



BHARATIYA VIDYA BHAVAN'S
SARDAR PATEL INSTITUTE OF TECHNOLOGY
(Empowered Autonomous Institute Affiliated to University of Mumbai)
[Knowledge is Nectar]

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ADV EXP 8	

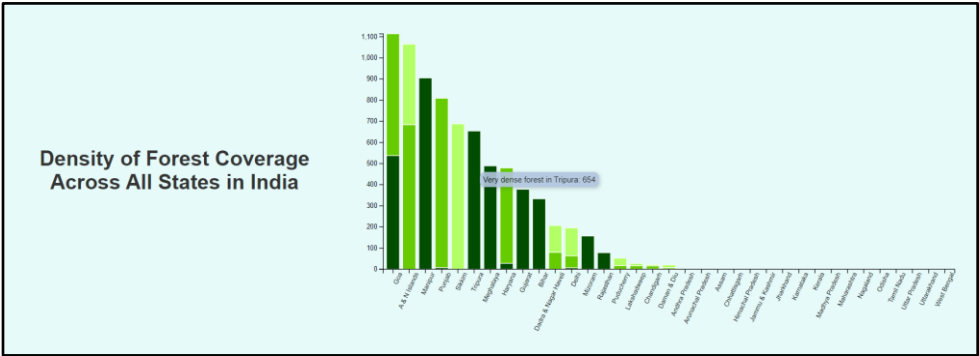
AIM	Designing Interactive Dashboards and Storytelling using D3.js on Environment/Forest Cover Dataset
Dataset Particulars	<p>Name: Forest Cover in India</p> <p>Link: https://www.kaggle.com/datasets/arjunprasadsarkhel/forest-cover-in-india/data</p> <p>Column Details :</p> <p>The dataset contains information about forest areas across different states or union territories (State/UTs) of India. It includes columns for:</p> <ol style="list-style-type: none">1) Geographical Area2) Forest Categories: Very dense forest, Moderately dense forest, Open forest, Total forest3) Percentage of geographical area covered by forest4) Scrub area5) Historical forest coverage data (from 1987 to 2013)<ol style="list-style-type: none">a) [Forest_Coverage_1987 , Forest_Coverage_1999 .. and so on]

Dashboard

Forest Coverage Percentage of Geographical Area

The map displays the forest coverage percentage for each state in India. The states are color-coded according to their forest coverage percentage, with Mizoram having the highest coverage at 85.41%.

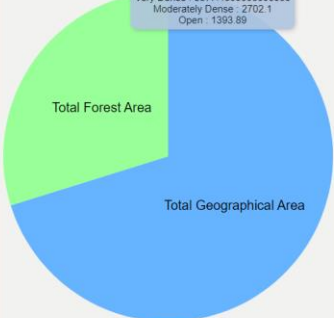
State	Forest Coverage Percentage
Mizoram	85.41%
Other States	Varies (represented by different shades of green)



Forest Coverage Over Time

Distribution of Forest Cover

Total Forest Area : 524.47
Very Dense : 3577.4800000000005
Moderately Dense : 2702.1
Open : 1393.89



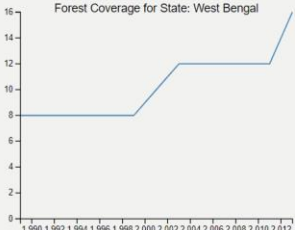
Total Forest Area

Total Geographical Area

Forest Coverage over the Years of every State/UT

Play

Forest Coverage for State: West Bengal



Year	Forest Coverage
1990	8
1992	8
1994	8
1996	8
1998	8
2000	8
2002	12
2004	12
2006	12
2008	12
2010	12
2012	15.5

Analysis

Stacked Bar Graph :

	<ol style="list-style-type: none"> 1) Goa , A & N Islands , Manipur , Punjab , Sikkim , Tripura , Meghalay are among the top 6 states with Higher Forest Coverage in India . 2) Amongst these Manipur , Sikkim , Tripura are the States with higher percentage if Dense Forests 3) As seen in the India Map of Forest Coverage , The seven sisters ; Eastern Part of india has higher density coverage than many other parts of India . 4) Nagaland , Odisha , Tamil Nadu , Uttar Pradesh , Uttarakhand , West Bengal are the states with lowest Forest Coverage 5) The reason can be rapid industrialization, faster urbanization , rapid civilization <p><u>Pie Chart :</u></p> <ol style="list-style-type: none"> 1) A cleare view of the pie chart shows that about 1/3rd of the total Indian subcontinent [as of 2013] has Fovrest Coverage.
Conclusion	By performing this experiment I became familiar with making interactive visuals using D3.js and use GeoJson Data for map generation