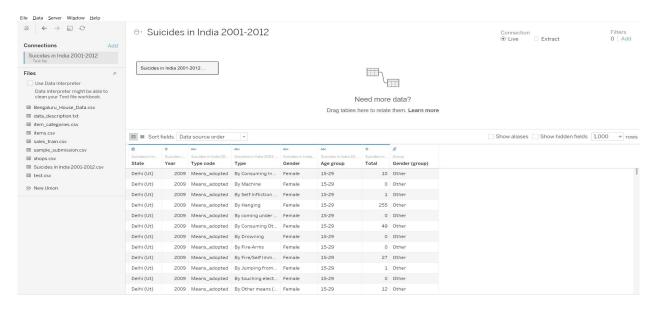
# I. Indian Suicide case Analysis

### > Introduction

Using visualization software such as Tableau and Power BI to present the results is an essential skill that a data scientist needs to master. In this project, a combination of chart types is used, such as pie charts, bar charts, and treemaps,

## Background



The data is obtained from data.gov.in: <u>accidental-deaths-and-suicides</u> There are 8 columns in total, the most important information is obtained from the following columns: State, Year, type code, gender, age group, total,

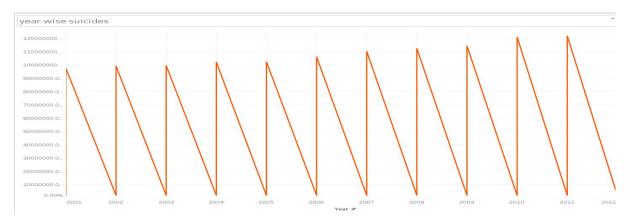
### Problem Statement and Objective

There are 3 main goals of this project: 1. Looking at the trend of suicide over the past years and compare it between state, is there a decrease in suicides in recent year 2. Find major cause of suicides in our countries? 3 Discover the suicide pattern by gender, age, and material status

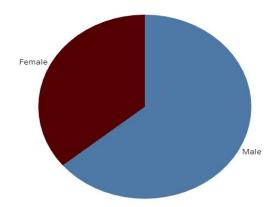
### Visualizations in Tableau

1) Annual Suicide growth from 2001 to 2012

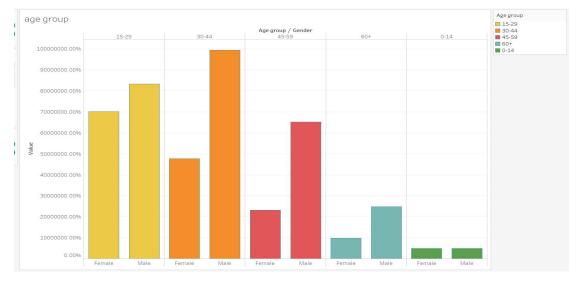
To see the suicides over the past years a line chart of suicide rate over the years is created. From figure 1-2, it is clearly seen in figure that by increasing a year there are in number of cases



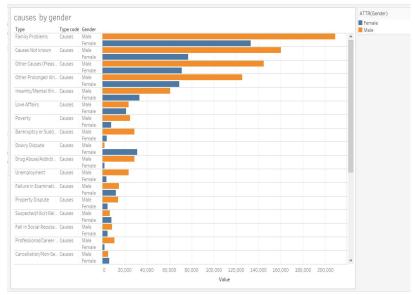
Suicide Rate Broken Down by Gender and Age



Suicide or ending one's own life is a tragic event with strong emotional repercussions for its survivors and for families of its victims. Men are especially at risk, with a suicide rate approximately four times higher than that of women. So lets analyse the major causes for suicide attacks, which age group does that more in our country



## 2) Suicide Rate Broken Down by cause

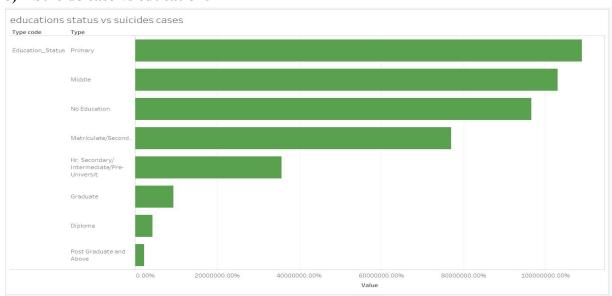


While most of the causes of the suicides are not known, the three major causes among the known cases are Family problems, Prolonged illness and mental illness.

According to the data men seem to be badly effected by unemployment, property dispute, poverty,drug abuse or addiction and change in economic status than women.

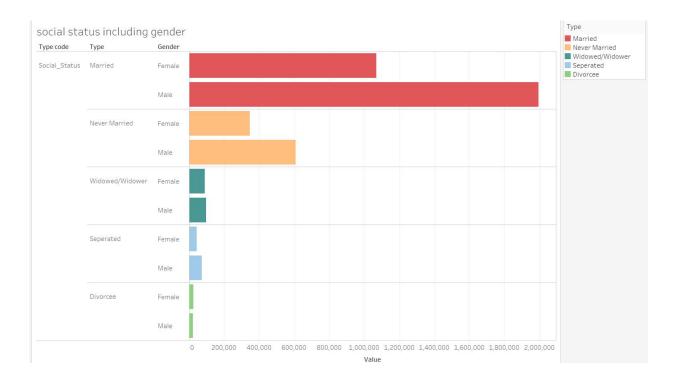
Number of women who have committed suicides due to dowry disputes is much higher when compared to men,

### 3) Suicide case vs educations

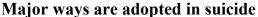


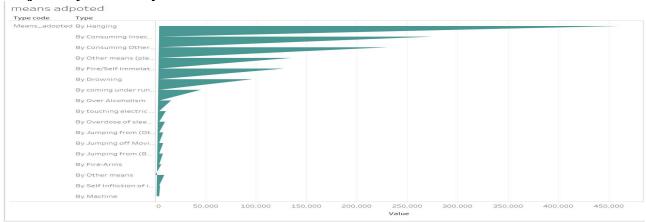
Number of suicides appear to be concentrated towards Lower education level. Most of the people who have committed suicides have education level below Matriculate/Secondary.

From the graph, we can noted that there is negative correlation between suicides cases and educations



According to the data, most of the females who have committed suicides are house wives. The percentage of female suicides in all other categories is much lower than the percentage of male suicides. While this is an indication of lower representation by women in professional careers, it also reiterates the importance of girl education and women empowerment. The graph shows that financially independent women are much mentally stronger.





Hanging is the most frequently used method of suicides

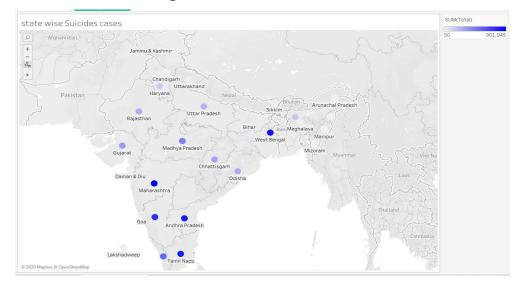
Materials for hanging were easily accessed and respondents considered it 'simple' to perform without the need for planning or technical knowledge.

Hanging was thus seen as the 'quickest' and 'easiest' method with few barriers to completion and sometimes adopted despite not being a first choice.

Prevention strategies should focus on countering perceptions of hanging as a clean, painless and rapid method that is easily implemented.

However, care is needed in the delivery of such messages as some individuals could gain information that might facilitate fatal implementation

# State wise case comparison



Which has highest number of suicides, Next comes West Bengal, Tamilnadu, Andrapradesh and Karnataka. So we have to find what was the main causes in those states.

Farming/Agriculture is the major occupation across all states of India, due of shortage of rainfall. Farming was impacted more which causes more suicide attempts.

Finding the states which has more counts.

It is disheartening to see that farmers who feed the rest of the country are the ones who are more committing suicides than any other profession. Followed by farmers, it's the unemployed and private sector employees who are most effected. It's surprising to know that the number of suicides among the unemployed and the private sector employees is almost the same. This also might be due to higher pressure in private sector when compared to government sector jobs

### Conclusion

- Age group between 15-44 has the highest number of suicides.
- Rate of suicide sky rocketed from 2002-2010 but since 2011 it has been decreasing but, since we have the data till 2012 we can't confim the pattern.
- Maharashtra, West Bengal and Tamil Nadu have the highest suicide rate this might also be because of the high population in these states.
- Family Problems, Illness, Mental Illness are some of the main reason while most of the reasons are still unknown.
- Hanging, Consuming Insecticides is more common but, most of other means are unknown.
- Most of the professional profile is unknown but house wife comes in second, while Farming comes in at third.
- Married is at the top when it comes to social status while never married is at second.
- The reason for suicide at the age group between 0-14 is because of Failure in Examination.
- The reason for suicide at the age group between 15-29 is because of Family Problems.