Plugging into the Future: An Exploration of Electricity Consumption Patterns

Project submitted to the

Project Based Experiential Learning Naan Mudhalvan- Smart inters

DATA ANALISYS WITH TABLEAU

Submitted by

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1.INTRODUCTION

Electricity consumption is an essential component of the modern life. It not only provides clean and safe light throughout the day, but also in many countries refreshes homes on hot summer days, and in others warms them in winter. In all countries, it allows the use of electrical and electronic equipment in which the use of electricity is essential to ensure their proper functioning. Although hundreds of millions of Americans and Canadians connect to the power grid every day, most of them do not think about how they get the electricity consumed, and how much it costs to produce it. Keeping the North America region energized is actually an amazing feat, a daily miracle.

Project Description:

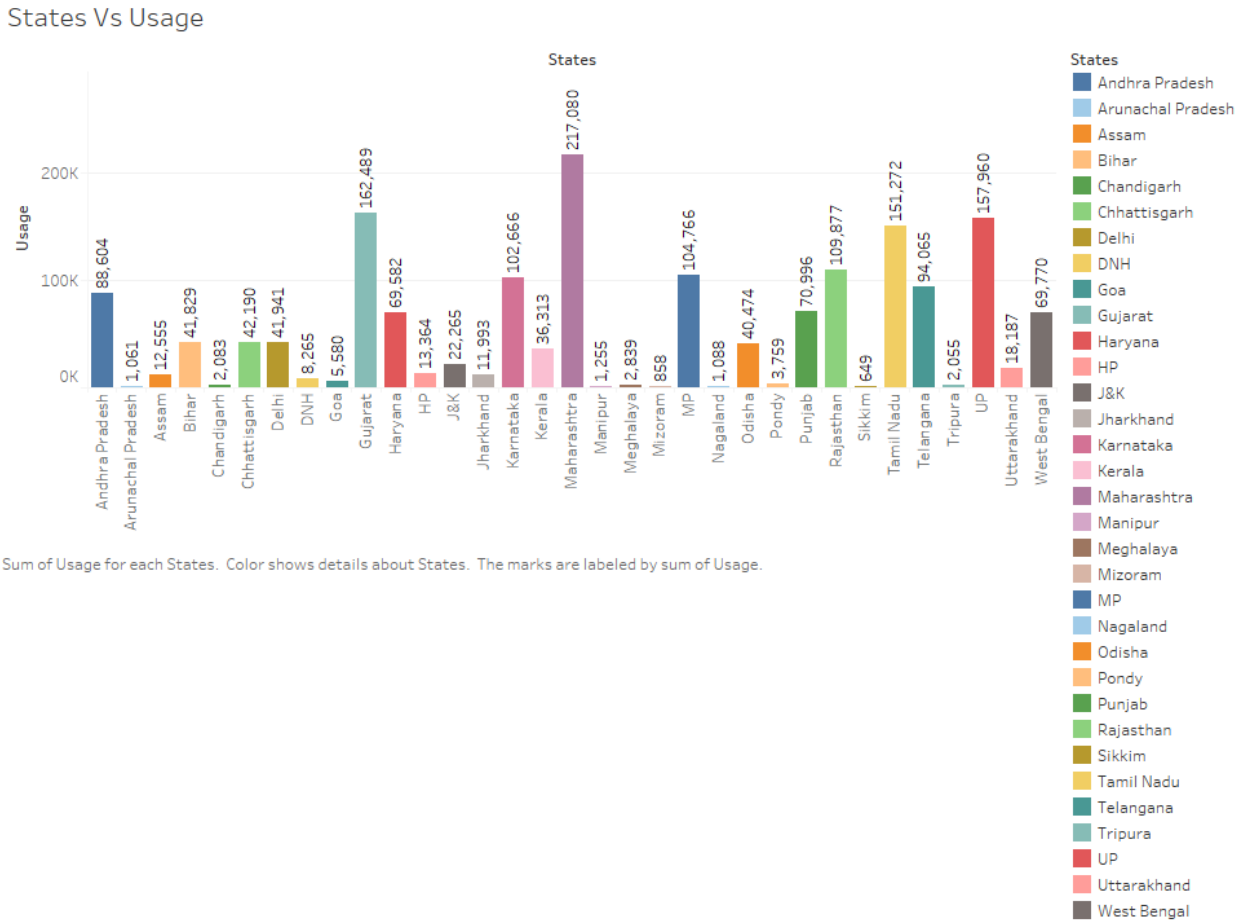
India is the world's third-largest producer and third-largest consumer of electricity. The national electric grid in India has an installed capacity of 370.106 GW as of 31 March 2020. Renewable power plants, which also include large hydroelectric plants, constitute 35.86% of India's total installed capacity. During the fiscal year (FY) 2019–20, the total electricity generation in the country was 1,598 TWh, of which 1,383.5 TWh generated by utilities. The gross electricity consumption per capita in FY2019 was 1,208 kWh.

In 2015-16, electric energy consumption in agriculture was recorded as being the highest (17.89%) worldwide. The per capita electricity consumption is low compared to most other countries despite India having a low electricity tariff.

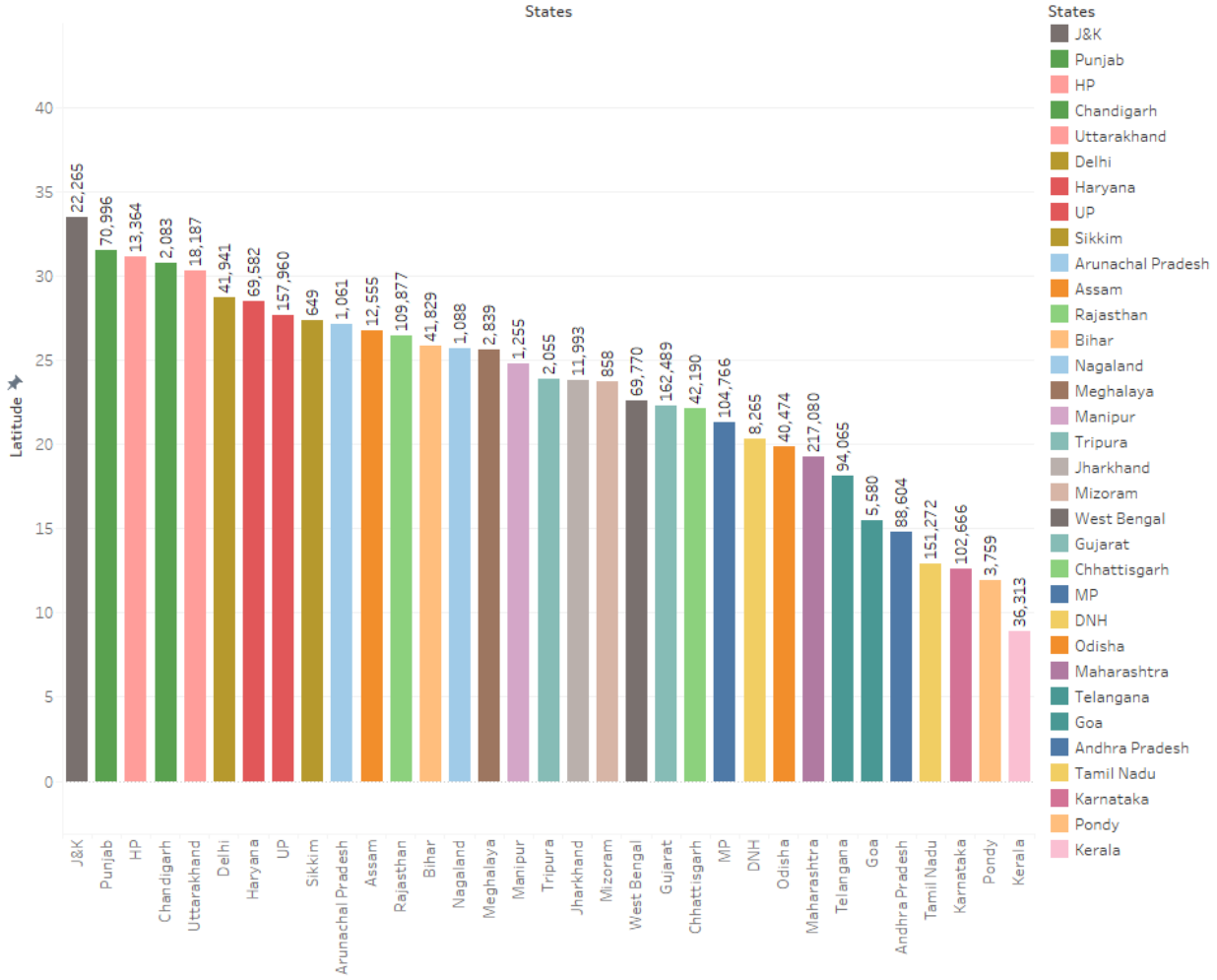
In light of the recent COVID-19 situation, when everyone has been under lockdown for the months of March to June the impacts of the lockdown on economic activities have been faced by every sector in a positive or a negative way.

The dataset is exhaustive in its demonstration of energy consumption state wise.

Analysing Electricity Consumption in India from Jan 2019 till 5th December 2020. This dataset contains a record of Electricity consumption in each states of India, here we are going to analyse State wise , Region wise and Overall Electricity consumption in India.

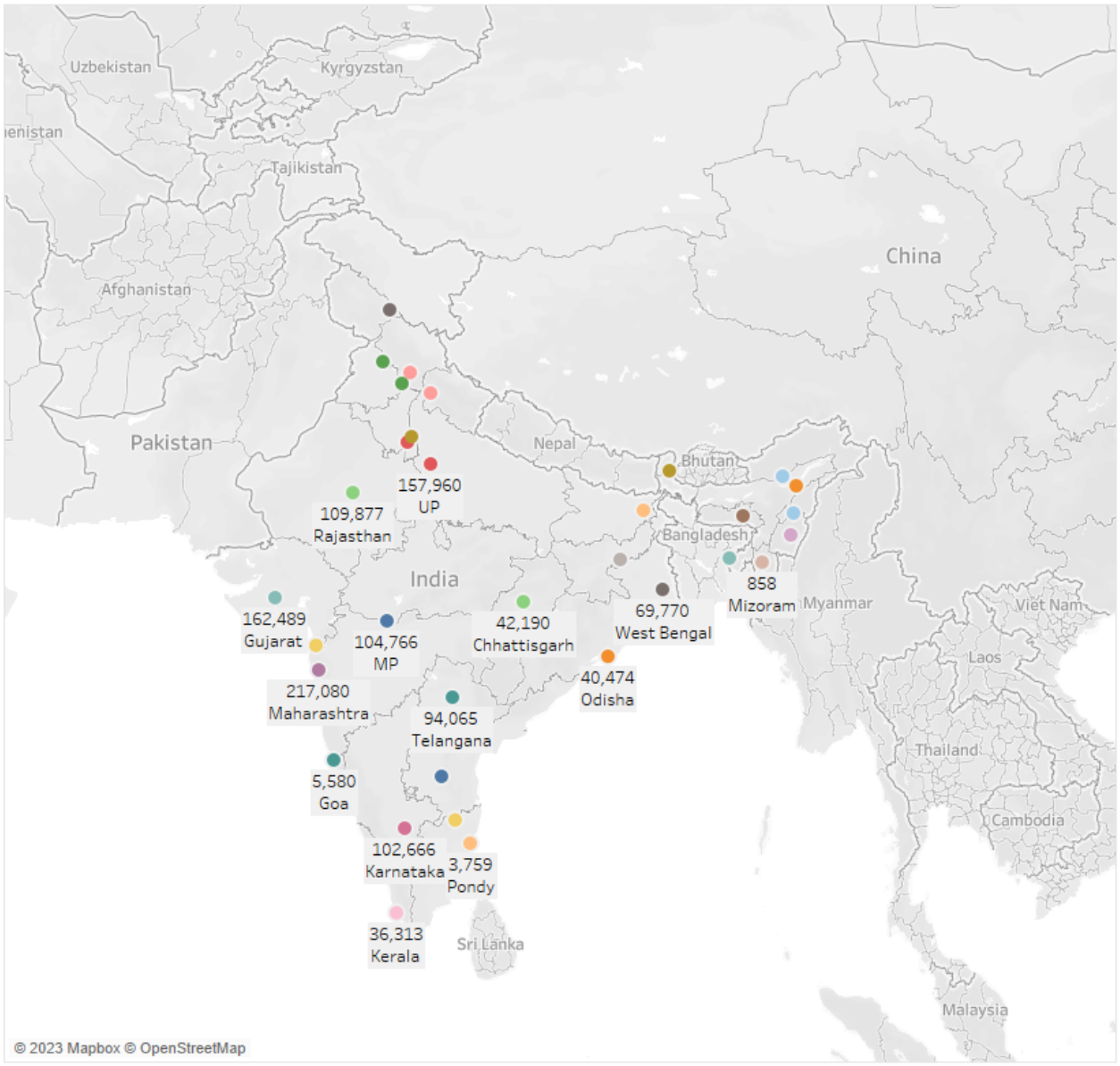


Sheet 2



Average of Latitude for each States. Color shows details about States. The marks are labeled by sum of Usage.

Sheet 4

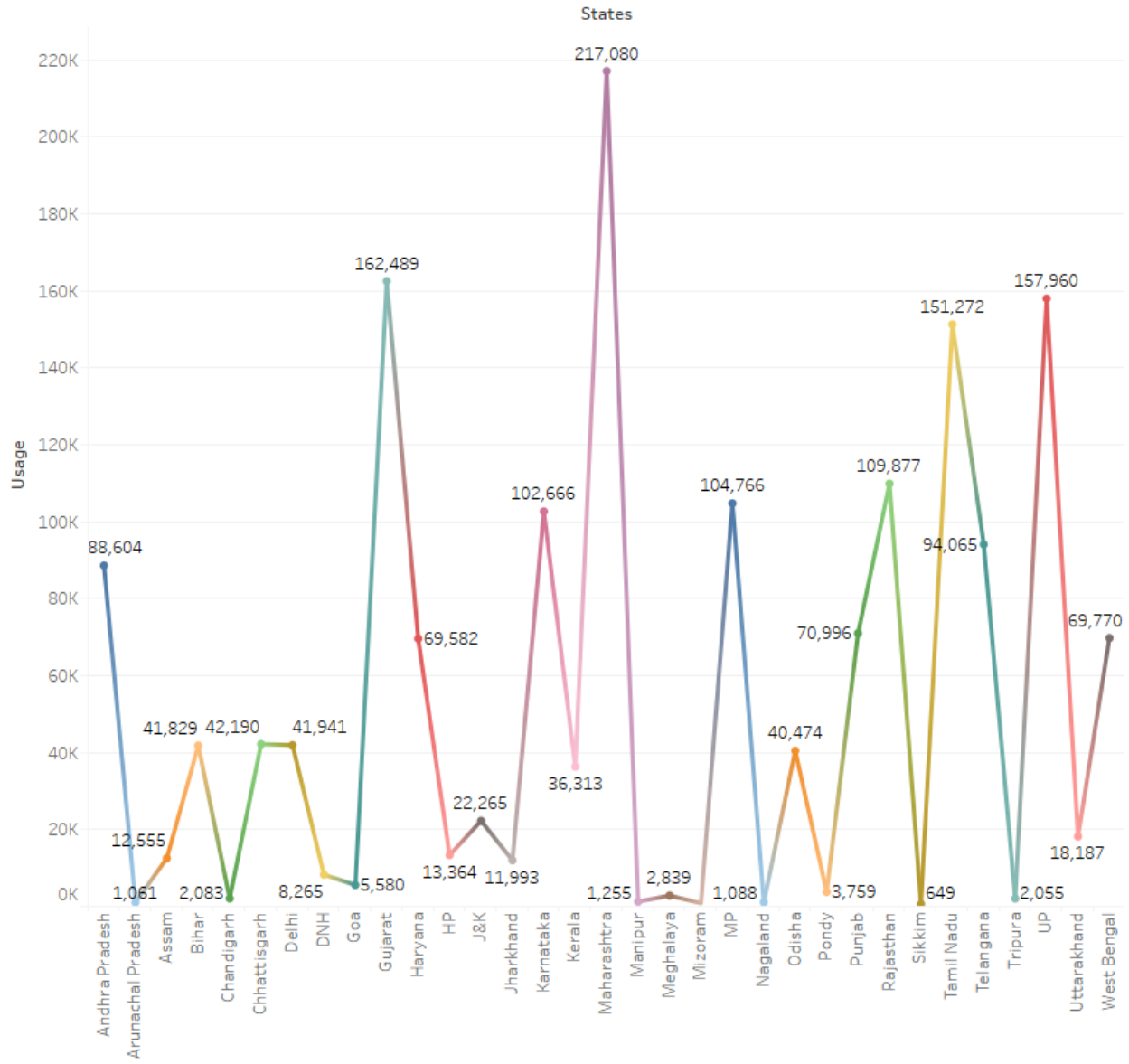


Map based on average of Longitude and average of Latitude. Color shows details about States. The marks are labeled by sum of Usage and States.

States

- Andhra Pradesh
- Arunachal Pradesh
- Assam
- Bihar
- Chandigarh
- Chhattisgarh
- Delhi
- DNH
- Goa
- Gujarat
- Haryana
- HP
- J&K
- Jharkhand
- Karnataka
- Kerala
- Maharashtra
- Manipur

Sheet 5

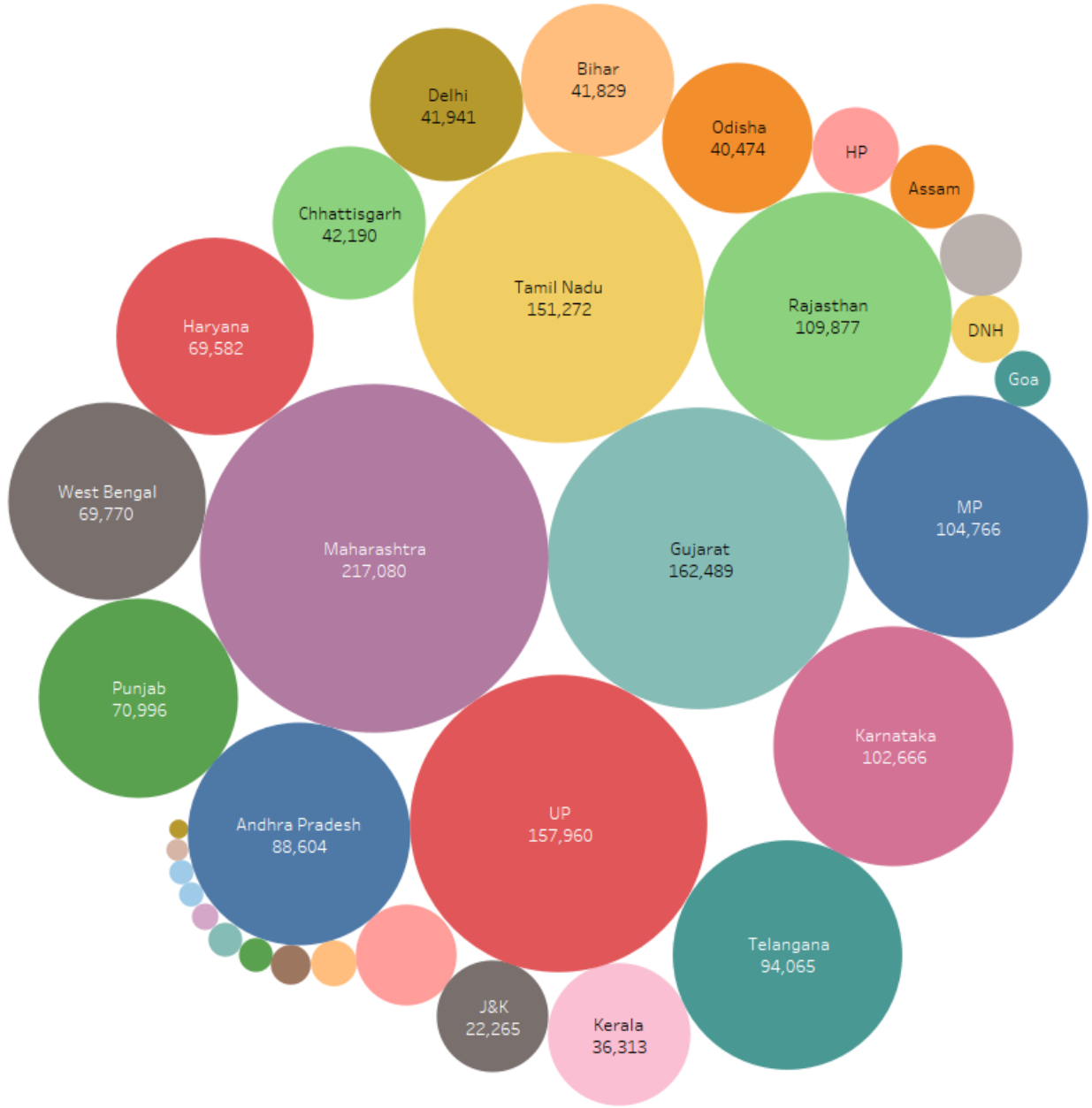


The trend of sum of Usage for States. Color shows details about States. The marks are labeled by sum of Usage.

States

- Andhra Pradesh
- Arunachal Pradesh
- Assam
- Bihar
- Chandigarh
- Chhattisgarh
- Delhi
- DNH
- Goa
- Gujarat
- Haryana
- HP
- J&K
- Jharkhand
- Karnataka
- Kerala
- Maharashtra
- Manipur
- Meghalaya

Sheet 3



States and sum of Usage. Color shows details about States. Size shows sum of Usage. The marks are labeled by States and sum of Usage.

States

- Maharashtra
- Gujarat
- UP
- Tamil Nadu
- Rajasthan
- MP
- Karnataka
- Telangana
- Andhra Pradesh
- Punjab
- West Bengal
- Haryana
- Chhattisgarh
- Delhi
- Bihar
- Odisha
- Kerala