

Mid Report DV- Project

Story:

Our project is on the topic Indian Greenery and Wilderness. The flow of visualization is as follows:

- The first visual shows the distribution of extinct, endangered etc species.
- The second shows the reason for decrease of wildlife.
- From the reason it was clear that habitat loss / change was major reason for decrease in wildlife and one of major habitat of wildlife is forest/ green cover.
- The third visual shows how green cover of states and population changed over time.
- The fourth visual shows reasons for forest cover decrease in India.

Link to video:

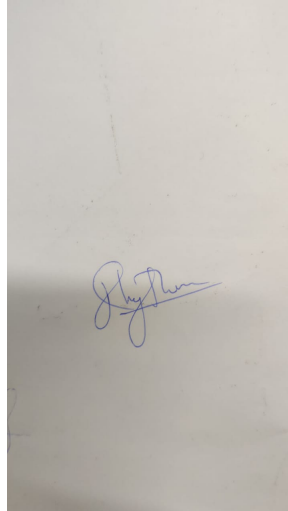
YouTube Link : <https://youtu.be/Pwgx7y5V7EY>

Google Drive Link :

<https://drive.google.com/file/d/1dw6AsFcOahyrkeVWSQNxcr1MwcHS451J/view?usp=sharing>

Contribution:

- Nipun Tulsian (2021101055) made pie-chart and sunburst.
- Rhythm Aggarwal (2021101081) made stack bar chart.
- Sarthak Bansal (2021101134) made a circular bar plot.
- All team members contributed for making of website and data collections.



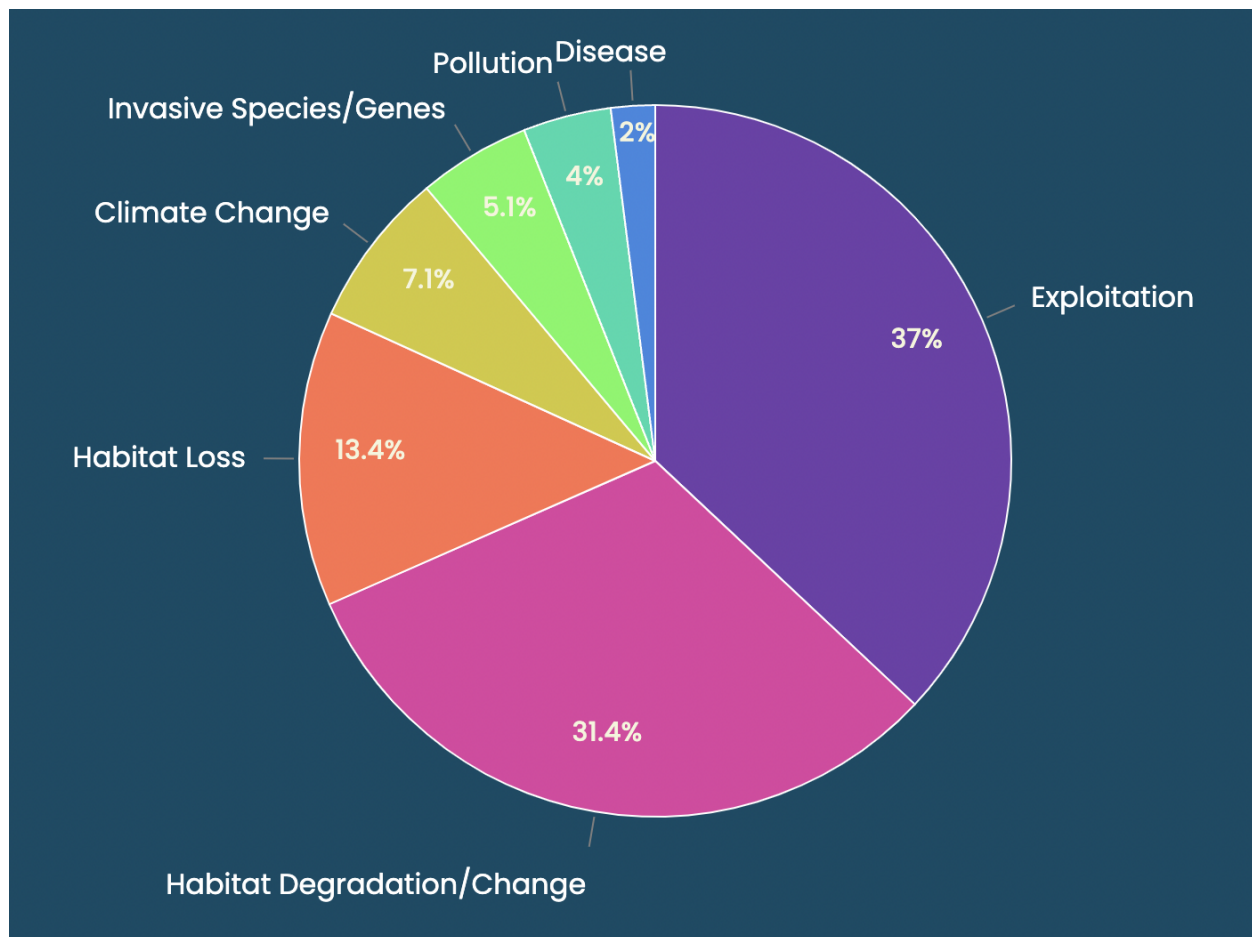
Nipum Tulsiam

Saithak Samal

Vis-1 Pie Chart

Data:

Reasons for Decrease	Effect in %
<i>reasons responsible for decrease in wildlife</i>	<i>their effect by proportion in %</i>



Inspiration to use the Visualisation:

Pie Chart is one of the most effective means of communicating simple yet crucial information in the most user friendly way. The reader can easily grasp how Each cause of wildlife decrease leads to total degradation.

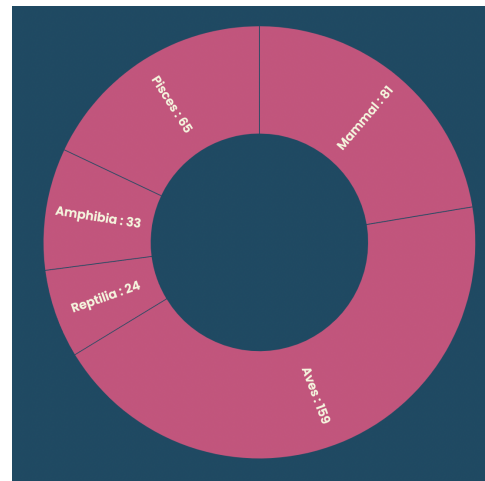
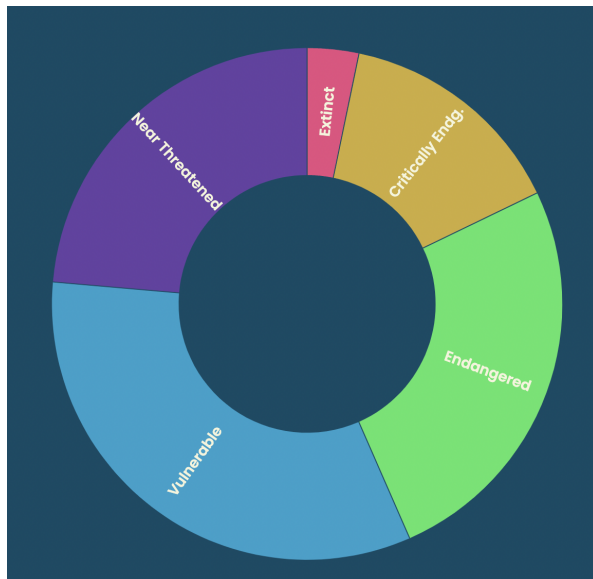
Inferences:

- Exploitation of wild life such as cruel methods of poaching, killing of wild animals is the major cause of Decrease in wild population
- Climate Change has both direct and indirect influence in terms of pollution, Diseases
- The human expansion and seach of land to populate has also been one major reason

Vis-2 Sunburst

Data:

Status of Vulnerable Species	{Mammal,Aves,Reptilia,Amphibia,Piesces}
Can be Extinct, Vulnerable,Endangered, etc.	No. of species of each class that acquired that status



Inspiration to use the Visualisation:

This sunburst chart illustrates the population of vulnerable species categorised by their status. In this specific sunburst chart, the categories are the different statuses of vulnerable species. The vulnerable species are grouped by their status, with each status represented by a different color. The segments within each status category represent the population of each species within that category. The chart is scaled with the proportions of contributions of various species and categories making it easy to understand

Inferences:

- Many species of the mammals got in critically endangered Status
- Many Aves species became extinct raising alarms for more effective conservation systems

- There are many species from each Animalia kingdom that are in the endangered Class, which is a serious cause of concern

Vis-3 Circular Bar Plot

Data:

Year	State in India	Forest Growth	Population Growth
<i>Year of the data</i>	<i>State in context</i>	<i>Forest Growth for the year in that state</i>	<i>Population growth for that year in that state</i>



Inspiration to use the Visualisation:

The circular barplot is useful for visualizing how forest area growth is distributed across different states of the country and how it relates to their populations. .The forest area

growth of each state is represented by a bar extending outward from the center of the circle while the population is represented by a bar extending inwards towards the center . The length of the bar is proportional to the percentage growth in forest area for that state, with longer bars representing greater growth. The slider provides the user flexibility with analysing a year of his choice with a step size of 2 years

This Visualisation technique has helped us to draw many crucial inferences as it shows How population growth has been related to Forest Growth and decline over the years

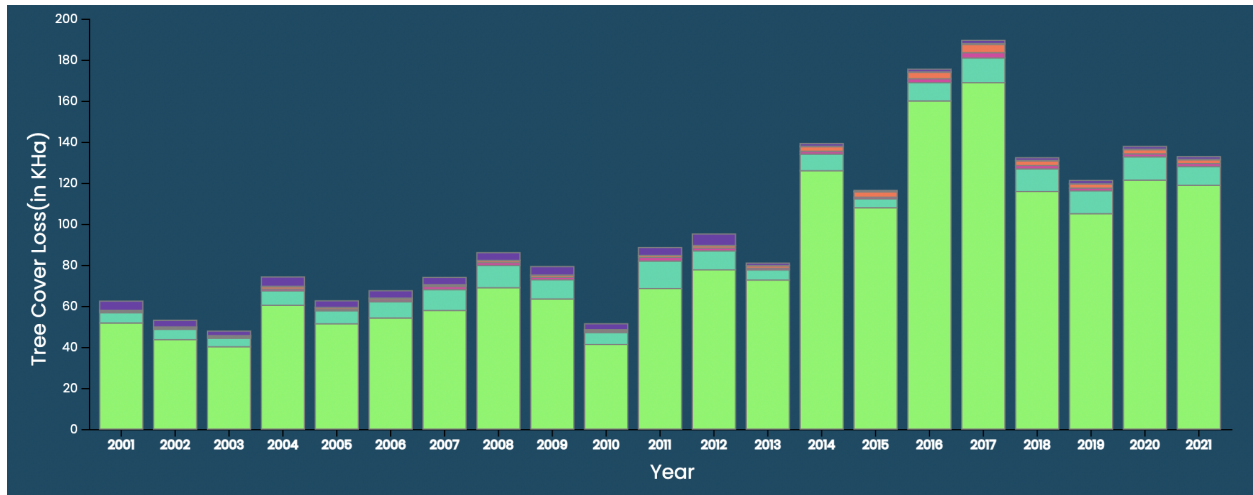
Inferences:

- During the time of economic liberalisation (1991-95) many years became populated due to migration such as Uttar pradesh, Madhya pradhesh, etc. In these states we can infer how with migration the forest cover decreased giving us insights into how government policies can directly and indirectly influence the Bio Diversity
- the population cover in the 7-sisters (eastern India) is much lower in comparison to other states and notably their forest cover is much higher.
- States such as punjab, haryana where vegetation grew with years. we can see that the forest cover decreased due to agriculture and forestry

Vis-4 Stacked Bar Chart

Data:

Year	Reasons for deforestation	Forest Cover loss (in ha)
<i>Year of the data</i>	<i>State in context</i>	<i>Forest Growth for the year in that state</i>



Inspiration to use the Visualisation:

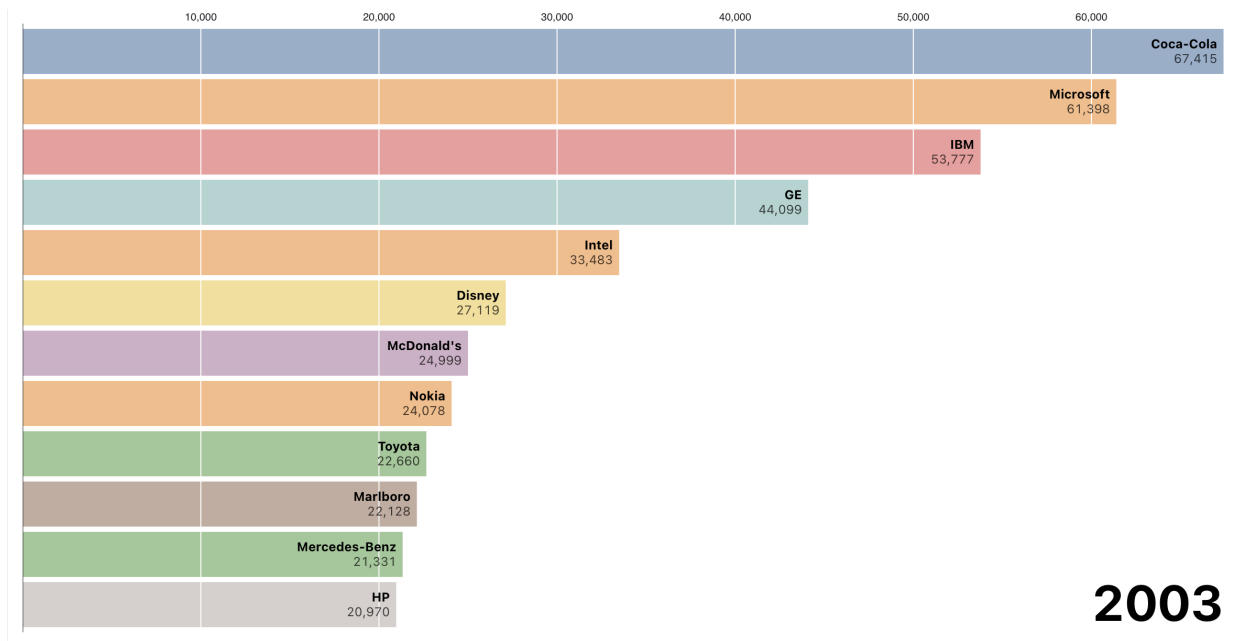
The chart consists of several vertical bars, each representing a year of data. The horizontal axis represents the years, while the vertical axis represents the percentage of tree cover loss. The bars are divided into sections, each representing a specific reason for deforestation, such as Agriculture, Forestry, Urbanization etc. The stacked bar chart provides an informative and visual way to represent the impact of various reasons for deforestation on tree cover loss over time. It is a useful tool for understanding the causes of deforestation and identifying potential solutions to this pressing environmental issue.

Stacked Bar Chart is the best Way to visualise and effectively tell how many reasons of deforestation have led to forest cover loss over the years.

Inferences:

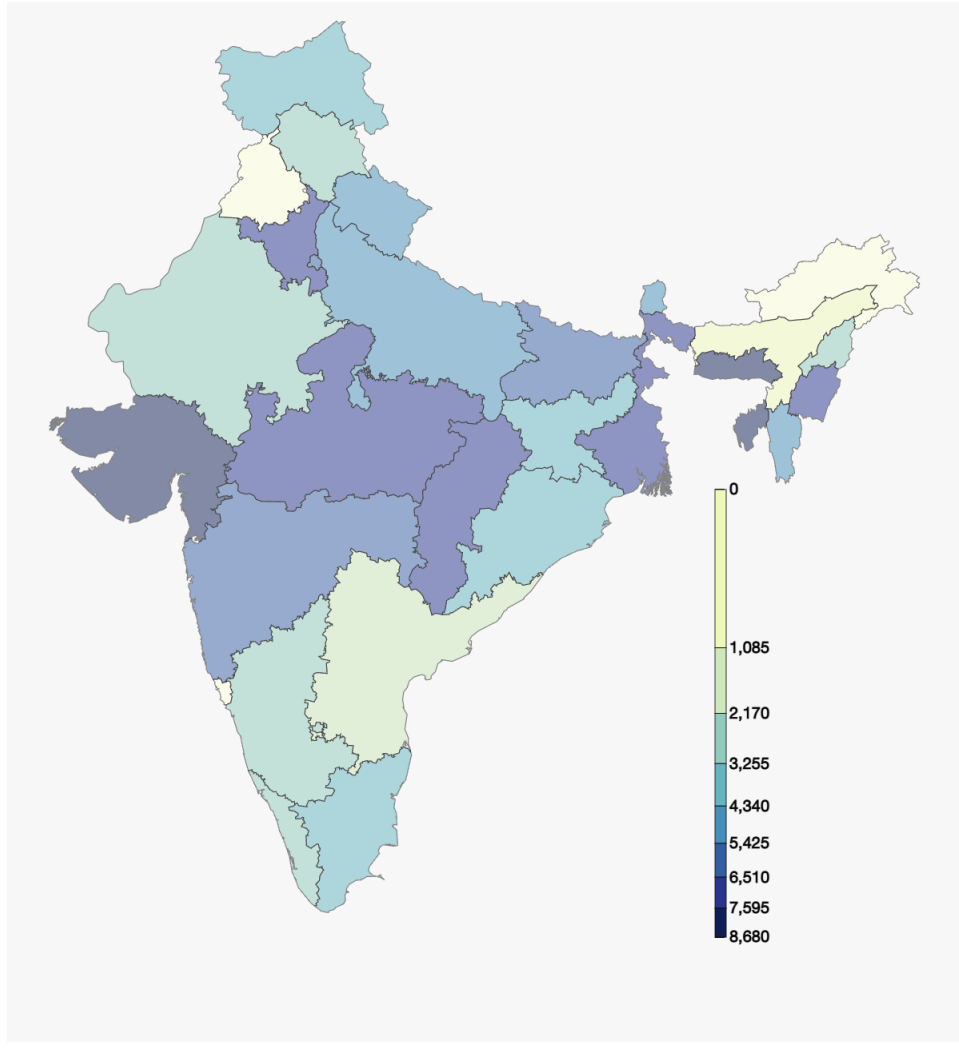
- It is saddening to see how decline in forest cover over the years has increased, forestry being the major cause
- More than urbanisation, Shifting of agriculture and leaving barren lands behind is the more major cause of decrease

Vis-5 Racing Bar Chart



This will show how forest cover of various countries will change over time.

Vis-6 India Map



India map showing different Ramsar sites and wildlife sanctuaries which will show the Government initiative for protecting wildlife.