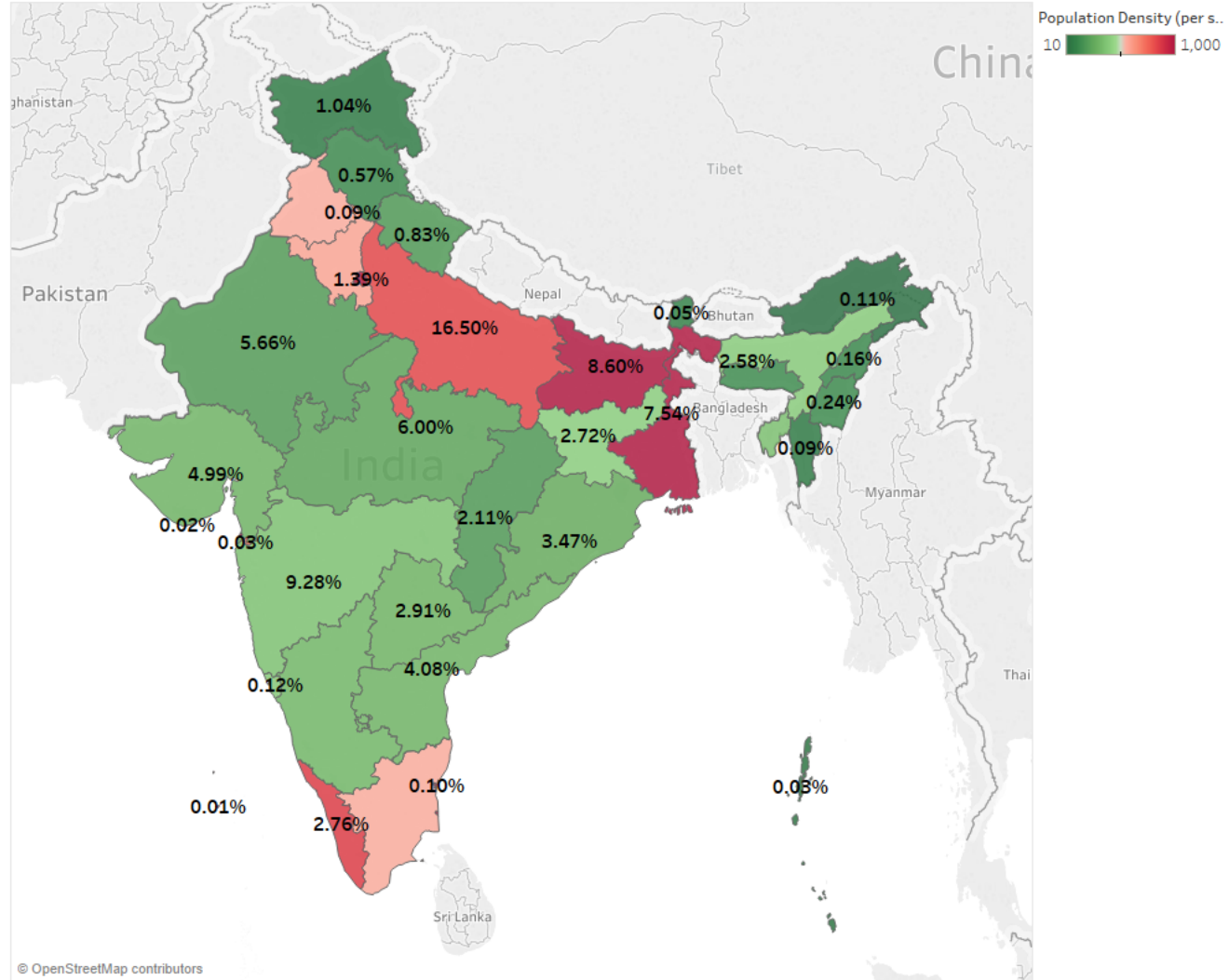
- Export
- FDI
- Foreign direct investment
- Fund
- Gas
- GDP
- health
- import
- Milk
- Motor Vehicles
- NFHS
- Oil
- Passenger
- Petrochemical
- Petroleum
- PHC
- port
- Power
- Primary
- Product
- Production**
- railway
- Revenue



# 3. Population Density and Population Percentage

# Crime and Poverty?

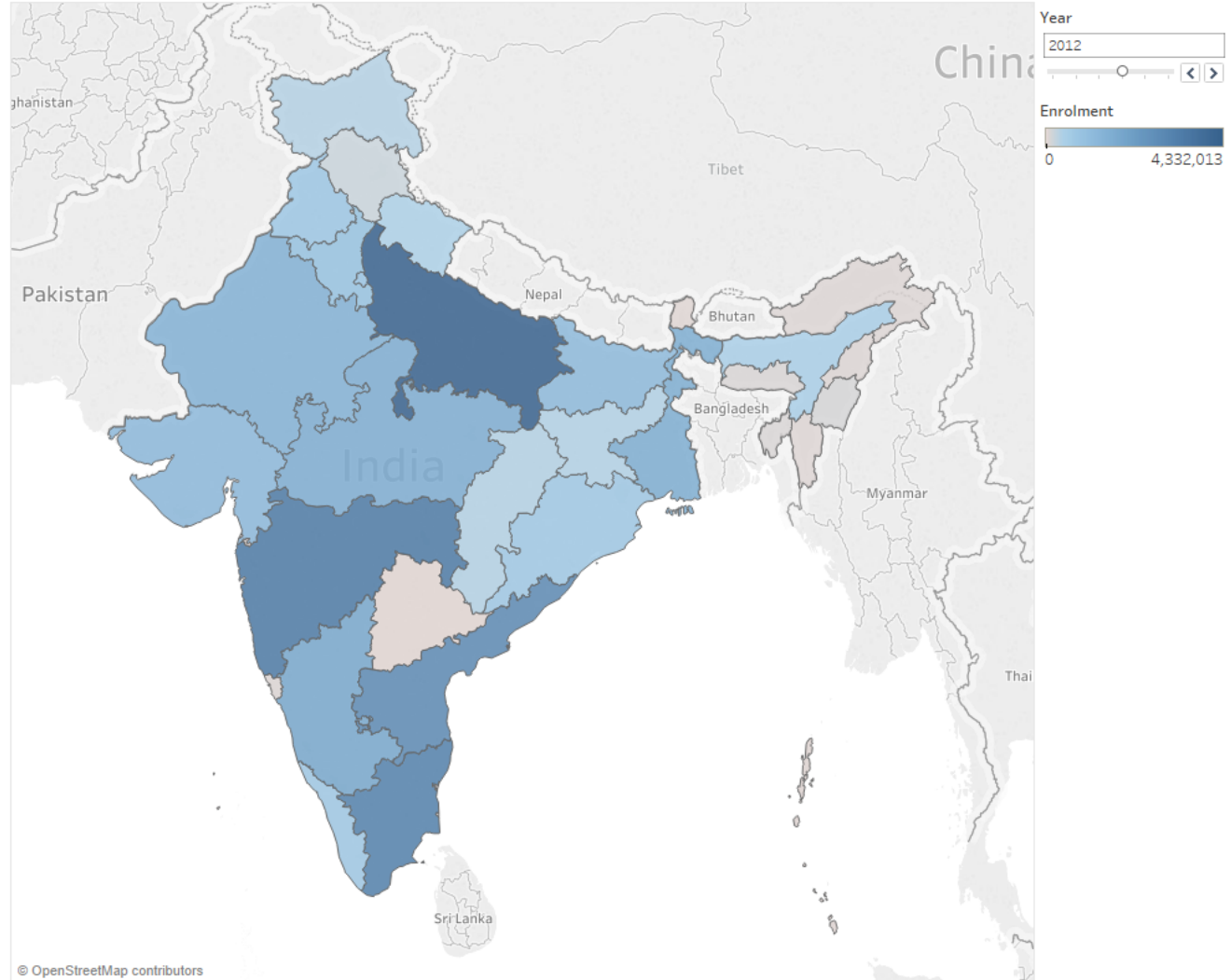
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# 4. Enrolment into Educational Institutions

# Crime and Poverty?

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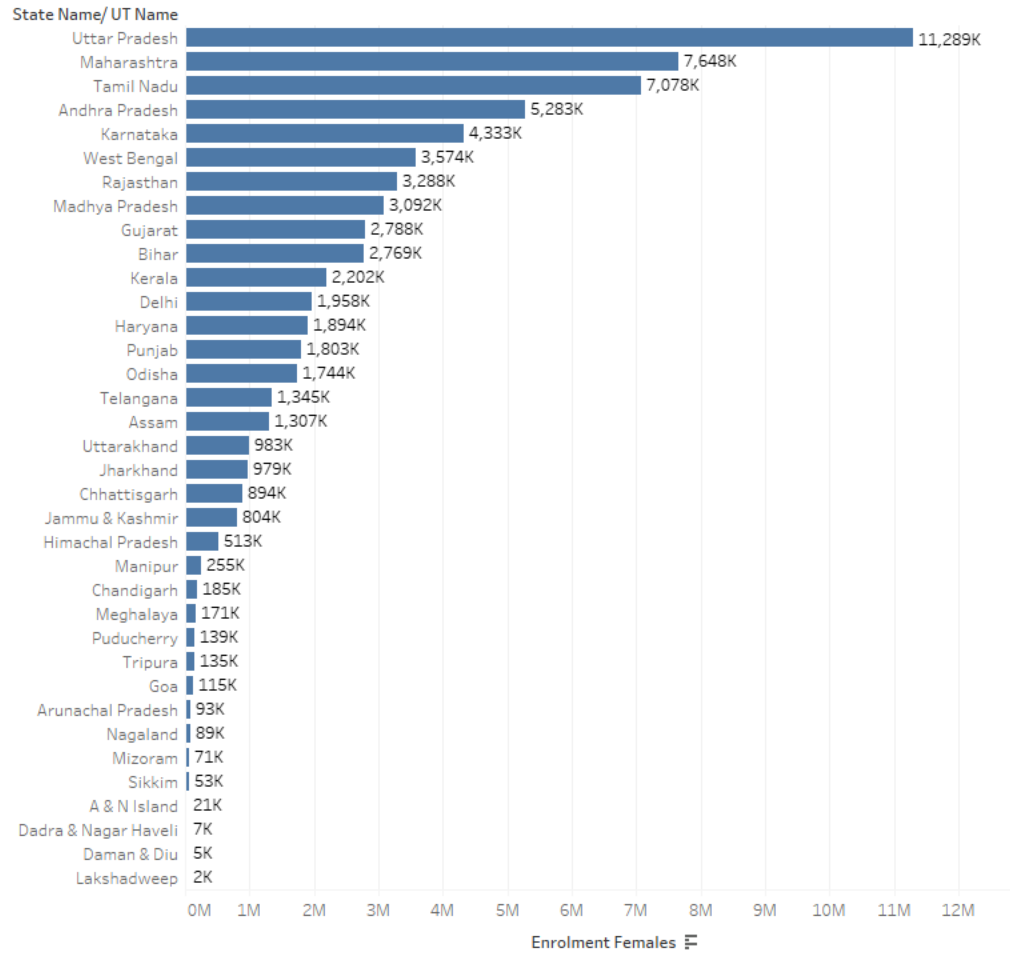
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# Female Enrolments

# Crime and Poverty?

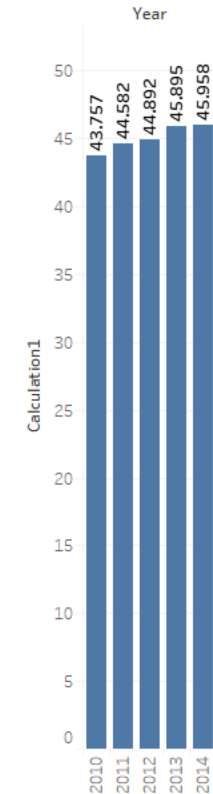
Navigation tabs: Total Crime Count or Number of convicts, Crime Against Women, Categories of Crime and Total Count, Population Density and Percentage of Population, Total Enrolment in Educational Institutions, **Female Enrolments in India**, Tot

## Female Enrolments wrt states



Year: (All)

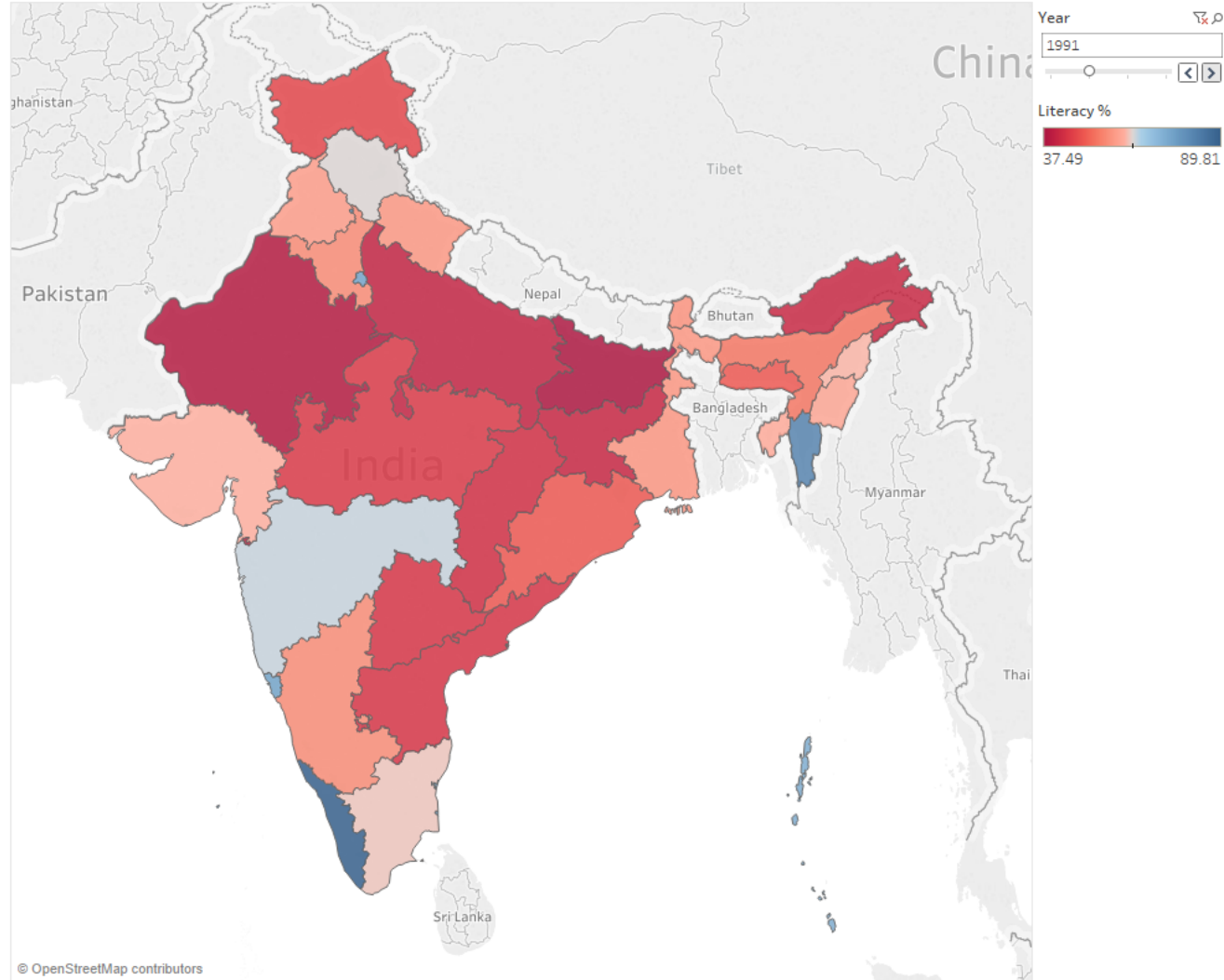
## Percentage of female Enrolment



# 5. Literacy

# Crime and Poverty?

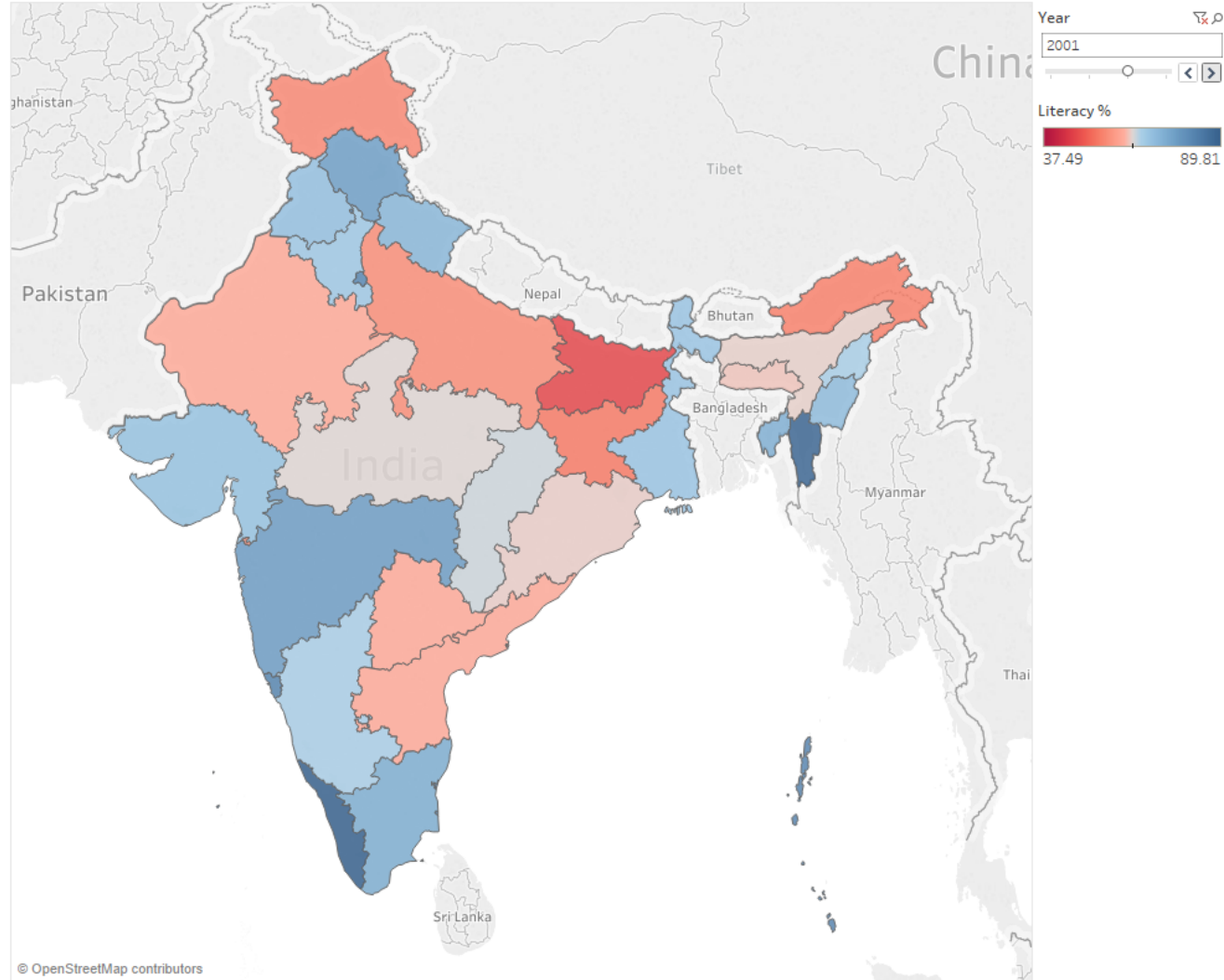
Navigation menu with tabs: Population Density and Percentage of Population, Total Enrolment in Educational Institutions, Female Enrolments in India, **Total Literacy Rate**, Female Literacy Rate, Poverty.





# Crime and Poverty?

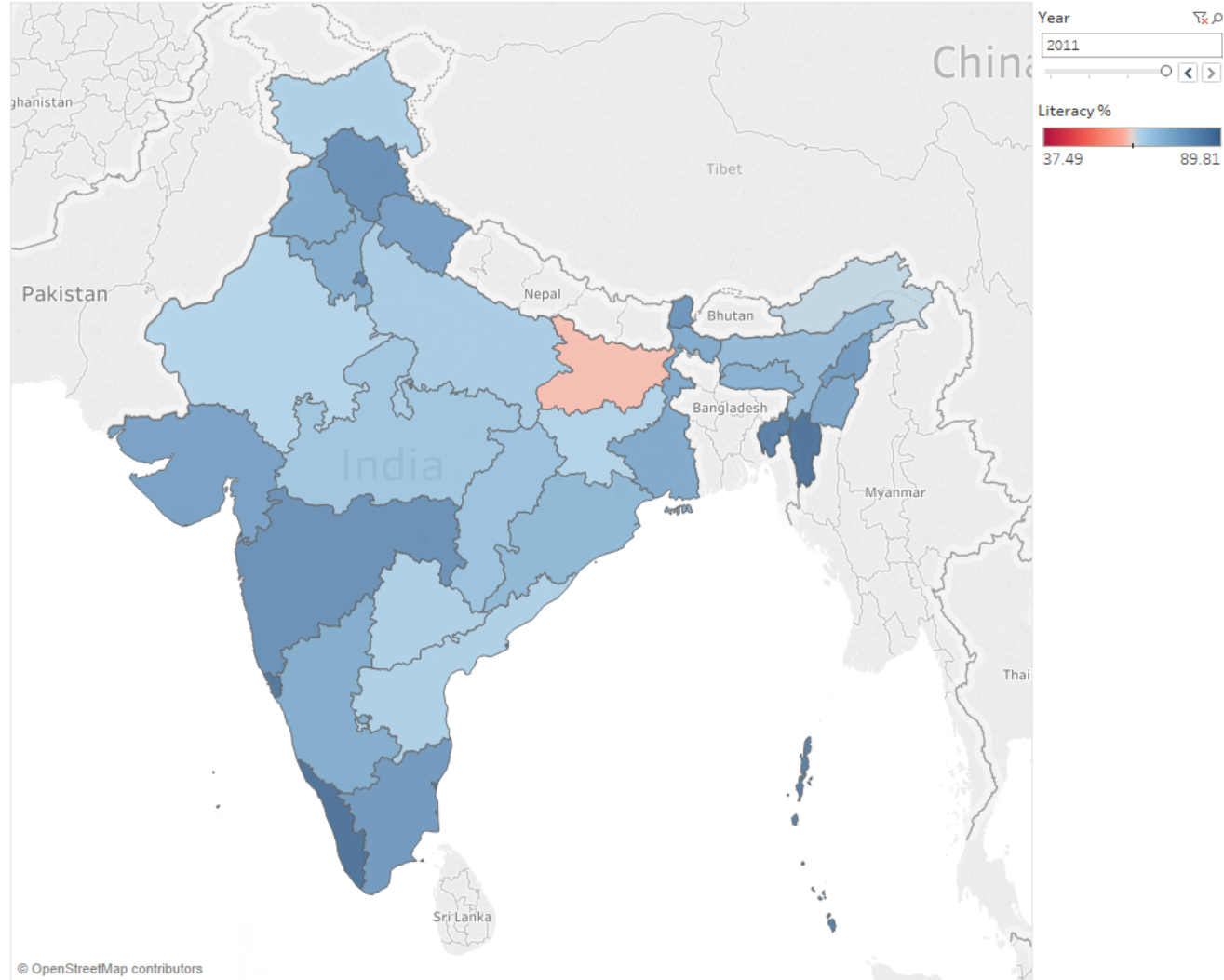
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# Crime and Poverty?

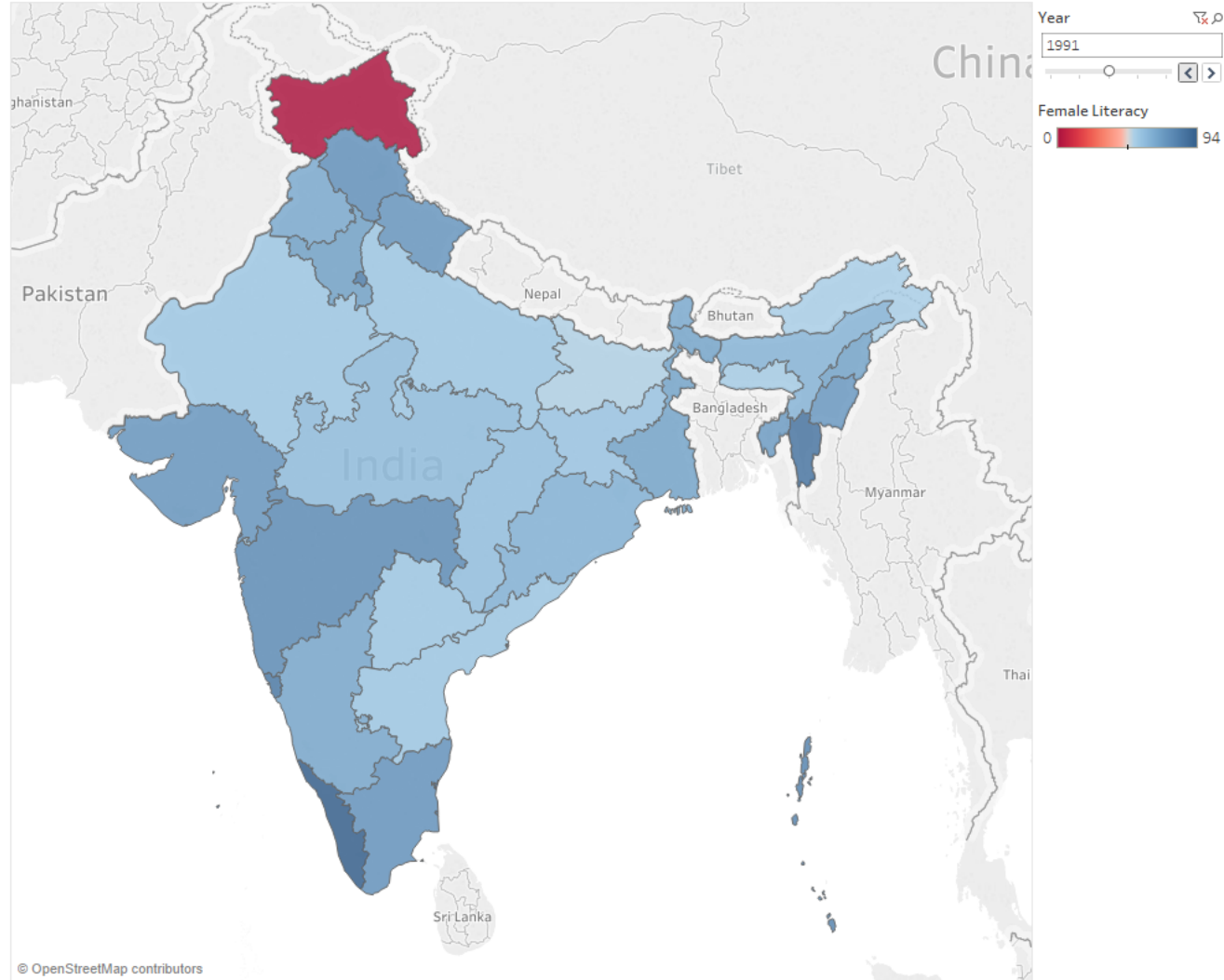
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Female Literacy Rate

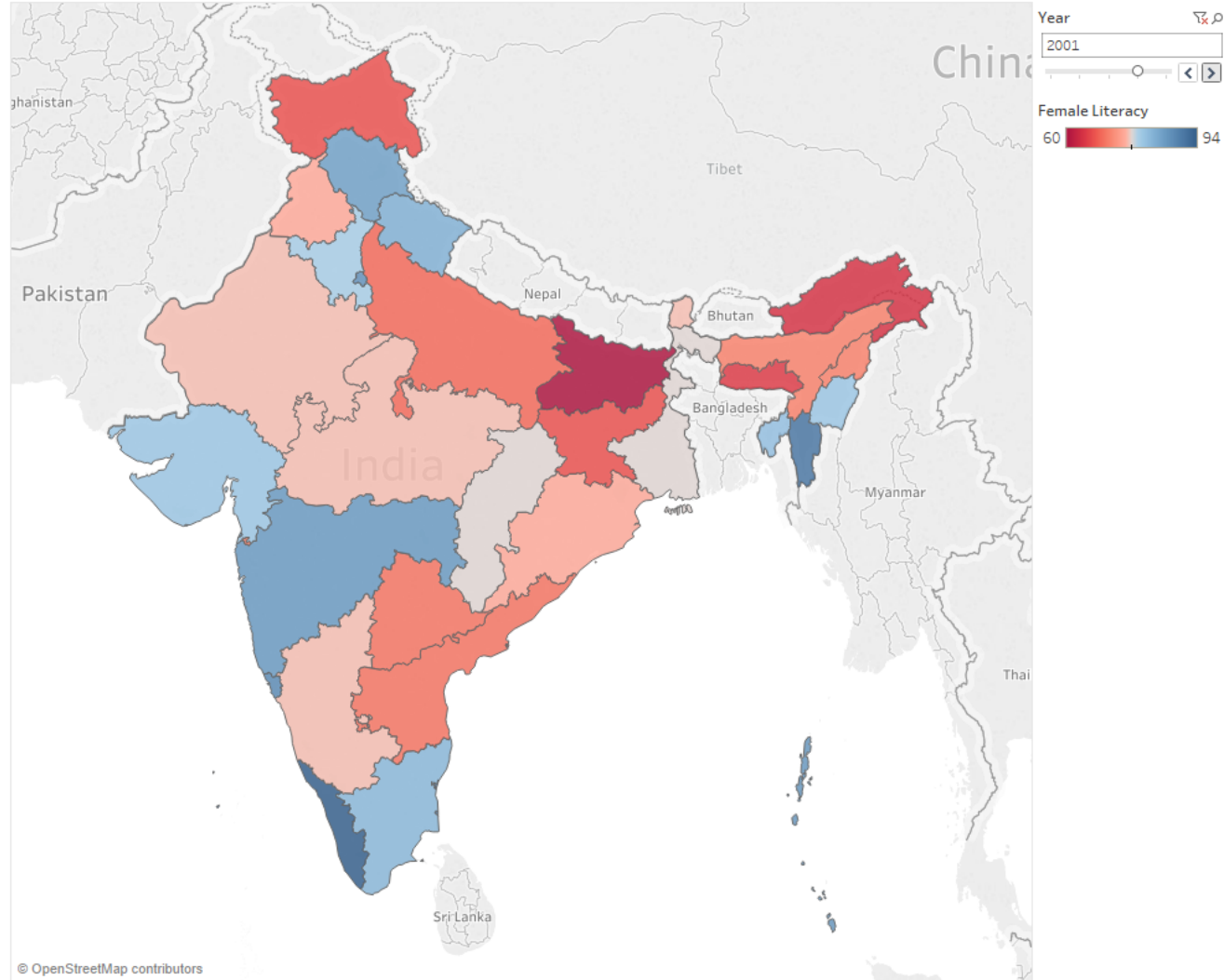
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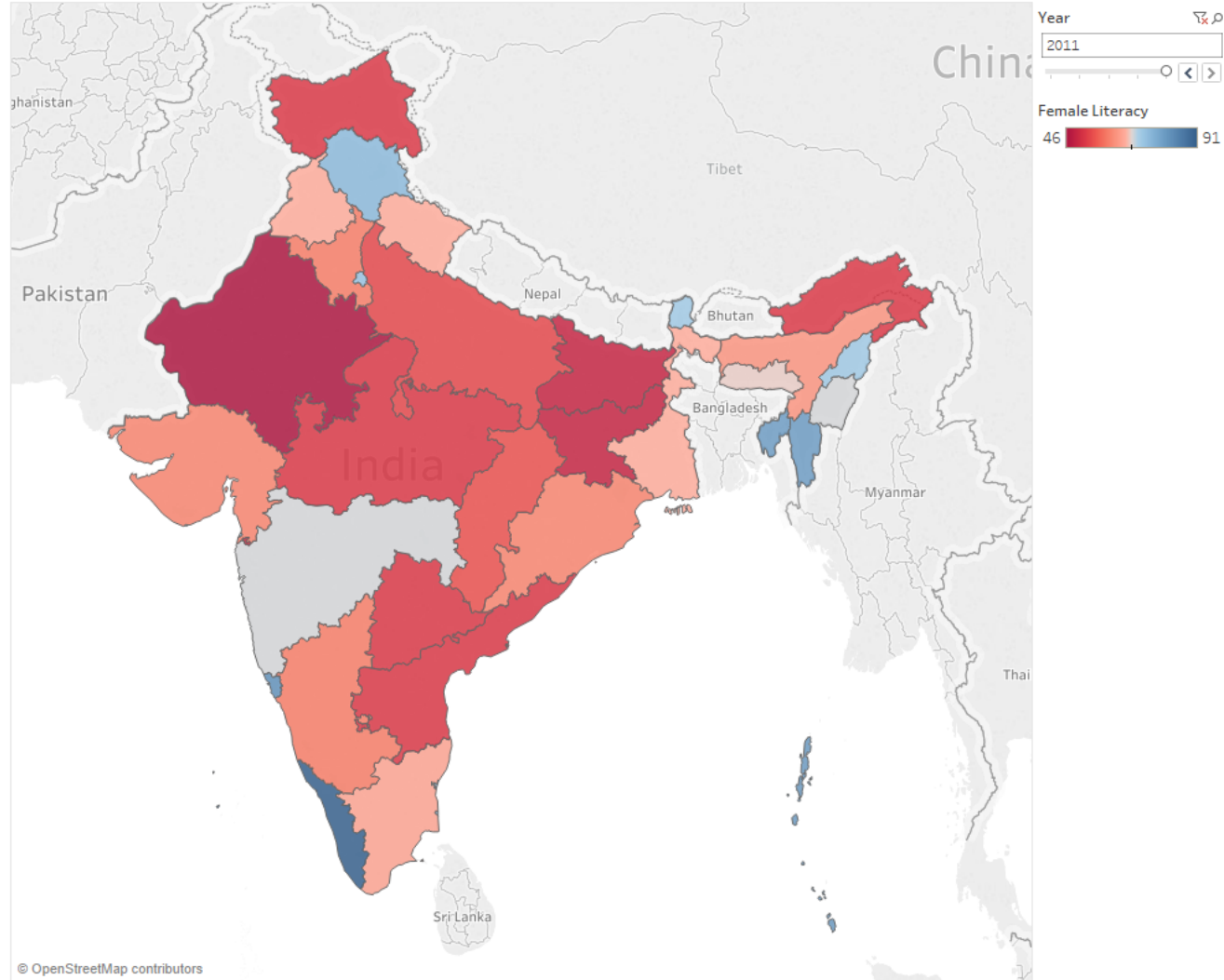
# Crime and Poverty?

- Population Density and Percentage of Population
- Total Enrolment in Educational Institutions
- Female Enrolments in India
- Total Literacy Rate
- Female Literacy Rate**
- Poverty



# Crime and Poverty?

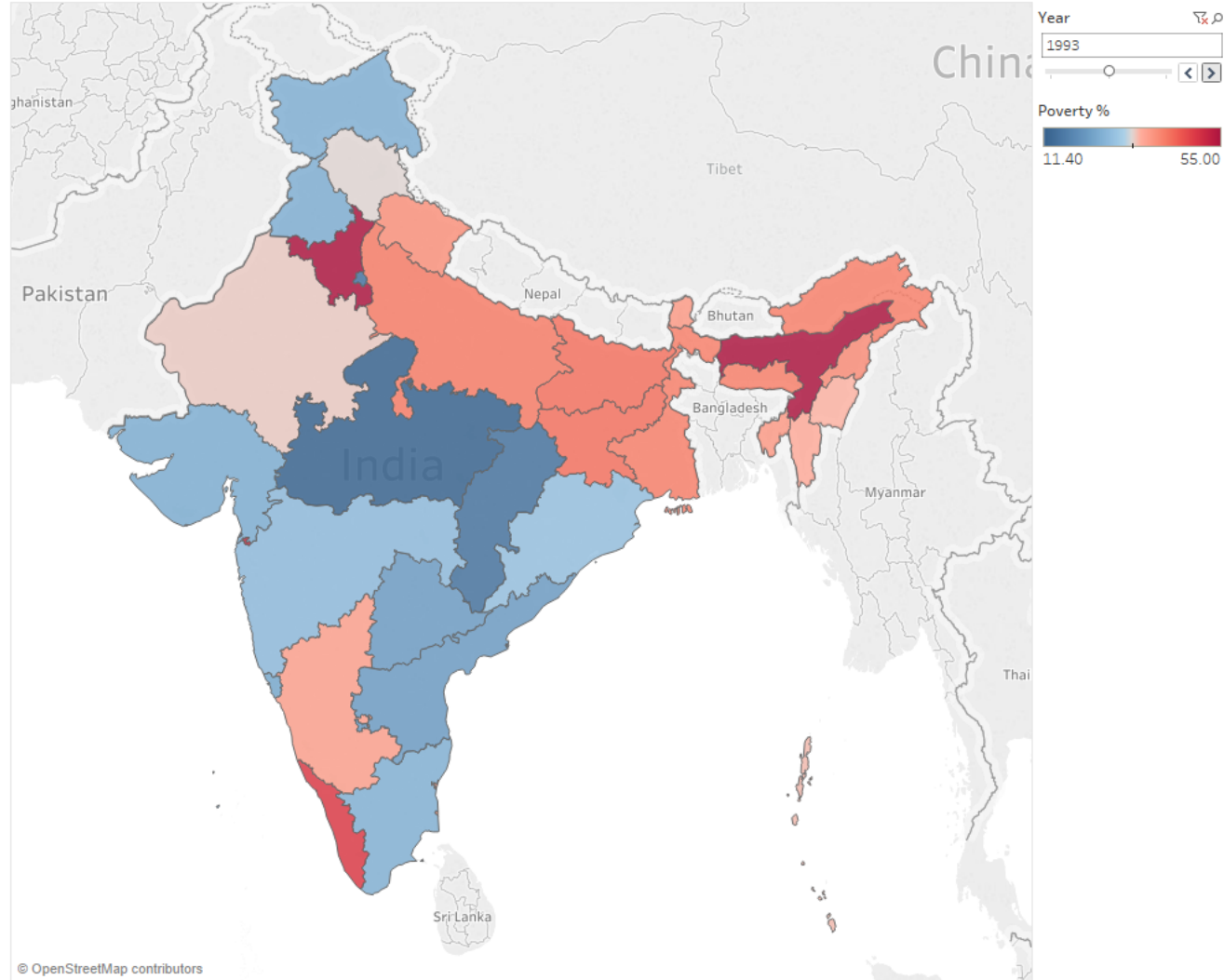
Navigation menu with tabs: Population Density and Percentage of Population, Total Enrolment in Educational Institutions, Female Enrolments in India, Total Literacy Rate, Female Literacy Rate, Poverty.



# 6. Poverty

# Crime and Poverty?

- Population Density and Percentage of Population
- Total Enrolment in Educational Institutions
- Female Enrolments in India
- Total Literacy Rate
- Female Literacy Rate
- Poverty**

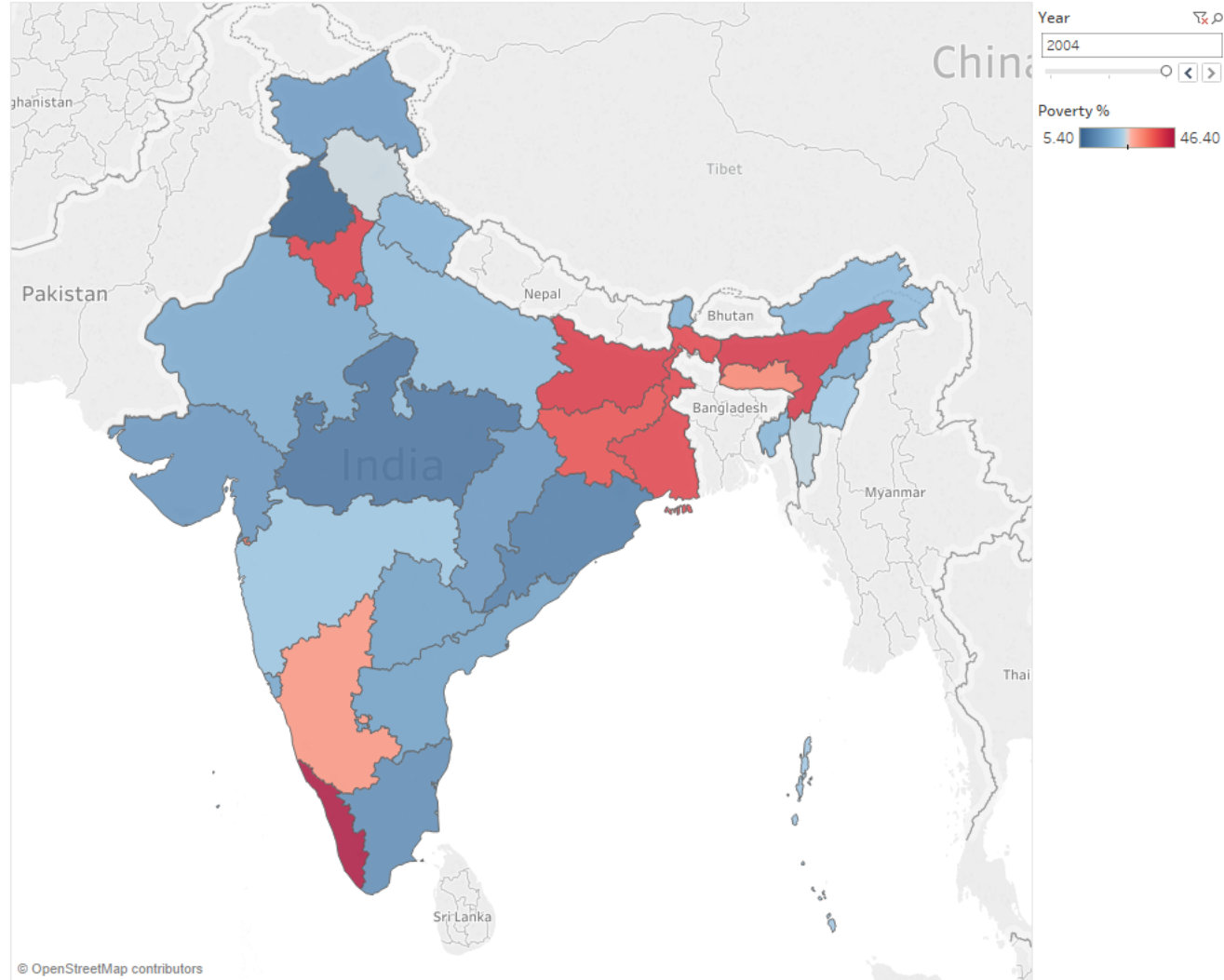


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# Crime and Poverty?

Navigation tabs: Population Density and Percentage of Population, Total Enrolment in Educational Institutions, Female Enrolments in India, Total Literacy Rate, Female Literacy Rate, **Poverty**



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# Observations

1. We did not find any specific factor which actually correlates strongly with the crime rates across the country.
2. It is much complex than saying “Poverty causes crimes” or “Illiteracy is the root cause of the crimes”.
3. Therefore, our naïve approach of correlating with single factors like literacy, poverty, etc., combining the states and union territories as uniform regions, failed to find any direct relation.
4. Lack of enough data on various other factors is one of the reasons we cannot quantify it right now.

# Observations

A lot of other social factors like

- life style
- environment of nurture i.e., **PARENTS**
- media they are exposed to
- Culture followed by the people
- Customs people follow
- Teachers attitude (can be anyone like family, friends, etc)
- Unreported cases

come into play to decide an individual's inclination towards crime.

# Further Study

- With rise in technology and connectivity in India, we can expect more statistics.
- Considering all those factors, one can try to get various data regarding the particulars and can hope to cluster, and correlate a complex term (forming a feature vector based on all the factors) derived by combining all the factors, at finer resolution.
- Machine learning algorithms would help us to do so.
- We should further dive into all those aspects and get a neater idea about the root cause of impulse of an individual to do an act knowing that it is illegal or immoral.

THANK YOU